Naugatuck Valley Community College
A State of Connecticut Two-Year Institution of Higher Education
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nv.edu

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Main Number - 575-8226
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575-8113
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596-2177
Services for Students with Disabilities
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Student Activities
575-8269
Student Government
596-2185
Testing Center
575-8215
Veterans Affairs
575-8006
Welcome to Our College!

I am happy to welcome you to Naugatuck Valley Community College (NVCC), a dynamic and nurturing institution where the success of our students is our expectation. Surrounded by splendid gardens and grounds and served by talented and credentialed faculty, staff and administrators at our Waterbury and Danbury Campuses, the College offers comprehensive educational opportunities for those who are just beginning their education and those who are continuing their personal journey to a better future.

Our catalog presents our students a rich and diverse array of career and academic programs, including accounting, allied health, business, cybersecurity, dance, digital arts, early childhood education, engineering technology, horticulture, hospitality management, human services, legal assistant/paralegal, liberal arts, manufacturing, nursing, sciences, theater and many more. We provide opportunities by participating in multiple transfer and articulation agreements designed to facilitate student transfers to the Connecticut State Universities and beyond.

For the past fifty-five years, Naugatuck Valley Community College has been an engine of change in the lives of our students and in the communities we serve through strong relationships with Connecticut agencies that promote educational, labor, economic and community development initiatives. NVCC has been recognized by the U.S. Department of Education as one of the top 25 community colleges nationwide in advancing opportunities for low-income students and in 2018, the Aspen Institute selected NVCC as one of the top 150 community colleges of excellence in the nation. In 2019, the National Science Foundation funded NVCC’s grant proposal to increase the number of low-income, academically talented students with demonstrated financial need who obtain degrees in STEM and enter the workforce or graduate programs. The NVCC Advanced Manufacturing Technology Center was selected as one of 10 national finalists for the 2019 Bellwether Award in the area of workforce development, and the College receives generous support from local industry partners such as Praxair, Inc. to educate and train the manufacturing workforce of tomorrow.

Students enrolled in credit programs at the Waterbury and Danbury campuses receive a UPASS that grants them unlimited, free bus transportation both day and night. Evening bus service was returned to Waterbury in 2011 after an NVCC-led advocacy campaign supported by students, members of the Regional Advisory Council and our state delegation highlighted the need for evening bus rides. The College also has a Bridge to College Office with federal GEAR UP and Upward Bound grant funding for college preparation.

Our varied degree, certificate and non-credit program offerings make Naugatuck Valley Community College the place to be. A new academic year brings the promise of exciting new opportunities for students. In Waterbury, our learning commons along the fifth floor afford students quiet places to study or socialize. Our Academic Center for Excellence (ACE) offers free tutoring services for all students and the Center for Academic Planning & Student Success (CAPSS) provides mentoring, academic advisement and counseling. The Center for Job Placement and College Opportunities (CJPCO) can help you create a professional resume and assist with transfer opportunities upon graduation and the Student Activities Office will provide you with information on how to become involved at NVCC and in the community. These services are replicated on a smaller scale at our new Danbury Campus where our Learning Commons provides tutoring and library services and a quiet place to study. Whether on our Waterbury or Danbury Campus, NVCC is alive with cultural activities for students, their families and the communities we serve.

I am joined by the entire NVCC family in welcoming you and supporting you as you begin a journey to a rewarding, engaged and successful next phase of your lives.

Sincerely,

Daisy Cocco De Filippis, Ph.D.
President

Daisy Cocco De Filippis, Ph.D.
President, NVCC
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* Ex Officio
**Student Regent

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Waldemar S. Kostrzewa*

Ann Merriam Feinberg
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* Ex Officio
PROGRAMS BY TITLE

The following listing is provided as a quick reference to the curriculum pages for each program and certificate.

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Non-credit certificates, workshops, seminars and short-term training courses are described in the latest semester course catalogs and can be accessed on the college website at nv.edu/nc. For more information call the Non-credit Lifelong Learning Office at 203-575-8029 or e-mail nc@nv.edu.

Agriculture
Bartending
Basic Life Support
Boating Safety
Bookkeeper
Business & Office Professional
Central Sterile Processing Technician
Certified Nurse’s Aide (CNA)
Events Management
Grant Writing

Hospitality
Manufacturing
Medical Administrative Assistant
Medical Coding and Billing Specialist
Motorcycle Rider Education
MS Office Essentials
OSHA 10 General
Patient Care Technician
Personal Fitness Trainer
Pharmacy Technician

Phlebotomy Technician
QuickBooks
Real Estate
Security Guard
Wedding Planner
Welding – SAW/STICK
Welding – GMAW/MIG
Welding – GTAW/TIG

Policy Changes

This catalog/publication is true and correct in content and policy. Naugatuck Valley Community College reserves the right to change requirements, courses, prerequisites, regulations, tuition, fees and other policies without prior notice. Upon written request, the President of the College may make waivers of these policies due to extenuating circumstances. The catalog does not constitute a contract and is for informational use only.
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"College Closed" applies to both the Waterbury and Danbury Campuses. Academic Calendar is subject to change.
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**NAUGATUCK VALLEY COMMUNITY COLLEGE ACADEMIC CALENDAR**

**FALL & WINTER 2019, SPRING & SUMMER 2020**
The College provides services from a highly qualified full-time faculty complemented by a talented pool of instructors and trainers. Outstanding learner-centered instruction is central to our mission. NVCC prepares students for transfer to other institutions and for the world of work. A strong core of general education gives students a broad background that prepares them to change or modify career direction or to transfer to other institutions of higher education.

Degree and certificate programs include computer training, writing and research. For those who come to the College unprepared for its rigors, a developmental skills program supports critical thinking, writing, and math competency to help students succeed.

The College involves all students in mathematics, reading, and writing and provides students with supportive services in counseling, tutoring, testing, and individualized assistance.

The College has a number of liaisons with area elementary and secondary schools. The College Career Pathways prepares students in high school for direct entry into college curricula. The Connecticut Pre-Engineering Program for middle school students and the Kids-on-Campus Summer Program for elementary and secondary students enrich both the College and the community.

NVCC offers additional supportive student services including advising, financial aid, health services, peer tutoring, services for veterans, minority student services, a bookstore, student government, student organizations and activities.

There are a number of collaborative Community College System initiatives including the Center for Teaching, the College of Technology, the Basic Skills Testing and Placement Program, and the Business and Industry Services Network.

**PUBLIC (COMMUNITY) SERVICE**

Art, dance, drama, film and music presentations are regular offerings at the college as the instructors develop student and community potential in the performing and fine arts. The magnificent stages, workshops, dance and music studios provide the faculty, students, and community with settings that make the classrooms come alive with sight and sound.

The Max R. Traurig Library is open to visitors from the community and provides the region with a collection of over 30,000 books, print subscriptions to magazines, journals, and newspapers, and CDs and DVDs for education and entertainment.

Members of the community, including Alumni, may also visit the Library to sign up for a Community Borrower account, which allows for book borrowing, use of Library computers and on-campus access to Wi-Fi, electronic periodical databases, and electronic books.

**STRATEGIC PLANNING**

NVCC has developed a ten-year Strategic Plan. It is published on the college website. The plan covers the academic years from September 2016 to May 2026.

**THE NVCC MISSION**

Naugatuck Valley Community College offers quality, affordable education and training in response to evolving community needs by providing opportunities to individuals and organizations to develop their potential.

**THE NVCC VISION**

At NVCC, the word “community” is central and our students are considered our most sacred trust and our finest asset. Collaboration within and outside the confines of our immediate surroundings defines our actions and is the base for the rich intellectual, educational, cultural and civic-minded experiences we provide our students.

**FIVE GOALS**

1. At NVCC, students achieve their goals.
2. NVCC faculty and staff make a difference—at the college, in the community, in their fields of study and in the lives of students.
3. NVCC programs meet and beat academic and industry standards.
4. NVCC is an engine of change within Waterbury, Danbury, and the broader community.
5. NVCC is an effective, performance-based institution.

In addition to these five goals, the Plan outlines 15 strategic initiatives—what we will do to meet these goals.

**NVCC STRATEGIC PLAN 2016-2026**

NVCC’s strategic plan is guided by the five Connecticut State Colleges and Universities (CSCU) Goals. This plan reaffirms the five NVCC goals that have grounded our strategic planning processes since 2010, yet places our student-centered goal as the driving force for all that we do. Students are the reason we are all here, and we can only be a splendid college if we are focused on their experience and success.
GENERIC OVERVIEW

Ten priorities–two per goal–will represent thematic areas of core work for the next ten years. Forty targets have been set to clarify the impact we are seeking and by which we will assess our progress. These targets range from student completion, job placement, and transfer outcomes, to process measures of internal systems change necessary for us to become even more student-centered and effective at what we do.

ACCREDITATION STATEMENT

Naugatuck Valley Community College is accredited by the New England Commission of Higher Education (NECHE).

Accreditation of an institution of higher education by the New England Commission indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the New England Commission is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the accreditation status by the New England Commission should be directed to the administrative staff of the institution. Individuals may also contact:

NEW ENGLAND COMMISSION OF HIGHER EDUCATION (NECHE)
3 Burlington Woods Drive
Suite 100
Burlington, MA 01803-4514
781-425-7785 • email: cihe@neasc.org

The College is also accredited by the Connecticut Board of Regents for Higher Education.

In addition to comprehensive accreditation by the New England Commission of Higher Education, some degree and certificate programs have the following specialized accreditations:

- Committee on Accreditation in Physical Therapy Education
- Commission on Accreditation for Respiratory Care
- Joint Review Committee on Education in Radiologic Technology
- National Association for the Education of Young Children
- National Institute for Automotive Service Education (ASE)
- National Automotive Technicians Education Foundation (NATEF)
- Accreditation Commission for Education in Nursing Inc. (ACEN)
- Engineering Technology Accreditation Commission of ABET
- www.acenursing.org

STATUTORY MANDATE

The legislative mandate for community-technical colleges, as provided in Public Act 92-126, Section 27(a) states:

a. The primary responsibilities of the regional community-technical colleges shall be:
   1. to provide programs of occupational, vocational, technical and technological and career education designed to provide training for immediate employment, job retraining or upgrading of skills to meet individual, community and state man-power needs;
   2. to provide programs of general study including, but not limited to, remediation, general and adult education, and continuing education designed to meet individual student goals;
   3. to provide programs of general study for college transfer representing the first two years of baccalaureate education;
   4. to provide community service programs as defined in subsection 5(b) of this section;
   5. to provide student support services including, but not limited to, admissions, counseling, testing, placement, individualized instruction and efforts to serve students with special needs.

b. As used in this section, “community service programs” mean educational, cultural, recreational and community-directed services which a community-technical college may provide in addition to its regular academic program. Such community service programs may include, but shall not be limited to:
   1. activities designed to enrich the intellectual, cultural and social life of the community;
   2. educational services designed to promote the development of skills for the effective use of leisure time;
   3. activities and programs designed to assist in the identification and solution of community problems; and
   4. utilization of college facilities and services by community groups to the extent such usage does not conflict with the regular schedule of the college.
CONTINUING NOTICE OF NONDISCRIMINATION:
Naugatuck Valley Community College does not discriminate on the basis of race, color, religious creed, age, sex, national origin, marital status, ancestry, disability, including but not limited to present or past history of mental disorder, learning disability or physical disability, sexual orientation, gender identity or expression or genetic information in treatment or employment at the College, in admission or access to the College, or in any other aspect of its programs and activities. In addition, the College does not discriminate in employment on the additional basis of veteran status or criminal record. The College is required by Title VI of the Civil Rights Act of 1964 (Title VI), Section 504 of the Rehabilitation Act of 1973 (Section 504), Title II of the Americans with Disabilities Act of 1990 (Title II), Title IX of the Education Amendments of 1972 (Title IX), the Age Discrimination Act of 1975 (Age Act), and their respective implementing regulations at 28 C.F.R. Part 35 and 34 C.F.R. Parts 100, 104, 106 and 110, not to discriminate on the basis of race, color, or national origin (Title VI); disability (Section 504/Title II); sex (Title IX); or age (Age Act). Inquiries concerning the application of each of the aforementioned statutes and their implementing regulations to the College may be referred to the U.S. Department of Education, Office for Civil Rights, at (617) 289-0111 or 5 Post Office Square, 8th Floor, Boston, MA 02109-3921, or to the applicable College Coordinators who are located at Naugatuck Valley Community College, 750 Chase Parkway, Waterbury, Connecticut 06708: Kimberly Carolina, Director of Human Resources/Section 504/Title II/ADA/Age Act Coordinator, Room K704b, 203-575-8056; Sarah Gager, Dean of Student Services/Deputy Section 504/Title II/ADA/Age Act Coordinator (Students), Room K509a, 203-575-8086; Robert Divjak, Director of Facilities/Deputy Section 504/Title II/ADA Coordinator (Facilities), Room C216, 203-575-8235; Jacquie Swanson, Associate Director of Human Resources/Title IX Coordinator, Room K704, 203-575-8043 (Rev 3/18/19).

THE NAUGATUCK VALLEY COMMUNITY COLLEGE FOUNDATION, INC.
The NVCC Foundation raises funds to support the students, programs, and services of the college. The non-profit organization is led by a talented, volunteer board of community leaders. Foundation efforts help fund scholarships, tutoring, instruction, and equipment.

The NVCC Development Office works closely with the NVCC Foundation to plan special events, fundraising appeals, and dedication ceremonies. Appeals to support NVCC goals are directed to faculty, staff, students, alumni, communities, and businesses. Donors should contact the Associate Dean of Development for more information.
ADMISSIONS INFORMATION

ADMISSION POLICY
Naugatuck Valley Community College is an open admission institution with selective placement into some programs and courses. Acceptance to any degree or certificate program requires that an applicant be a graduate of an approved secondary school or have earned either a State High School Equivalency Diploma or a General Educational Development (G.E.D.) diploma. Seniors graduating from a CT high school are accepted into a degree or certificate program and permitted to register prior to their date of high school graduation under the condition that they submit proof of high school completion by July 7 of the year in which they graduated high school. Failure to do so will result in the student being removed from their program of study and switched to non-degree status.

Admission to the College does not necessarily mean admission to all courses and programs. Several degree and certificate programs have specific admissions criteria. Please refer to the Programs of Study section of the catalog for specific admission requirements.

Students who do not have a high school diploma or its equivalent may enroll at the College as non-degree students. Non-degree students are not eligible for financial aid, but may take advantage of the Connecticut Tuition Payment Plan.

High school students who demonstrate sufficient scholastic ability and who present written approval from their high school principal or a designated representative may register for courses as non-degree students on a space available basis.

Students may gain admission to Naugatuck Valley in either the fall semester (August) or spring semester (January). In some programs, admission is specifically for the fall or spring semester only.

Classes are offered days, evenings and weekends, as well as online. Part-time students enroll for a maximum of 11 credits; full-time students enroll for a minimum of 12 credits. Courses vary in the amount of credit they carry; however, most courses are worth three (3) credits.

Admission to English as a Second Language Courses
The English as a Second Language (ESL) courses at Naugatuck Valley Community College are designed to serve the needs of non-native speakers of English. The ESL Department offers a multi-level program to increase students’ proficiencies in English in all four areas: reading, writing, listening and speaking.

In addition to the basic application procedures, a writing sample and the English Proficiency (LOEP) portion of the Accuplacer Placement Test must be completed before students can register for the courses. The English placement for non-native speakers of English is determined by the ESL office and is based primarily on these tests.

Admission to the Allied Health and Nursing Programs
The Allied Health and Nursing programs have specific admission criteria which can be found in the Programs of Study section of the catalog. Admission to these programs is highly selective and based on academic record and assessment testing. A program application for admission must be submitted in addition to the College Application.

Admission to Technology Degree and Certificate Programs
In addition to the standard requirements necessary for admission to the College, students applying for admission to technical degree and certificate programs should possess a solid background in science and mathematics. Refer to the programs of study section of the catalog for details.

Admission to Non-credit Lifelong Learning programs
Non-credit programs are open to all citizens in the region for professional and personal development. Formal college application is not required. Registration is accepted for all courses. Certification programs have specific requirements that should be understood prior to registering. Customized programs are specially tailored for organizations and companies that address workforce demands/needs. Lifelong learning staff are available to provide information.

APPLICATION DEADLINES
The College admits students on a first-come, first-served basis. For the fall semester, which begins in late August or early September, preference is given to applications received by June 1. For the spring semester, which begins in January, preference is given to applications received by December 15. Applicants will be accepted after these dates provided openings are available.

Applications for the Physical Therapist Assistant Program are available in April and must be submitted by June 1. Applications for Radiologic Technology and Respiratory Care Programs are available in October and must be submitted by January 15. The online application for the Nursing Program is available November 1 and must be submitted by February 1.

Note: All admission dates to select programs are subject to change. Please meet with your advisor for program updates.

APPLICATION PROCEDURES
New Students
The following procedures apply to all individuals planning to enroll in degree or certificate programs for the fall or spring semesters:

• Complete an Application for Admission and submit it with the non-refundable $20.00 application fee to the Admissions Office, Naugatuck Valley Community College, 750 Chase Parkway, Waterbury, Connecticut 06708. (Checks should be made payable to NVCC.) Students may also apply online at nv.edu/admissions using a credit card to pay the $20.00 application fee.

• Request that an official copy of the high school transcript with date of graduation be sent directly to the Admissions Office from the Guidance Department at the high school, or supply a copy of the high school diploma.* Equivalency Diploma recipients must submit a copy of the equivalency diploma or G.E.D. results.

* Applicants who are presently in high school may submit their completed application form and $20.00 application fee directly to their high school guidance office. The Guidance Office will forward the application, fee and high school transcript directly to the Admissions Office.

• All new and transfer students seeking admission into a degree program who were born after 12/31/56 are required by state law to submit immunization documentation for two (2) doses of measles, mumps and rubella (MMR). Those born as of 1/1/80 also need to submit documentation for two (2) doses of varicella (chicken pox).

Placement Test (ACCUPLACER®)
All new and transfer students enrolling in degree or certificate programs are required to take the placement test, unless an exemption is granted. NVCC uses the Accuplacer computerized adaptive placement test to assess academic skills in English, reading and mathematics. Advisors will use the results to make decisions about the level of courses students are prepared to take. This is not an admission test. Prior to taking the test, an application for admission must be completed. Applicants will receive information on test schedules by e-mail once their application has been processed.

An exemption may be granted to students who:

• completed coursework in a college level English and/or math course with a grade of “C” or better
• scored 18 or higher on the ACT Math exam
• scored 21 or higher on the ACT English exam OR scored 47 or higher on the ACT English and Reading portions combined
• have achieved the appropriate Advanced Placement (AP) or College Level Examination Program (CLEP) scores
Students are encouraged to schedule their test as soon as possible to have their scores reviewed to determine if the requirements for exemption are met. Scores, CLEP scores, GED, SAT or ACT score report, ACCUPLACER® score report, AP Placement testing may be waived for transfer students who have earned an associate's degree or higher or who have completed college level English and/or mathematics with grade of "C" or better. SAT or ACT scores may also be acceptable.

IMMUNIZATION REQUIREMENTS
By law, all higher education institutions in Connecticut require each full-time or matriculating student born after December 31, 1957 to provide proof of adequate immunizations before permitting the student to enroll.

New and Transfer Students
If you were born after December 31, 1956, Connecticut State Law requires that all full-time (degree seeking and non-degree/non-matriculating) and part-time matriculating students enrolled in postsecondary schools be adequately protected against measles, mumps and rubella (MMR). In addition, all full-time and matriculating students, except those born in the continental United States prior to January 1, 1980, must provide proof of immunization against varicella (chicken pox). Students must have two (2) doses of each vaccine administered at least one (1) month apart to insure adequate immunization.

Exemptions: Any student (new or transfer) who (1) presents a certificate from a physician stating that in the opinion of the physician such immunization is medically contraindicated; (2) provides a written statement that such immunization would be contrary to their religious beliefs; (3) provides a laboratory report documenting immunity; or (4) provides a physician's statement of confirmation of disease.

If students are unable to provide the above data due to a documented medical condition, an explanatory statement on office letterhead from an attending physician must be submitted to the college. Students may present serologic (blood test) evidence in place of the vaccination to verify immunity. An actual laboratory report must be presented documenting immunity.

The law also allows for exemption due to religious beliefs. A student requesting a religious exemption must submit a written statement that such immunization would be contrary to his/her religious beliefs.

Failure to comply with these guidelines will prevent course registration, release of transcripts, and eligibility for financial aid.

In the event of an outbreak of measles, mumps, rubella or varicella on this campus, students who are not in compliance (including a medical or religious exemption), will be excluded from classes for a minimum of 18 days per incubation period or until their immunizations are complete.

INTERNATIONAL STUDENT ADMISSION
Students who are not citizens or permanent residents of the United States, but who are interested in studying at Naugatuck Valley Community College, may do so by applying as international students.

Application Deadlines for F-1 Applicants
Students are admitted for the fall and spring terms. We recommend that international students apply by the following dates:

• The fall term begins in August; the application deadline is June 15.
• The spring term begins in January; the application deadline is November 1.

International students planning to attend Naugatuck Valley on an F-1 student visa must present the following documents:

Admission Application and Fee
A Naugatuck Valley Community College application and non-refundable $20 fee are required. The application form is available as a downloadable PDF file at nv.edu/Apply or you can request it by mail from the Admissions Office. The college's web application process is not designed for use by international students. You must mail your application along with your check or money order for $20 (converted to U.S. currency and payable to NVCC). Do not send currency.

You must present the following documents with your completed application form:

Academic Records
• Proof of your graduation from high school or university, in the form of a diploma or transcript (translated to English). You may be asked to use a foreign transcript evaluation service, such as the following:

World Education Services
P.O. Box 5087
Bowling Green Station
New York, NY 10274
Phone (212) 966-6311 or (800) 937-3895
Fax (212) 739-6100
www.wes.org
ADMISSIONS INFORMATION

• Center for Educational Documentation, Inc.
  Evaluation Service
  PO Box 170116
  Boston, MA 02117
  Phone: (617) 338-7171
  Fax: (617) 338-7101
  E-mail: info@cedevaluations.com
  Web site: www.cedevaluations.com

• Globe Language Service, Inc.
  Evaluation Service
  305 Broadway Ste. 401
  New York, NY 10007
  Phone: (212) 227-1994
  Fax: (212) 693-1489
  E-mail: info@globelanguage.com
  Web site: www.globelanguage.com

Immunization Records
Proof of immunization must be provided. Refer to the section on immunization requirements.

Evidence of English Proficiency
International students are required to submit proof of English proficiency. Preferably, applicants should take the TOEFL test and achieve a score of 500 on the paper test or 61 on the Internet-based test. The IELTS exam is also acceptable. Enrollment in English as a Second Language coursework may be required until a higher level of English proficiency is attained.

Forms and Documentation Needed for Form I-20
International students who are in F-1 visa status, or who need F-1 visa status, must work with the international student advisor to obtain the Form I-20. In order to receive the Form I-20, international students must prove that they have the funds immediately available to pay for the first year of tuition and living expenses. To apply for the I-20, students must submit the forms and documentation listed below.

1. International Student Information Sheet.
2. Certification of Finances: This form contains a summary of the student’s financial resources and ability to pay for tuition, fees, and living expenses.
3. Promise of Cash Support signed by the sponsor and notarized: This form states that the sponsor will assume some or all responsibility for the student’s expenses during his/her stay in the U.S. The form must be supplemented by bank documentation proving availability of the promised funds.
4. Promise of Free Room and Board: This form is necessary if a local sponsor is providing the student’s housing and food.
5. Copy of passport identity pages.
6. Students who are already in the U.S. should provide copies of the I-94 card and visa stamp. Students applying from outside the U.S. will need to bring these documents to the international student advisor upon arrival.

The Form I-20 will not be issued until all of the above items have been received and the applicant has been admitted. Students will then be advised on how to pay the $200 SEVIS fee required by the Department of Homeland Security. Please contact the International Student Advisor with any questions or concerns: (203) 575-8010.

Housing
There are no dormitories on campus. International students must arrange for their own housing.

Transportation
NVCC is a commuter college and students are expected to make arrangements for transportation to and from the College. Upon verification of payment of the student activities fee, credit students qualify for a local Waterbury bus pass. International students may not be immediately eligible for a Connecticut driver's license.

Tuition for Fall 2019 has not been officially set by the Connecticut Board of Regents. Any change in tuition and/or fees may result in additional charges for Fall 2019 being assessed on your account at a later date.

Tuition, Fees and Living Expenses for 2018-2019

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees*</td>
<td></td>
</tr>
<tr>
<td>(based on 12 credits per term)</td>
<td></td>
</tr>
<tr>
<td>Books and supplies</td>
<td>$1,200</td>
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<tr>
<td>Room and Board</td>
<td>$11,800</td>
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<tr>
<td>Transportation</td>
<td>$2,000</td>
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<tr>
<td>Personal Expenses</td>
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<td><strong>$21,624</strong></td>
</tr>
</tbody>
</table>

*Subject to change
full-time, full-year, in-state, not living with parents

The above is only an estimate. International students with families need to add $1,500 per dependent accompanying them.

Out-of-State Fees
All holders of temporary visas (e.g. F, J, and H) will be charged the out-of-state tuition rate, unless and until they present evidence of an approved or pending change to permanent residency, as well as evidence that establishes Connecticut residency in accordance with state law.

Transferring In for International Students
If you are transferring to Naugatuck Valley from another school in the United States, you must follow these additional steps:

1. Provide a copy of your current I-20
2. Notify the DSO (Designated School Official) at your current school that you plan to transfer to NVCC and ask him/her to:
   a. Enter into the SEVIS information system your "intent to transfer."
   b. Enter into SEVIS a "transfer release date."
   c. Complete the bottom portion of the Transfer Verification Form (available from the NVCC International Student Advisor).

NON-DEGREE STUDENTS
Students who are interested in enrolling in individual credit courses, but who are not interested in pursuing a degree or certificate program, may elect to enroll as non-degree seeking students. Non-degree students complete a College Admissions Application at the time of registration and pay the one-time $20.00 application fee. In some cases, non-degree students may be required to take academic skills assessment tests in English or mathematics and/or provide proof that prerequisites for specific courses have been met. Non-degree students are not eligible for financial aid, but may take advantage of the Connecticut Tuition Payment Plan. Non-degree students are not permitted to register for a full-time course load (12 credits or more).

UNDERAGE STUDENTS
All students under the age of 18 must complete the following prior to registering for classes:

- Application for Admission and $20.00 Application Fee
- Secondary Education Validation Form and the Accuplacer® Assessment Test
- Interview with the Assistant Director and a parent must be present. The interview is mandatory.

Students who will be turning 18 years of age during their year of graduation from high school and will not be attending the college until after their high school graduation do not need to complete the Secondary Education Form or meet with the Assistant Director.

At Naugatuck Valley Community College, Family Educational Rights and Privacy Act (FERPA) rights belong to the student, regardless of age. A “student” is a person who attends an educational institution that maintains educational records or personally identifiable information. Parents of community college students do not have a right to access their children’s student records. In accordance with this regulation, students’ college records will be released to parents...
ADMISSIONS INFORMATION/REGISTRATION AND RECORDS

only with the observed written consent of the student.

SENIOR CITIZENS
The application fee is waived for any Connecticut resident 62 years of age or older who has been accepted for admission. Tuition, the college service and student activity fees are waived for Connecticut residents 62 years of age or over on a space available basis. Special fees such as material or supplemental fees must still be paid. Registration under this waiver begins on the first day of the semester/session and is restricted to classes with available seats. Non-credit Lifelong Learning courses are not eligible for tuition waiver.

VETERANS
In addition to completing the basic application procedures, veterans should contact the Veterans' Affairs Office at the College prior to registering for classes. Once registered, the Veterans' Affairs Office will certify enrollment to the Veterans' Administration. To expedite the process of applying for benefits, the veteran should bring a DD214 (separation papers).

According to the Dependents Educational Assistance Act, wives and children of totally disabled veterans, widows and children of deceased veterans, and 100 percent totally disabled veterans are eligible to receive educational assistance while attending school. To expedite the process of applying for benefits, supporting documentation such as a marriage or birth certificate should be brought to the Veterans' Affairs Office. Veterans who served on active duty during specific periods of conflict may be eligible for tuition waivers. For more information, call Veterans' Affairs.

NVCC Office of Veteran Affairs offers a Veterans’ Room where they can meet, network, and share experiences. The Veterans’ Oasis is located in S411.

ADMISSION WITH ADVANCED STANDING

Academic Credit for Military Experience
Veterans may obtain transfer credit for courses successfully completed in the United States Armed Forces schools, provided that such courses are judged the equivalent of, and are applicable toward, degree requirements. Three credits in physical education are also granted for the completion of Basic Training.

Academic Credit for Work/Life Experience
Naugatuck Valley promotes the practice of awarding credit in recognition of learning acquired through life experiences such as employment, volunteer activities, military training, special seminars and other methods. Students may apply for the evaluation of prior learning through one or more of the procedures listed:

Credit by Examination - Students may elect to have prior learning evaluated by either of the following examination options:

• College Level Examination Program (CLEP)
• The College Level Examination Program (CLEP) allows individuals to earn college credit for what they already know. NVCC awards credit for successful scores on CLEP exams.
• Credit by Examination - Some divisions and departments of the College produce their own examinations. Contact your advisor or the testing center for more information.

Academic Credit for College Career Pathways (formerly Tech Prep)
A high school graduate who was registered as a CCP student at their high school through the CCP program can apply their earned college credits toward a program of study at Naugatuck Valley Community College. A qualified high school student had to successfully complete approved articulated courses in 10th, 11th and/or 12th grade with a grade of “C” or better. The CCP student may be required to take the placement tests at the College. Parents of students under the age of 18 may be required to sign a parental consent form. For more information, contact the Academic Dean’s Office.

Advanced Placement Testing
Degree credit will be granted on the basis of scores on the Advanced Placement Examinations administered by the College Entrance Examination Board. Students who earn scores of 3 or higher receive credit for the courses for which the examinations are stipulated as measures. AP transcripts can be obtained by contacting the College Board @ 888-308-0013 or at www.collegeboard.com.

NEW ENGLAND BOARD OF HIGHER EDUCATION (NEBHE) RECIPROCAL PROGRAM
Naugatuck Valley Community College is authorized to participate in the NEBHE Reciprocal Program which is designed to encourage interstate enrollments in publicly supported degree granting institutions. A reciprocal agreement has been arranged among the six New England states to implement this program. Under this agreement, students enrolled in the NEBHE program pay tuition and fees which are substantially less than those listed for out-of-state residents.

A New England resident is eligible to participate in the program provided:

• The program of study is not offered at an in-state institution.
• The program of study is offered at both in-state and out-of-state institutions and the out-of-state institution is closer in traveling time to the applicant’s legal residence.

Applicants must meet the admission requirements of the College and fall within the quota arrangements of the program. All other out-of-state applicants are required to pay the non-resident tuition and fees.

The NEBHE program is subject to change at any time.

CATALOG YEAR POLICY
Students are responsible for completing the requirements for their major and degree that were in place upon their admittance to the College as matriculated (degree-seeking) students - this is considered the student's catalog year. (Note: If a student is readmitted to the College following a withdrawal or dismissal, he or she is responsible to complete the requirements in place on the new matriculation date.) Students may change their catalog year to the most current for their major by contacting the Registrar.

REGISTRATION PROCEDURES

New Students
Applicants who have been admitted to a degree or certificate program will be invited by e-mail or mail to register for courses by the Admissions Office at a specified date and time. Students must call to set up an appointment for New Student Registration.

Continuing Students
Continuing students and readmitted students may register during the current semester for the following semester. Times and locations for registration are announced by the registrar.

Former Students Seeking Readmission
Readmit students are those who have previously been accepted and who have attended Mattatuck Community College, Waterbury State Technical College, Naugatuck Valley Community-Technical College or Naugatuck Valley Community College, but who have been away from the College for two years or more.

A student to be readmitted to the college should:

• Obtain a Readmission Form (available from the Office of the Registrar or program advisor/coordinator or online: nv.edu/registrar.)
• Meet the advisor/program coordinator to review the program’s current requirements, and plan course selection.
• Unless previously tested, make arrangements to take the placement test through the Testing Center.
REGISTRATION AND RECORDS

- If required, provide written documentation regarding proof of measles, mumps, rubella, and varicella (chicken pox) immunization to the Office of the Registrar (unless previously provided).
- Contact the Naugatuck Valley Community College Office of the Registrar to ensure that official copies of high school and college transcripts are still on file, especially if the student has been away from the College for five years or longer.
- Submit official college transcripts if the student has attended another college or university while away from Naugatuck Valley Community College, to the Office of the Registrar K516.
- The advisor/program coordinator may advise the student to invoke the Fresh Start Option. This option is only available to students with a cumulative GPA less than 2.0 and after an absence of two or more years. A student may invoke a Fresh Start Option only once at Naugatuck Valley Community College and must do so prior to or during the semester of readmission.

Readmit Students - Fresh Start Option
A student readmitted to Naugatuck Valley after an absence of two or more years (four semesters, not including summer) may return without the handicap of a grade average of less than 2.0 earned previously at Naugatuck Valley Community College. To do so, the student must invoke the Fresh Start Option. This Option permits previous grades to be removed from the grade point average. Credit is kept for all courses passed with grades of “P”, “C-”, or higher. There is no credit for previous courses in which grades of “D+” or lower were earned. All courses and grades remain on the record.

A student may invoke Fresh Start Option only once at Naugatuck Valley Community College and must do so prior to or during the semester of readmission. Since Naugatuck Valley is an “open admission/selective placement” college, neither the use of Fresh Start Option nor repeat poor performance precludes further readmission(s) of the student.

The Fresh Start Option does not apply to any completed degree or certificate. A student must complete a minimum of 15 credits after returning to college under the Fresh Start Option to be eligible for a degree or certificate and for graduation honors.

Note: For purposes of grade point average, credit, and Fresh Start Option, courses previously taken at Waterbury State Technical College and/or Mattatuck Community College are considered to be courses taken at Naugatuck Valley Community College.

LIFELONG LEARNING REGISTRATIONS (NON-CREDIT)
Learners taking non-credit certificates or individual courses should refer to the most current Learn2Earn course schedule and program web pages for up-to-date information, registration methods, and dates.

TRANSFER COURSES
Students may take courses at another college to be transferred to Naugatuck Valley Community College for credit. It is the student’s responsibility to have an official transcript of the course work sent to the Office of the Registrar at NVCC for evaluation purposes. This transcript will be evaluated by the associate registrar and acceptable courses will be posted to the student’s academic record. Students are encouraged to consult the associate registrar to ensure the transferability of a course from another institution before enrolling in the course. Transfer credit shall be awarded for comparable courses completed at other regionally accredited higher education institutions. Only credits for courses with grades of “C” or better or a grade of “P” are accepted in transfer only if transcript legend defines “P” as representing a grade of “C” or better. The letter grade(s) assigned by the other institution shall not be recorded or included in the computation of the student grade point average.

Notwithstanding the number of degree credits which shall be granted in accordance with the foregoing, the student must complete at least 25 percent of the minimum credit requirements for the degree through coursework at the college awarding the degree.

When a student seeks transfer credit for technical or specialty courses into a program that is also accredited by a national or regional specialized accrediting agency, such credits must be from a comparably accredited program. In the case of a request for transfer credit for technical or specialty courses from a non-specially accredited program, the college shall provide appropriate means for the validation of the student’s competency in the technical specialty course areas.

CROSS REGISTRATION
Full time students (12 or more credits) may be able to take up to two additional courses for no cost at another state-supported institution of higher education (including the Connecticut State Universities and the University of Connecticut) on a space-available basis if the course is not offered at NVCC.

COURSE OVERLOADS
Course overloads will not be granted. However, in extenuating circumstances, Division Leaders, with the approval of the Dean of Academic Affairs, may authorize overloads to courses that have reached their limit (closed).

COURSE CANCELLATIONS AND CHANGES
Students will be notified by mail, e-mail, or phone of course cancellations. Courses may be cancelled due to insufficient enrollment. Faculty names and room assignments are subject to change due to required adjustments in the schedule. Students are encouraged to check their course schedules before arriving to their first session to verify the assigned room.

REGISTRATION BETWEEN CONNECTICUT COMMUNITY COLLEGES
Tuition and fees for students who register for general fund/tuition account courses at multiple colleges within the community-technical college system shall be charged as follows:

- Full-Time Students – Students who have paid the tuition and fees of a full-time student at their “home” institution shall be exempt from further charges. Copies of the student tuition and fee receipt from the “home” institution should be accepted by the “host” institution in lieu of payment.

- Part-Time Students – The charges for students who have paid the tuition and fees of a part-time student at their “home” institution and register for additional courses at a “host” institution shall not exceed the amount charged for a full-time student, if the student’s combined registration at the “home” and “host” institutions would classify them as a full-time student. Students may register at multiple colleges whose combined student status is less than full-time shall be charged tuition and fees as a part-time student for the semester credits registered at each of the respective colleges.

SUMMER AND WINTER SESSIONS
Naugatuck Valley Community College welcomes students from
other colleges and universities who wish to make up a course or earn advanced standing at their home institution. Credits earned at Naugatuck Valley Community College are generally acceptable at other colleges, but students are advised to consult their home institutions for information regarding transfer of credit.

Naugatuck Valley Community College students may attend the summer or winter session to lighten their study load during the regular academic year or to reduce the time needed to earn their degrees or certificates. Students are encouraged to check the appropriateness of their course selection with their advisors. Course offerings may be viewed online or printed from the College website at nv.edu.

STUDENT RECORDS
Notification of Rights under the Family Educational Rights and Privacy Act (FERPA)
The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student’s education records within 45 days of the day the College receives a request for access. Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request amendment of an education record that the student believes is inaccurate. Students may ask an appropriate College official to amend a record that they believe is inaccurate. The student should write to the College official, clearly identify the part of the record he or she wants changed, and specify why he/she believes it is inaccurate. The College will notify the student of the decision. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision. The right to request amendment does not include the right to request the removal of the results of an institutional disciplinary proceeding against the alleged perpetrator of a crime of violence to the alleged victim of that crime with respect to that crime.

3. The right to consent to disclosure of personally identifiable information contained in the student’s education records, except to the extent that FERPA authorizes disclosure without consent. FERPA permits disclosure without consent to school officials with legitimate educational interests. A “school official” includes but is not limited to the following: a person employed by the College in an administrative, supervisory, academic, research or support staff position (including law enforcement and security personnel, counseling and health staff); a person or company with whom the College has contracted (such as an attorney, auditor, collection agent or official of the National Student Clearinghouse); a person serving on the Board of Trustees who is authorized to act on its behalf; or a student serving on a committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities.

FERPA also permits disclosure of education records without consent in connection with, but not limited to:
- To comply with a judicial order or a lawfully issued subpoena;
- To appropriate parties in a health or safety emergency;
- To officials of another school, upon request, in which the student seeks or intends to enroll;
- In connection with a student’s request for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid;
- To certain officials of the U.S. Department of Education, the Comptroller General, to state and local educational authorities, in connection with certain state or federally supported education programs;
- To accrediting organizations to carry out their functions;
- To organizations conducting certain studies for or on behalf of the College;
- The results of an institutional disciplinary proceeding against the alleged perpetrator of a crime of violence to the alleged victim of that crime with respect to that crime.
- Directory information as defined in the policy of the Board of Trustees.

4. The right to refuse to permit the College to release directory information about the student, except to school officials with a legitimate educational interest and others as indicated in paragraph 3 above. To do so, a student exercising this right must notify the Office of Registrar in writing. Once filed, this notification becomes a permanent part of the student’s record until the student instructs the College, in writing, to remove it.

5. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Colleges to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

   Family Policy Compliance Office
   U.S. Department of Education
   400 Maryland Avenue, SW
   Washington, DC 20202-4605

Directory Information
The Board of Regents has designated the following as directory information: student names and addresses, dates of attendance, full vs. part-time student status, awards and honors and graduation date. For purposes of access by military recruiters only, telephone listings and, if known, age, level of education and major are also designated as directory information.

Colleges may disclose directory information without prior consent, unless a student has exercised the right to refuse to permit the College to release directory information in accordance with paragraph 4 above.

GRADE REPORTS
Semester grades will be available via the web approximately one week after the exam period. To view your grades online go to http://my.commnet.edu.

TRANSCRIPTS
There is no charge for official transcripts. Official and unofficial transcripts are available at my.commnet.edu via the online student information system, where our Parchment transcript service is available for most students. In the event the Parchment service is not available, a transcript request form can be obtained by contacting the Office of the Registrar either by phone at 203-596-2177 or by
email at records@nv.edu.

ENROLLMENT VERIFICATION REQUESTS
Enrollment Verifications are available approximately three weeks after the start of each semester. Enrollment Verifications are supplied through the National Student Clearinghouse. Students can print their own Enrollment Verification Certificate via the internet. By using their 8-digit student ID number and PIN, students can log onto http://my.commnet.edu, click on Banner Student & Faculty Self-Service, then on Student Records, and then follow the Enrollment Verification Request link. This will connect directly to the National Clearinghouse. Enrollment verifications are available approximately three weeks after the start of each semester.

DUPLICATE NON-CREDIT CERTIFICATES
Official non-credit transcripts are not available. Naugatuck Valley Community College issues initial non-credit certificates at no cost to you upon successful completion of all your program requirements. You are responsible for the safekeeping of this certificate. A duplicate or replacement certificate may be obtained for a processing fee of $15. To comply with FERPA laws, all requests must be in writing and signed by the student to whom the certificate was issued. The following information must be included:

- Full name
- Name at the time of the course
- Current mailing address
- Current phone number
- Student ID or Social Security number
- Course or program name
- Semester and year course or program was completed
- Signature (original, not electronic) and current date

This process requires verification of successful program completion and may take up to three weeks. Mail the requests to:

- Naugatuck Valley Community College
- Founders Hall, Room F323
- 750 Chase Parkway, Waterbury, CT 06708
- Attention: Duplicate Certificate Request

FINANCIAL AID POLICIES
Financial aid is monetary assistance provided to undergraduate students who seek higher education. The cost of education beyond high school is expected to be paid by the student and/or the student’s family. When the cost, however, is greater than the student's or the family's ability to pay, financial assistance is available. Most assistance programs are administered on the basis of “need” which is defined as the difference between the cost of attending a particular college and the family’s ability to pay that cost. Cost includes tuition and fees, books and supplies, transportation, and miscellaneous expenses. The student's or the family's ability to pay is calculated through a needs analysis system approved by the United States Department of Education, Office of Student Financial Assistance.

The Financial Aid Office incorporates various types of financial aid into a “Financial Aid Package” for each student in an effort to help the student meet particular educational goals. If qualified, Naugatuck Valley Community College students can receive financial assistance for direct educational costs such as tuition, fees, books and supplies. Student status will be measured as follows:

- 6-8 credits 1/2 time
- 9-11 credits 3/4 time
- 12 credits and above Full-time

Financial Aid Awards shall be prorated based on student status as recorded by the Record’s Office at the time a payment list is generated. If an overpayment has been made, the aid dollars shall be returned in the appropriate accounts. The order is as follows:

- self-help dollars will be restored to accounts.
- student help and college work study dollars will be returned to appropriate accounts.

- loan dollars will be returned to the College account, or to the federal government if a Direct Subsidized Stafford Loan, Direct unsubsidized Stafford Loan, or Direct Plus Loan for Undergraduate Students is involved.

The cost of attending Naugatuck Valley Community College will vary depending on a number of factors: how many courses the student is taking, how far away and with whom the student lives, and whether the student has dependent or independent status. The expenses listed below are typical for a broad category of students attending Naugatuck Valley:

<table>
<thead>
<tr>
<th>ANNUAL BUDGET</th>
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<tbody>
<tr>
<td>Tuition</td>
<td>$4,464</td>
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<tr>
<td>Books</td>
<td>$1,200</td>
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<tr>
<td>Transportation and Miscellaneous Expenses</td>
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<td>Meals</td>
<td>$3,600</td>
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<td>Total</td>
<td>$13,464</td>
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</table>

Note: The budget is pro-rated for less than full-time students. (Costs subject to change.)

Eligibility for Financial Assistance
Common to all federal funding, to be eligible for financial assistance a student at the College must:

- be a United States citizen or an eligible non-citizen.
- have financial need as assessed by an eligible needs analysis system.
- be enrolled as a matriculated student at Naugatuck Valley Community College.
- be working towards a degree or certificate.
- maintain satisfactory academic progress.
- not be in default on any federal educational loan or owe a repayment on any federal grant at any institution.
- certify registration for Military Selective Service (if applicable).
- have completed high school or have earned the GED.
- be in good standing with any federal educational loans.
- Non-credit course work does not qualify for federal financial aid.

HOW TO APPLY FOR FINANCIAL AID
A student may apply for financial assistance at Naugatuck Valley Community College by completing the Free Application for Federal Student Aid (FAFSA) form for the year in which the student intends to attend the College. This form will establish the “financial need” of the student. Financial aid is granted on a one (1) year basis; students must apply for assistance each year.

The student and a parent must apply for a FSA ID at fsaid.ed.gov. The FSA ID is required for use in signing the online application.

The student should complete the FAFSA on the web at fsaid.ed.gov. The Federal School Code for Naugatuck Valley Community College is 006982.

Using Your Tax Return:
If you (or your parents) need to file a tax return with the Internal Revenue Service (IRS), we recommend that you complete your tax returns before filling out the FAFSA. If you have not completed your tax return yet, you can submit your FAFSA using estimated tax information, and then correct that information after you file your tax return. The easiest way to complete or correct your FAFSA with
accurate tax information is by using the IRS Data Retrieval Tool through www.fafsa.gov. In a few simple steps, you may be able to view your tax return and transfer it directly into your FAFSA.

If a student is selected for verification, processing time can take up to four (4) weeks. Students are encouraged to provide all required verification documents in a timely manner to the Naugatuck Valley Community College Financial Aid Office. During the verification process if a student wishes to register for classes, payment arrangements must be made with the Bursar's Office to avoid cancellation of classes.

**TYPES OF FINANCIAL AID**

Once eligibility has been established, the student should visit www.nv.edu and login on MyCommnet Banner Self Service and click on the financial aid tab. This will explain the “Financial Aid Package” comprised of all the funds the student will receive. The student may receive aid from one or many programs depending upon the student’s need and the availability of funds. The available programs include:

### Grants

These are gift aid programs. Funds are not required to be repaid.

- **Federal Pell Grant** This grant is the foundation of all federal aid programs. It is money provided to help undergraduate students pay for their education beyond high school. The amount of money the student can receive through this program will depend upon the program funding for the year, the information the student provides on the application, and whether the student is enrolled full-time or part-time. The student must be enrolled for at least three credit hours in a program of six months in length or longer. The student is eligible for this grant until a first bachelor's degree is earned.

- **Federal Supplemental Educational Opportunity Grant (SEOG)** This is a federal grant for undergraduate students who have completed high school and have a financial need.

- **Naugatuck Valley Grant** This program provides grants in varying amounts to students demonstrating financial need. Eligibility requires that a student be a Connecticut resident.

### Loans

These funds must be repaid and approval of these loans is not automatic.

- **Federal Direct Stafford Loan Program** This program provides low interest loans to students seeking assistance in financing their education. The loans are administered through the Federal government. The interest rate is variable and may change every July 1, but many never exceed 8.25%. These loans are available to students who are enrolled at least half-time and maintain satisfactory academic progress. The loan must be used for reasonable educational expenses.

- **Federal Direct Plus Loans** Federal Plus Loans are for parents to borrow. This type of loan enables parents with a good credit history to borrow to pay for the education expenses for each of their dependent undergraduate children who are enrolled at least half-time and maintain good academic satisfactory progress.

- **Federal Work-Study Program**

  - The Federal College Work-Study Program (FWS) is part of the “Financial Aid Package” which provides jobs for undergraduate students who need help earning funds for some of their educational expenses. Awards vary according to financial need and the availability of funds. Generally, a student will work 7 to 15 hours weekly at the prevailing rate. Students must be enrolled at least part-time (six credits) and be making satisfactory academic progress.

### ACADEMIC STANDARDS FOR FINANCIAL AID RECIPIENTS

**Satisfactory Academic Progress Policy for Student Financial Aid Recipients**

A student receiving Federal Title IV financial aid or other financial aid directly administered or certified by the college must maintain satisfactory academic progress towards the completion of a certificate or degree program of study. Satisfactory academic progress for financial aid recipients is measured by both quantitative and qualitative standards and is an assessment of a student’s cumulative academic record at the college. A student must complete successfully two-thirds (66.66%) of the credits (earned credits/attempted credits) s/he attempts. All attempted credits resulting in either an academic grade or administrative transcript notation will be included in the quantitative calculation. Incomplete courses, course withdrawals, course repetitions, and noncredit remedial courses (with appropriate credit equivalency evaluation) will be included in this assessment. Transfer credits will be counted as attempted and earned credits in the calculation for determining satisfactory academic progress. A student must also maintain a cumulative minimum grade point average as noted below to be making satisfactory academic progress and be eligible to receive financial aid.

- **Earned Credits Minimum GPA**
  - \( \leq 15.99 \) 1.50
  - \( \geq 16.00 \) 2.00

**Financial Aid Warning Period**

A student’s cumulative academic history will be evaluated prior to each term’s financial aid disbursement. This policy will be used to evaluate full-time and part-time students.

1. **Repeated/Audit Coursework:** Financial aid recipients are limited to one repetition of a previously passed course in their program of study. A second repetition of a previously passed course will not be eligible for financial aid payment. Audit courses are not financial aid eligible.

2. **Communication:** Students will receive notification prior to the start of a period of enrollment via postal mail or e-mail that will describe any changes to the status of their academic status. Updates to academic progress standing are also available to student at http://my.commnet.edu.

3. **Warning Period:** Any student who fails to meet the minimum satisfactory academic progress standard will be placed on Financial Aid Warning once. The warning period will be the student’s next semester of enrollment at the college. The college will communicate the Warning status to the student and inform the student that s/he must meet the academic progress standard by the end of the Warning Period in order to maintain eligibility to participate in the financial aid program at the college.

**Termination**

Any student who fails to meet the minimum satisfactory academic progress standard at the end of the warning period will be dismissed from the financial aid program at the college. The College will communicate the termination status to the student and inform the student of the reinstatement and appeal process available to the student.
Maximum Credit Hours
A student may receive student financial aid for any attempted credits in his/her program of study that do not exceed 150% of the published length of the student’s educational program at the College. For example, a student enrolled in a 60-credit degree program may receive financial aid for a maximum of 90 attempted credit hours. Similarly, a student enrolled in a 30-credit certificate program may receive financial aid for a maximum of 45 attempted credit hours. Any attempted credits at the College must be included in the calculation. This 150% maximum credit hour rule is applicable to students who change majors or who pursue a double major.

Reinstatement
A student’s financial aid eligibility will be automatically reinstated at such time as the student meets the minimum satisfactory academic requirements. Reinstatement to the financial aid program may also occur upon successful appeal by the student.

Appeal Process
Students may appeal financial aid decisions. The first appeal should be made to the Director of Financial Aid. Appeal forms are available online and at the Financial Aid Office. Any appeal, due to extenuating circumstances (such as injury, illness, death of a relative, or if a student has experienced undue hardship as a result of special circumstances) must be documented with supporting evidence from a third-party source. Students will be notified of the director’s decision within 14 days. If the student is dissatisfied with the decision on that level, an appeal can be made to the Dean of Student Services.

Withdrawal From Classes
Students who plan to withdraw from any classes must report to the Financial Aid Office prior to the actual course withdrawal for counseling and/or adjustment to their award. Students who do not follow this procedure may be placed on warning or terminated from financial aid depending upon completion of the rest of their courses and the grades earned for those courses.

FINANCIAL AID — SUMMER SESSION
There are Pell Grants available for those who qualify for the summer session. Satisfactory academic progress requirements are identical to semester requirements. For further information, please call the Financial Aid Office.

FEDERAL TAX CREDITS FOR EDUCATIONAL EXPENSES
The Taxpayer Relief Act of 1997 created two nonrefundable education tax credits entitled the Hope Scholarship Credit and the Lifetime Learning Credit. See details on page 20.

RIGHTS AND RESPONSIBILITIES OF STUDENTS RECEIVING FINANCIAL AID
You have the right to ask the College:
• The names of its accrediting organizations.
• About its programs and faculty; its instructional, laboratory, and other physical facilities.
• What is the cost of attending; what are the policies regarding refunds to students who withdraw.
• What financial assistance is available, including information on all federal, state, local, private, and institutional financial aid programs.
• What the procedures and deadlines are for submitting applications for each available financial aid program.
• What criteria is used to select financial aid recipients.
• How financial need is determined. This process includes how costs for tuition and fees, room and board, travel, books and supplies, personal and miscellaneous expenses, etc. are considered in a student’s budget. It also includes what resources (such as parental contribution, other financial aid, assets, etc.) are considered in the calculation of financial need.
• How much financial need, as determined by the institution, has been met.
• How and when will financial aid be distributed.
• An explanation of each type and amount of assistance in the financial aid package.
• What the interest rate is for a student loan, the total amount that must be repaid, the length of time for repayment, the date to begin repayment, and any cancellation and deferment provisions that apply.
• Those involved in the College's Work Study Program have the right to know the type of jobs available, hours of work, duties, rate of pay, and payment schedule.
• For a reconsideration of the aid package if you believe a mistake has been made or if your enrollment or financial circumstances have changed.
• For an explanation regarding the criteria used to determine satisfactory progress.
• What special facilities and services are available to students with disabilities.

It is your responsibility to:
• Review and consider all information about the College’s programs before enrollment.
• Register for courses that will fulfill the degree requirements.
• Pay special attention to your application for student financial aid, complete it accurately, and submit it on time to the proper office. Errors can prevent or delay the receipt of financial aid.
• Provide all additional documentation, verification, corrections and/or new information requested by either the Financial Aid Office or the agency to which you submitted your application.
• Read and understand all forms that you are asked to sign, and retain a file copy.
• Accept responsibility for the promissory note and all other agreements that you sign. If you have a loan, notify the Department of Education of changes in your name, address or school status.
• Perform in a satisfactory manner the work that is agreed upon in accepting a college work-study job.
• Know and comply with the deadlines for application or reapplication for aid.
• Know and comply with the College’s refund procedures.

PAYMENT OF TUITION AND FEES
Payments of tuition, the college services fee, the student activities fee and applicable mandatory usage fees are expected in accordance with deadlines published in the credit and non-credit tabloids each semester. Special fees and charges must be paid as designated by the College.

All holders of temporary visas (e.g. F, B, J, and H) will be charged the out-of-state tuition rate, unless and until they present evidence of change to permanent resident which may be demonstrated by presentation of the “Notification of Action” form from U.S. Citizenship and Immigration Services verifying the student’s change of status, or the actual “green card” as well as evidence that establishes Connecticut residency in accordance with state law.
FINANCIAL AID INFORMATION/TUITION AND FEES

Failure to Pay
The College reserves the right to cancel student registrations for non-payment, but students are responsible for the applicable charges should they fail to formally drop the class(es) from their schedule or withdraw from the College. The College also reserves the right to freeze the records of any students with incomplete payment plans or other obligations to the College.

Students presenting bad checks must replace them (plus $25.00) with cash, money order or bank check within seven (7) days (one week) of the College’s receipt of such notification.

The applicable charges are subject to change but are expected to be as shown below and on the following pages. Charges for non-credit courses are variable by course.

Installment Payment Plan
An installment payment plan is available to students enrolling for 3 credits or more in the fall and/or spring semesters and select non-credit programs. This plan allows students to defer the payment of tuition beyond the normal due dates, for a fee of $25.00 each semester. Specific information is available in the Bursar's Office, Kinney Hall.

Special Fees
These include:
1. An application fee charged to all first-time applicants for admission and first-time non-matriculating students at any Connecticut Community College..............................................$20.00
2. A program enrollment fee charged to all students applying for matriculation into an academic program except if an application fee has been paid.................................................................$20.00
3. Late payment fee charged for any tuition and fee payment received after the established date .......................$15.00
4. Replacement of a lost library/ID card fee is charged to defray the cost of replacing a student’s ID card ..................$10.00
5. Returned check fee charged for any checks which are not honored by a banking institution.............................$25.00
6. College Level Examination Program (CLEP) ...... $15.00
   (In addition there is a $80 fee payable to The College Board)
   Proctoring fee .....................$15.00 for CCC students; $35 for non-CCC students
7. Academic evaluation fee charged to students taking college-produced examinations for the awarding of course credit ..........................................................$15.00
8. Portfolio assessment fee .................................................$100.00
9. TV course fees charged for the support of promotional and other expenses .........................................................$0
10. Proctoring fee ..............................................................$35.00

Students enrolled in tuition fund courses and/or educational extension fund credit courses carrying 12 semester hours or more will be classified as full-time for general fee purposes.

WAIVER OF FEES
Fees may be waived under the following conditions:
• Application fee waiver for students with severe financial need.
• Fee waivers for special programs for students rendered incapable of paying the fees or benefiting from the services.
• Fee waivers for students taking TV courses only and who will not use the College facilities.

WAIVERS OF TUITION
Tuition waivers apply to general fund courses only unless otherwise noted.

Dependent Children of Certain Police/Firefighters
Tuition is waived for any dependent child of a police officer, as defined in section 7-294a of the CT General Statutes, or a supernumerary or auxiliary police officer, or firefighter, as defined in section 7-323j, killed in the line of duty.

Persons 62 Years or Older
The application fee and all general fees are waived for any Connecticut resident 62 years of age or older who has been accepted for admission. Tuition is waived for Connecticut residents 62 years of age or over on a space available basis. Special fees other than the application fee must still be paid. Registration under this waiver begins on the first day of the semester/session and is restricted to classes with available seats.

VETERAN’S AND NATIONAL GUARD BENEFITS
The Veteran’s Administration provides educational benefits under the following programs:

- Chapter 30: The Montgomery G.I. Bill
- Chapter 31: Vocational Rehabilitation
- Chapter 32: Post Vietnam Veterans Educational Assistance Program (VEAP)
- Chapter 33: Post 9/11 G.I. Bill
- Chapter 35: Survivors’ and Dependents’ Education
- Chapter 1606: Selected Reserve Program
- Chapter 1607: Reserve Educational Assistance Program (REAP)

Students are advised to make their initial application for VA benefits well in advance of their first semester. Veterans may use their GI Bill benefits during spring, summer and fall semesters.

Eligible students may use VA benefits to pursue a degree or certificate program approved by the CT State Approving Agency and must be enrolled in that program. Courses that the student registers for must fulfill degree requirements. Once a student has registered and paid the appropriate charges for a given semester, the College will certify the student’s enrollment to the VA, which will then pay the appropriate benefits to the student.

Continued certification by the College is contingent on the student’s maintaining satisfactory academic progress toward the completion of program requirements.

Further information on VA benefits available in the Veteran’s Affairs Office located within the Financial Aid Office in K512.

Connecticut Veteran’s Tuition Waiver
Under Section 27-103 of the CT General Statutes, the Board of Trustees for the State of Connecticut Community Colleges shall waive the tuition at any community college for eligible CT veterans with military service during time of war. For the purpose of granting a tuition waiver, a veteran is anyone who has served at least 90 days of active duty and has been released from active duty honorably or under honorable conditions.

To use the waiver, a veteran should complete the application in the Veteran’s Affairs Office in K512, present a CT driver’s license or military identification card, and make payment arrangements at time of registration if no Certificate of Eligibility is on file with the Veteran’s Affairs Office.

National Guard Tuition Waiver
Members of the Connecticut Army and Air National Guard who are in good standing are eligible for a tuition waiver. The waiver can be used during spring and fall semesters only and does not cover fees or book charges.

Guard members must apply for a Certificate of Eligibility from their unit. Members are encouraged to apply early to their unit for the semester they wish to attend. The Certificate of Eligibility is good for one semester only. All guard members must be prepared to make payment arrangements at time of registration if no Certificate of Eligibility is on file with the Veteran’s Affairs Office.
Veterans OASIS
The Veterans OASIS is located in S411 and is open Monday through Friday, 7 am - 10 pm; Saturdays, 7 am - 6 pm; and Sundays, 11 am - 6 pm. The Oasis provides a quiet area for networking, homework, and veteran related activities. There are computers and wireless internet available also. For further information, please contact Debbie DiCicco in K512.

Dependent Child or Surviving Spouse of Specified Terrorist Victim
Tuition for General Fund courses are waived for any Connecticut resident who is a dependent child or surviving spouse of a specified terrorist victim who was a resident of Connecticut. A list of said victims is maintained by the State Department of Higher Education.

Dependent Children of Veterans
Dependent children of veterans missing in action or former prisoners of war will have a complete waiver of tuition.

FEDERAL TAX CREDITS FOR EDUCATIONAL EXPENSES
The Taxpayer Relief Act of 1997 created two non-refundable education tax credits entitled the **Hope Scholarship Credit** and the **Lifetime Learning Credit**. A nonrefundable tax credit allows a taxpayer to subtract from the total amount of taxes owed, the value of the credit that he/she is eligible for. “Nonrefundable” means that you must owe taxes to get the value of the credit (i.e. if you owe $500 in taxes and are eligible for a $1,000 tax credit, you can subtract $500 from the taxes owed).

**Hope Scholarship Credit** is a non-refundable tax credit that can be claimed for 100 percent of the first $1,000 of out of pocket expenses for each student’s qualified tuition and related expenses, plus 50 percent of the next $1,000. For example, the maximum is a $1,500 tax credit for each student ($2,000 in out-of-pocket expenses).

Credits can also be claimed for other students in the family (a dependent or spouse) who qualify (i.e., a parent goes to school and claims the credit for himself/herself and a child who is a dependent that is also attending a school). The credit is based on a per student basis. As long as the student is eligible, there is no limit on the dollar amount a particular family can be eligible.

**Lifetime Learning Credit** is a non-refundable tax credit that can be claimed for 20 percent of the first $5,000 of out of pocket expenses for a family’s qualified tuition and related expenses. For example, the maximum is a $1,000 tax credit for the entire family. In the year 2003, the amount increases to 20 percent of the first $10,000 ($2,000).

Credits can be claimed for more than one person in the family but not to exceed $1,000 for the entire family ($2,000 in 2003). This is different than the Hope Scholarship Credit; the amount is based on a per family basis rather than a per student basis. There is a dollar limit that a family can be eligible.

You must meet specific income and enrollment guidelines to be eligible. Consult the Taxpayer Relief Act of 1997 or the Internal Revenue Service for details.

WITHDRAWALS AND REFUNDS
A registered student wishing to withdraw must submit a withdrawal request, in writing, to the Office of the Registrar. The effective date of withdrawal is the date the signed withdrawal is received. Withdrawals can be made:

- in person in Waterbury: Office of the Registrar, K516
- in person in Danbury: Administrative Office, 2nd Floor
- by mail: NVCC Office of the Registrar K516
- 750 Chase Parkway, Waterbury, CT 06708
- Fax: (203) 575-8085
- On-line: http://mycommnet.edu

Requests must be received by the deadline within the withdrawal period (i.e. requests received by midnight prior to the deadline will be honored).

Refunds of Tuition and Fees
- **Non-refundable Fees**
  - The college services fee and student activity fee paid by all students registering for credit general fund/tuition account courses, or credit extension account courses, are non-refundable, except when course sections cancelled by the College would result in a change in fees otherwise due.
- **Also, the following usage fees and special fees are non-refundable:**
  - clinical program fee
  - application fee/program enrollment fee
  - late registration fee
  - replacement of lost ID card fee
  - academic evaluation fee
  - portfolio assessment fee
  - lab/studio fees
  - proctoring fee
  - supplemental fee
  - manufacturing fee

- **Refund of Tuition for General Fund Credit Courses**
  - For notice of an official drop received prior to the first day for that semester, a refund of 100 percent of total tuition and supplemental fees will be granted for both full-time and part-time students.
  - For notice of withdrawal received on the first day of the semester through the 14th calendar day of that semester, both full-time and part-time students will be granted a 50 percent refund of total tuition and supplemental fees applicable to the courses for which they are registered.
  - For a reduction in load which occurs on the first day of the semester through the 14th calendar day of that semester, 50 percent of the difference of the tuition and supplemental fees applicable to the original and revised course schedule will be refunded.

- **Refund Schedule for Students Enrolling in the Armed Services**
  - Upon submitting notice in writing of withdrawal accompanied by a certified copy of enlistment papers, 100 percent refund of tuition and fees will be granted to students entering the armed services before earning degree credit in any semester.

- **Change of Registration**
  - When a student has changed his or her course schedule to a different mix of general and extension credit courses, the College may elect not to apply the refund policy which would otherwise be in effect with respect to the course(s) deleted, and may, instead, collect or refund only the net amount due based on the tuition and fee policies applicable to the total student course load.

- **Refund of Fees for Extension Fund Credit Courses**
  - Extension fees may be refunded in accordance with the following:
    - A student who withdraws by the last business day before the first day of the semester/session is entitled to a full refund of
TUITION AND FEES

all extension account fees. A request for withdrawal must be received by the president or his or her designee no later than the end of the last regular business day of the college before the first day of the semester/session.

• A student reducing his or her extension account course load will be entitled to a full refund of extension account fees appropriate to the course(s) dropped, provided the request for refund is received by the president or his or her designee no later than the end of the last regular business day of the college before the first day of the semester/session.

• No refund will be made after the first semester/session except in cases of serious illness or other extraordinary circumstances, at the discretion of the college president or his or her designee.

• Other – Special Waivers
  • The College president is authorized to modify the tuition refund policy for specific students on a case-by-case basis under the following circumstances: severe illness documented by a doctor’s certificate; erroneous advisement by the College; and military transfer. Exceptions which are not normally considered include change in job, normal illness, and poor decision or change in mind by a student. Other extenuating or extraordinary circumstances may also be considered upon written request submitted to the president or his/her designee.

• Refund Policy for Students Participating in Federal Title IV Student Aid Programs
  • Students who receive federal student aid and withdraw from all classes are subject to the Return of Federal Title IV Funds calculation. This calculation allows you to keep only that portion of federal aid which you earned, based upon the number of calendar days you were in attendance, compared to the number of calendar days in the entire semester.
  • (Example: A student received $1200 in Federal Grants, but withdrew after 40% of the semester. He is said to have "earned" 40% of the grants or $480.00. The remainder of the Grants, or $720.00 is said to be "unearned.")
  • Any balance remaining after this calculation will be your responsibility to pay back to NVCC. Should you fail to complete payment, you will be referred to the U.S. Department of Education for collection and will no longer be eligible for Title IV funds at any institution.

• Non-credit Refund Information
  • Withdrawal requests for refund must be received three business days (72 hours) prior to the beginning of class unless stated otherwise in the course description. Refunds are not granted after this deadline. Telephone: 203-575-8029 Fax: 203-575-8243 Email: nc@nv.edu Mail: Non-Credit Refunds, Room F323, Naugatuck Valley Community College, 750 Chase Pkwy., Waterbury, CT 06708
  • If there is a course cancellation due to insufficient enrollment, students will be notified by phone, mail and/or email. Please make sure when registering that your contact information is up-to-date. We would like to offer you the opportunity to transfer to another section, if available, or to another class of your choosing. If we have not heard from you within 7 business days, a refund will automatically be processed. Please allow 2-4 weeks for processing. The person registered in our records system is the person who will receive the refund. The College reserves the right to cancel courses due to insufficient enrollment or other reasonable causes. Full refund is made if the College cancels the course. When registering for a coupon course, cancellation of one class voids the discounted price.
Tuition for Fall 2019 has not been officially set by the Connecticut Board of Regents. Any change in tuition and/or fees may result in additional charges for Fall 2019 being assessed on your account at a later date.

Subject to change without notice.
Visit nv.edu/pay for current tuition and fee schedule.

### In-State Resident Students

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12.0 or more **$1,956.00 .. $236.00 .. $20.00 .. $2,212.00

Annual Full-time $3,912.00 $472.00 $40.00 $4,424.00

### Out-of-State Non-Resident Students

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12.0 or more **$5,868.00 .. $708.00 .. $20.00 .. $6,596.00

Annual Full-time $11,736.00 $1,416.00 $40.00 $13,192.00

### New England Regional Program (NEBHE)

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12.0 or more **$2,934.00 .. $354.00 .. $20.00 .. $3,308.00

Annual Full-time $5,868.00 .. $708.00 .. $40.00 .. $6,616.00

### Educational Extension Program Credit Courses

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<td>$236.00</td>
<td>$20.00</td>
<td>$2,896.00</td>
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</tbody>
</table>

**Excess Credits Tuition Charge: An additional flat tuition charge of $100 per semester shall apply when total registered credits exceed 17 for the semester.

**Mandatory Usage Fees, rates effective Fall 2018:**

- Clinical Program Fee-Level 1 * * $487.00 *Per semester, not assessed Material or Supplemental Clinical Program Fee
- Clinical Program Fee-Level 2 * * $359.00
- Advanced Manufacturing Lab Fee * * $120.00
- Supplemental Course Fee Level 1 ** * $102.50**Per course; level determined by additional contact hours
- Supplemental Course Fee Level 2 ** * $205.00
- Material Fee *** * $51.00 ***Per course, where applicable

All Tuition and Fees are subject to change
STUDENT SERVICES AND PROGRAMS

CENTER FOR JOB PLACEMENT AND COLLEGE OPPORTUNITIES (CJPCO)
Traurig Learning Resources Center & Library, Room L524
Phone: (203) 575-8158 • Fax: (203) 596-8794
nv.edu/cjpcowaterbury
Monday - Friday, 8:30 a.m. to 4:30 p.m
Evening hours by appointment only.

Danbury
Administrative Offices
Visit the calendar for days and times at nv.edu/jpc
The Center for Job Placement and College Opportunities' (CJPCO) services include career planning, employer connections, cooperative education, internships, student workers and student assistants. Learn to conduct a job search, use Internet services effectively in all phases of career planning, including finding a career that suits your strengths and personality type, as well as the hiring outlook, salary information and educational requirements of careers of interest to you. Learn to write effective resumes and cover letters, interview effectively and connect with employers who are actively hiring employees or interns. Sign up for our online job posting board at
www.collegecentral.com/nvcc to view part-time, full-time, internship and work study job postings and to post your resume.

All CJPCO services are open to alumni as well as to current students.

WORKFORCE TRANSITION SERVICES

W.I.A. Programs The federal Workforce Investment Act (W.I.A.) offers a comprehensive range of workforce development activities through statewide and local organizations. Naugatuck Valley Community College is a partner with the Northwest Regional Workforce Investment Board. NVCC offers programs that are certified to provide education and training to adults and dislocated workers who have been awarded vouchers under W.I.A., these may include:
• Job Seekers
• Laid-off Workers
• Youth
• Incumbent Workers
• New Entrants to the Workforce
• Veterans
• Persons with Disabilities
• Employers

For more information, or to learn if you qualify, contact your local Department of Labor at www.CTDOL.state.ct.us. Once qualified by the D.O.L., students should schedule an appointment to determine an educational plan. Contact:
Linda Stango, Director of Workforce and Transition
190 Main Street, Danbury, CT 06810
Tel. (203) 437-9699
or
750 Chase Parkway, Room L524
Waterbury, CT 06708
Tel. (203) 575-8221
lstango@nv.edu

NEW students to the college who want to know about admissions and program requirements should contact the Admissions Office at (203) 575-8040.

CONTINUING students to the college should contact their faculty advisor: A list of advisors can be found in the CAPSS office or by logging into www.myCommnet.edu.

Academic Advising Academic advising is offered to assist students in recognizing the options that are available for their educational planning, to illustrate the need to plan ahead, to learn the language of educational planning, learn the optimal sequence of courses, identify academic requirements and electives, educational decision making, and develop an overall educational plan.

Testing Center Listed below are the tests offered and administered in the Testing Center. Students may elect to have prior learning evaluated by the following examination options:
• College Level Examination Program (CLEP) allows individuals to earn college credit for what they already know. NVCC awards credit for successful scores on CLEP exams. CLEP tests may be taken at Naugatuck Valley through the Testing Center.
• Credit by Examination - Some divisions and departments of the College produce their own examinations for credit. Contact your advisor or the Testing Center for more information.

Test of Essential Academic Skills (TEAS) Students applying to the Nursing or Physical Therapist Assistant programs are required to take the TEAS.

Accuplacer (Placement Test) Incoming students enrolled in a degree or certificate program are required to take the placement test to assess academic skills in mathematics, English and reading.

Career Counseling Career counseling is an educational and developmental process that is dedicated to student self-realization and self-direction, and assists students in developing skills in career decision making. In collaboration with the CJPCO, CAPSS offers several career planning opportunities including career assessments and individual career counseling appointments.

Personal Counseling Counseling within the CAPSS office takes a holistic approach to student success. Short term counseling services are provided by professionally trained counselors for personal concerns. Some concerns for personal counseling include but are not limited to: academic issues and dilemmas, making life decisions, developing self-confidence, managing stress, and alleviating personal barriers to success in college. Referrals to outside agencies are made as needed.

Transfer Planning Students planning to transfer upon graduation to other colleges or universities should meet with their academic advisor or see a counselor early in their academic studies. Credits that are transferable and applicable vary from college to college, so it is critical that students learn about the college of their choice and the transfer process for that college. CAPSS hosts semiannual Transfer Fairs for students in which area colleges and universities are represented.
TRANSFER INFORMATION
Counselors and/or advisors provide assistance for students who plan to transfer into a four–year college or university. Information is available in CAPSS on the transfer of credits, scholarships, financial aid and admission requirements for both in-state and out-of-state colleges and universities. Students should consult with their receiving institutions to confirm that courses will transfer.

Transfer to the Connecticut State Universities (CSU’s)
Graduates of the Connecticut Community Colleges with a GPA of 2.0 or higher are guaranteed admission to the state university of their choice within the Connecticut State College and University System. Students must adhere to the application deadlines. See the Center for Academic Planning and Student Success (CAPSS) for details.

Transfer Ticket Degrees allow NVCC students to complete associate degree programs that transfer without hassle to all Connecticut State Universities and Charter Oak State College offering their major. Upon transfer, students are guaranteed full junior status and can complete a bachelor's degree in their major without losing any credits or be required to take any extra credits.¹

For students who wish to start a bachelor degree at NVCC, we offer Transfer Tickets Programs in the following degrees:

<table>
<thead>
<tr>
<th>Accounting (Business)</th>
<th>Early Childhood (Teacher Credential)</th>
<th>Physics</th>
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</thead>
<tbody>
<tr>
<td>Art</td>
<td>English</td>
<td>Political Science</td>
</tr>
<tr>
<td>Biology</td>
<td>Finance (Business)</td>
<td>Psychology</td>
</tr>
<tr>
<td>Business Administration</td>
<td>History</td>
<td>Social Work</td>
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<tr>
<td>Chemistry</td>
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<td>Sociology</td>
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<td>Communication</td>
<td>Marketing (Business)</td>
<td>Spanish</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Management (Business)</td>
<td>Theater</td>
</tr>
<tr>
<td>Criminology</td>
<td>Mathematics</td>
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</tbody>
</table>

For additional information regarding these programs, please see an NVCC advisor and review information at the CSCU Transfer Ticket Website at http://www.ct.edu/transfer/tickets

¹Note: Transfer Tickets do not include seamless transfer to the University of Connecticut.

Transfer to the University of Connecticut
The University of Connecticut (UCONN) offers the Guaranteed Admission Program (GAP), an agreement between the University and the Connecticut Community Colleges. Naugatuck Valley students may apply if they:

- Complete an application through the Center for Academic Planning and Student Success (CAPSS) prior to completion of 30 transferrable credits
- Limit to majors offered in UCONN's College of Liberal Arts and Sciences and College of Agriculture and Natural Resources
- Complete a prescribed articulation program at NVCC
- Earn a minimum 3.0 GPA upon graduation from NVCC
- Observe the application procedures and deadlines within the agreement

Other articulations currently exist for programs at UCONN's Waterbury Campus:
- Business and Technology
- Urban and Community Studies
- Bachelors of General Studies

NVCC students are free to apply for transfer to any of UCONN’s many colleges and programs at any time. Many of these programs are very competitive. It is important that the student consult with their faculty advisor or the CAPSS for advisement.

NVCC also has various transfer articulation agreements with the following colleges and universities located in Connecticut:
- Fairfield University
- Quinnipiac University
- Saint Joseph College
- Sacred Heart University
- University of Bridgeport
- University of Hartford
- University of New Haven

STUDENT INSURANCE/ACCIDENT REPORTS
Injuries acquired as the result of a school related activity must be reported to the faculty or staff member in charge and to the Office of Disability Services within 24 hours of the time of the injury. Accident report forms are available in this office. For more information, contact the Office of Disability Services.

OFFICE OF DISABILITY SERVICES
Kinney Hall Room K519
Phone: 203-596-8608

Facilities at this college are uniquely appropriate to meet the needs of students with disabilities. Elevators are available to accommodate students in wheelchairs, making classrooms accessible to all students.

During the admissions process students with disabilities who may require accommodations are strongly encouraged to identify themselves to the Admissions Office. This will enable college support staff to provide appropriate assistance with program planning, placement testing, course scheduling and classroom accessibility appropriate to the student’s needs.

After submitting appropriate documentation and completing the disabilities disclosure process, students with disabilities who may require accommodations must contact the Counselor for Students with Disabilities in the CAPSS Office.

Students may discuss their needs with individual instructors. Discussions with faculty should occur at the beginning of each semester and each time an accommodation is required. Instructors, in conjunction with appropriate college officials, will provide assistance/accommodations only to those students who have completed the disclosure and accommodation process. If a student does not disclose a disability, the College will be unable to provide accommodations. The College reserves the right to determine the nature and extent of appropriate academic accommodations. Students requiring ambulatory assistance are strongly encouraged to identify themselves to the Office of Disability Services so that emergency evacuation plans may be made.

The College makes every attempt to adhere to both the guidelines and spirit of the Americans With Disabilities Act.
WOMEN'S CENTER
Kinney Hall Room K405
Phone: (203) 575-8288 or (203) 596-8680
Website: nv.edu/women
Facebook: NVCC Women's Center
Contact: Rose-Mary Rodrigues
RRodrigues@nv.edu

The Women's Center at NVCC assists students to achieve their full potential in education, career, and personal life, as they face and overcome issues unique to women. The Women's Center provides support for NVCC student's intellectual and academic growth, professional development, and personal empowerment.

The Women's Center is a safe place for all women to gather, explore, and share their experiences. The Center facilitates education on issues related to feminism, gender, and domestic and sexual violence.

The Women's Center organizes events of interest to students and the college community such as book discussions, film documentaries, discussion groups, speaker series, workshops and more.

The Women's Center provides resources for students in the areas of crisis intervention, confidential counseling, and community services.

For information on hours and upcoming events, like us on Facebook “NVCC Women's Center.”

ORIENTATION
An orientation program for all new students is designed to assist in the successful transition from high school, home or the workplace to Naugatuck Valley Community College. It is intended to provide entering students with information concerning academic policies, study skills, general college procedures and requirements, the academic expectations of the College, the co-curricular and extra-curricular opportunities, and the available student services. Students should be better able to make reasoned and well-informed choices as a consequence of participation.

STUDENT ACTIVITIES
A variety of more than 33 social and educational clubs and organizations are available for participation by full and part-time students attending the College. These organizations are designed around the needs and interests of the student population. They are continuously being developed by the Office of Student Activities in conjunction with students and members of the College’s faculty and staff who serve as advisors. Students are encouraged to join campus organizations as a means of meeting new friends and obtaining experiential learning opportunities outside their regular classroom programs. Funding for all clubs and organizations is provided by the Student Activity Fee and dispersed by the Student Government Association. In addition, students can find academic honor opportunities in the Academic Standards section.

STUDENT GOVERNMENT
The Student Government Association of Naugatuck Valley Community College is the recognized governing body representing the concerns and interests of the College’s student community. Membership consists of representatives elected from each of the various student clubs and organizations, senators who have successfully collected petition signatures from fifty (50) members of the general student body, and four (4) officers elected each spring semester. Membership is open to all full and part-time students interested in participating. Regular weekly meetings are open to the campus community. The Student Government is responsible for the recognition and funding of all student clubs and organizations on campus. Operating funds for the Student Government are provided by the Student Activity Fee.

NVCC ALUMNI ASSOCIATION
The NVCC Alumni Association offers alumni and their families educational and cultural programs, usually at no cost. Alumni are invited to volunteer to tutor or mentor NVCC students. Alumni Association members hold their own events and often contribute to scholarships. The Development Office has more information.

PUBLIC SAFETY SERVICES
The Public Safety Department is located in the Core Building, Room C122. The department employs sworn police officers, building and grounds officers and telecommunication operators. Sworn members of this department are empowered with all rights and responsibilities of their position as a police officer.

Parking
Specific parking areas are designated for visitors, students, faculty and staff. Parking permits are required for all faculty and staff and may be obtained at the Public Safety Office located in the Core Building, Room C122.

Students may park on a first-come, first-served basis in D lot, E lot, F lot, and P1/P2 of the core garages, overflow lot, roadways where designated, except in those areas designated as handicapped, visitors, fire lanes or grass areas, and in those identified by a sign on special occasions. There is NO student parking in C lot or the Ekstrom garage, Monday-Friday, 6:00 am–5:00 pm. The lack of parking space does not permit the violation of a parking regulation. Vehicles may be towed if they are in violation of the parking regulations without notice to the owner. The speed limit on the roadways is 15 miles per hour.

Parking at Danbury Campus
All students are required to display a parking tag for the Danbury Parking Authority. Parking tags for students are available in the administrative office at the NVCC Danbury Campus located at 190 Main Street, Danbury, CT.)

The College does not assume responsibility for any motor vehicle, parked or in motion, or its contents.

Services Offered by the Department
The Public Safety Department responds to several types of calls for service including:
• a safety escort,
• assistance during emergency evacuations,
• assistance during medical emergencies*,
• lost and found property,
• motor vehicle accidents, and
• any suspected criminal act.

* In the event of an emergency, go to the nearest phone and dial either 8112 or 8113 for assistance.

Report on Campus Crime
In compliance with Connecticut General Statutes section 10a-55a, the Federal Higher Education Act of 1998, concerning campus safety, the Public Safety Department produces a yearly report which identifies the mandated crimes reported and investigated on campus. This report is available on the website, posted throughout campus and in the Public Safety Office.

CAMPUS RESOURCE TEAM (CRT)
In compliance with state and federal regulations, the Campus Resource Team (CRT) will assist the College in addressing issues of Sexual Violence, Dating Violence, Stalking, and Intimate Partner Violence. The CRT consists of members of the NVCC Community as well as the local community and law enforcement. This team will meet regularly to discuss, suggest, develop, guide, and support ways to make NVCC more aware of and sensitive to the issues of Sexual Violence, Dating Violence, Stalking, and Intimate Partner Violence as well as the College policies and procedures that address these issues.
THE CENTER FOR EARLY CHILDHOOD EDUCATION
The Center for Early Childhood Education is designed to foster the social, physical, emotional and intellectual growth of each child by providing a warm, nurturing and enriching environment. The Center is the academic component of the Early Childhood Education Program and serves as a training center for student teachers. The Center is accredited and utilizes the Reggio Emilia Approach and the Connecticut State Frameworks. Children must be 18 months of age to enroll in the toddler program and three years of age to enroll in the pre-school program.

The extended-day program is offered:
Monday-Thursday: 7:30 am - 4:00 pm
Friday: 7:30 am - 12:00 noon

The half-day program is offered:
Monday-Friday: 7:30 am - 12:00 noon

Applicants are encouraged to apply as soon as possible. Traditionally, there is a waiting list of two to three years. For more information, contact The Center at (203) 596-8604.

School Readiness Component
Through the School Readiness initiative children may attend The Center. Children must be 3 years old to attend and with a priority for residents of Waterbury to apply. Fees are set according to a sliding fee scale. The children may attend 7:30 am - 5:30 pm, five days per week, 50 weeks per year. For more information contact The Center at (203) 596-8604.

BOOKSTORE
George D. Yonan Memorial Bookstore
The college bookstore is located on the third level of the Student Center, Room S304. In addition to textbooks, the bookstore offers course supplies, materials, supplies, clothing, electronics, gift items, etc. Regular bookstore hours are Monday-Thursday, 8:30 am-4:30 pm and Friday 8:30 am-1:00 pm. Extended bookstore hours at the beginning of each semester are posted on the web site as well as the T.V. monitors throughout the campus. Textbooks may also be ordered on line through our on-line ordering system which can be found on the college web site at nv.edu click on student services and the bookstore link.

REFUND POLICY: Textbooks may be returned for full refund or exchange during the first week of the semester. Books must be clean, unmarked, in original packaging if purchased that way and not damaged in any way. Cash register receipt MUST accompany ALL book returns. Electronics are not returnable. Clothing is returnable as long as all tags are still attached to merchandise.

DINING SERVICES
Marigolds Café (Student Center 5th floor - Full service café through 2 pm daily / grab and go service until 6 pm.)
Monday-Thursday: 7:30 am - 6:00 pm / Friday: 7:30 am - 1:00 pm

Jacoby’s Café (Founders Hall - Hot and cold beverages, snacks, pastry, soup, grab and go sandwiches and prepared salads daily.)
Monday-Thursday: 8:00 am - 1:45 pm / Closed Friday

In addition, vending services are available 24 hours a day at:
• Student Center Cafeteria
• Ekstrom Hall, 5th and 6th Floors
• Founders Hall
• Kinney Hall, 5th and 7th Floors
• Technology Hall, 5th Floor

OTHER SERVICES
Two ATMs are located on the 5th Avenue Walkway.

BRIDGE TO COLLEGE
In its strategic plan, NVCC committed to creating and strengthening bridge programs with local high schools that contribute to preparing college-ready students. These initiatives fall under the Bridge to College Office and include programs that have been in place for a number of years, such as GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs), as well as new initiatives that were recently funded. These programs include:
• Upward Bound
• Upward Bound Math and Science
• Perkins
• College and Career Pathways (CCP)
• Male Encouragement Network (MEN)
For more information visit nv.edu/b2c.

CONNECTICUT BOARD OF REGENTS
FOR HIGHER EDUCATION POLICIES
Note: The Connecticut Community Colleges are now part of the Connecticut State Colleges and Universities system and are governed by the Board of Regents for Higher Education.

The Board of Regents has stipulated that all policies of the former Board of Trustees shall remain in effect until revised.

ASSESSMENT EXPECTATIONS
Students at Naugatuck Valley Community College are expected to spend several hours during their college career in college-wide outcome assessment activities, such as tests, surveys and interviews.

CONNATC-EOC OFFICE
The Connecticut Talent Assistance Cooperative (CONNTAC) is a state agency funded by the United States Department of Education. A regional CONNTAC Educational Opportunity Center (EOC) is located on the Naugatuck Valley Community College campus. Services offered through the Center include: academic and career counseling, college referral and financial aid planning. For more information, call (203) 574-1140.

DRUGS AND ALCOHOL POLICY
The Board of Trustees of Community-Technical Colleges endorses the statement of the Network of Colleges and Universities committed to the elimination of drug and alcohol abuse, which is based on the following premise:

• American society is harmed in many ways by the abuse of alcohol and other drugs—decreased productivity, serious health problems, breakdown of the family structure, and strained social resources. Problems of illicit use and abuse of substances have a pervasive effect upon many segments of society—all socio-economic groups, all age levels, and even the unborn. Education and learning are especially impaired by alcohol abuse and illicit drug use.

The Board recognizes that education regarding alcohol and substance abuse is an appropriate and even necessary part of contemporary college life. Since the unauthorized use of controlled substances, in addition to the potential harmful effect it may have on students and employees, is contrary to state and federal law and regulation, it must be prohibited in any college activity, on or off the college campus. The conditions of alcohol and drug dependency may be considered disabilities or handicaps under state and federal law and regulation, and under Board of Trustees policy, and employees and students will not be discriminated against because they have these disabilities. All students and employees, however, are considered to be responsible for their actions and their conduct.

These provisions shall apply to all colleges under the jurisdiction of the Board:

1. No student or employee shall knowingly possess, use, distribute, transmit, sell, or be under the influence of any controlled substance on the college campus, or off the college campus at a college-sponsored activity, function or event. Use or possession of a drug authorized by a medical prescription from a registered physician shall not be a violation of this provision.
2. All colleges shall develop and enforce policies regarding the sale, distribution, possession, or consumption of alcoholic beverages on campus, subject to state and federal law. Consistent with previous Board policy, the consumption of alcoholic beverages on campus may be authorized by the president subject to the following conditions, as appropriate:
   a. when a temporary permit for the sale of alcoholic beverages has been obtained and dram shop act insurance has been purchased;
   b. when a college permit has been obtained;
   c. when students bring their own beverages;
   d. when alcoholic beverages are provided by a student organization and no fee is charged for attendance or for said beverages.

All colleges shall provide educational programs on the abuse of alcohol and other drugs and referral for assistance for students and employees who seek it. Colleges are encouraged to establish campus-wide committees to assist in development of these programs in response to particular campus needs and identification of referral resources in their respective service planning regions.

3. This policy shall be published in all college catalogs, faculty/staff manuals, and other appropriate literature.

4. Failure to comply with this policy will result in invocation of the appropriate disciplinary procedure and may result in separation from the college and referral to the appropriate authorities for prosecution.

**PERSONS WITH DISABILITIES POLICY**

The Board of Trustees of Community-Technical Colleges and all of the colleges under its jurisdiction are committed to the goal of achieving equal educational opportunity and full participation for people with disabilities in the Community-Technical Colleges. To that end, this statement of policy is put forth to reaffirm our commitment to ensure that no qualified person be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity on a community-technical college campus or in the central office of the Board of Trustees.

The Board recognizes that a physical or functional impairment is a disability only to the extent that it contributes to cutting the person off from some valued experience, activity or role. Higher education is, therefore, especially important to people with disabilities, since it aims to increase every student’s access to valued experiences, activities, and roles. Improving access for students and employees means removing existing barriers that are physical, programmatic and attitudinal. It also means taking care not to erect new barriers along the way.

The efforts of the Community Colleges to accommodate people with disabilities should be measured against the goals of full participation and integration. Services and programs best promote full participation and integration of people with disabilities when they complement and support, but do not duplicate the regular services and programs of the college.

Achieving the goal of full participation and integration of people with disabilities requires cooperative efforts within and among higher education institutions. The Board of Trustees will work with the Board of Governors to achieve a higher level of services and appropriate delivery methods at all Connecticut Community Colleges.

This statement is intended to reaffirm the Board’s commitment to affirmative action and equal opportunity for all people and in no way to replace the equal opportunity policy statement.

**I. STUDENT CODE OF CONDUCT**

**Preamble**

Academic institutions exist for the transmission of knowledge, the pursuit of truth, the development of students, and the general well-being of society. In line with this purpose, the Board of Regents for Higher Education (“BOR”) in conjunction with the Connecticut State Colleges and Universities (“CSCU”) has the duty to protect the freedoms of inquiry and expression, and furthermore, has the responsibility to encourage all of its members to develop the capacity for critical judgment in their sustained and independent search for truth.

CSCU has certain self-defined institutional values. Principal among these values is respect for the safety, dignity, rights, and individuality of each member of the CSCU Community. The opportunity to live, study, and work in an institution which values diverse intellectual and cultural perspectives and encourages discussion and debate about competing ideas in an atmosphere of civility is a basic component of quality higher education.

All members of CSCU must at all times govern their social and academic interactions with tolerance and mutual respect so that the students who pass through a CSCU door are enriched by these experiences and are prepared for full and enlightened participation in a multi-cultural society. Because of the BOR’s and CSCU’s commitment to principles of pluralism, mutual respect, and civility, certain activities are not acceptable on CSCU campuses. Acts of intolerance, of hatred or violence based on race, religion, sexual orientation or expression, disability, gender, age, or ethnic background are antithetical to the BOR’s and CSCU’s fundamental principles and values. It is the BOR’s and CSCU’s responsibility to protect our students’ right to learn by establishing an environment of civility.

The disciplinary process is intended to be part of the educational mission of CSCU. Student disciplinary proceedings are not criminal proceedings and are not subject to court rules of procedure and evidence.

**Introduction**

This Student Code of Conduct (hereinafter the “Student Code” or “Code”) is intended to present a clear statement of student rights and responsibilities established by the Board of Regents for Higher Education. The BOR has charged the President of the Board of Regents for Higher Education with developing procedures to protect those rights and to address the abdication of responsibilities in collaboration with the four State Universities, the twelve Community Colleges and Charter Oak State College. The Student Code describes the types of acts that are not acceptable in an academic community.

Disclaimer: This Code is neither a contract nor an offer of a contract between any BOR governed institution and any student. The provisions of this Code are subject to revision at any time.

**Part A: Definitions**

The following list of defined terms utilized throughout this Student Code is provided in an effort to facilitate a more thorough understanding of the Code. This list is not intended to be a complete list of all the terms referenced in the Student Code that might require interpretation or clarification. The Vice President for Student Affairs at a University, the Dean of Students at a Community College, the Provost at Charter Oak State College or their designee shall make the final decision of the interpretation of the definition of any term found in the Student Code. For purposes of interpretation and application of the Student Code only, the following terms shall have the following meanings:

1. “Accused Student” means any student accused of violating this Student Code.
2. “Advisor” means a person who accompanies an Accused Student or an alleged victim to a hearing (or a proceeding pertaining to a report of sexual violence) for the limited purpose of providing advice and guidance to the student. An advisor may not directly address the
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Hearing Body, question witnesses, or otherwise actively participate in the hearing process (or other proceeding pertaining to a report of sexual violence).

3. “Appeal Body” means any person or persons authorized by the University Vice President for Student Affairs, Community College Dean of Students, Charter Oak State College Provost or their designee to consider an appeal from a determination by a Hearing Body that a student has violated the Student Code.

4. “Calendar Days” means the weekdays (Mondays through Fridays) when the University or College is open.

5. “College” means either collectively or singularly any of the following institutions: Asnuntuck Community College, Capital Community College, Gateway Community College, Housatonic Community College, Manchester Community College, Middlesex Community College, Naugatuck Valley Community College, Northwestern Connecticut Community College, Norwalk Community College, Quinebaug Valley Community College, Three Rivers Community College, Tunxis Community College, and Charter Oak State College.

6. “Complainant(s)” means the person(s) who initiates a complaint by alleging that a Student(s) violated the Code.

7. “CSCU” means either collectively or singularly, any of the following institutions: Central Connecticut State University, Eastern Connecticut State University, Southern Connecticut State University, Western Connecticut State University; Asnuntuck Community College, Capital Community College, Gateway Community College, Housatonic Community College, Manchester Community College, Middlesex Community College, Naugatuck Valley Community College, Northwestern Connecticut Community College, Norwalk Community College, Quinebaug Valley Community College, Three Rivers Community College, Tunxis Community College, and Charter Oak State College.

8. “CSCU Affiliates” means individuals and/or entities with whom or with which the College or University has a contractual relationship.

9. “CSCU Official” means any person employed by the College or University to perform assigned administrative, instructional, or professional responsibilities.

10. “CSCU Premises” means all land, buildings, facilities, and other property in the possession of, or owned, used, and/or controlled by, the University or College, either solely or in conjunction with another entity.

11. “Disciplinary Officer” or “Conduct Administrator” means a University, College or CSCU official who is authorized to determine the appropriate resolution of an alleged violation of the Code, and/or to impose sanctions or affect other remedies as appropriate. Subject to the provisions of this Code, a disciplinary officer or conduct administrator is vested with the authority to, among other duties: investigate a complaint of an alleged violation of the Code decline to pursue a complaint, refer identified disputants to mediation or other appropriate avenues of resolution, establish charges against a student and enter into an administrative agreement agreement developed with an Accused Student in accordance with Section II-B-3 of this Code, advise a Hearing Body, and present the case before the Hearing Body.

12. “Hearing Body” or “Hearing Panel” means any person or persons authorized by the University Vice President for Student Affairs, Community College Dean of Students or Charter Oak State College Provost to determine whether a student has violated the Code and to impose sanctions as warranted, including a hearing officer or hearing board.

13. “Institution” means the University or College within CSCU.

14. “Instructor” means any faculty member, teaching assistant or any other person authorized by the University to provide educational services, including, but not limited to, teaching, research, and academic advising.

15. “Member of the CSCU Community” means any person who is a student, an official or any other person who works for CSCU, either directly or indirectly (e.g., for a private enterprise doing business on a CSCU campus).

16. “Policy” means the written regulations, standards, and student conduct expectations adopted by the BOR and found in, but not limited to the Student Handbook, the Residence Life Handbook, the housing contract, the graduate and undergraduate catalogs, and other publicized University and College notices.

17. “Prohibited Conduct” means the conduct prohibited by this Code, as more particularly described in Part I-D of this Code.

18. “Reporting Party” means any person who alleges that a student has violated this Code.

19. “Student” means either (1) any person admitted, registered, enrolled or attending any CSCU course or CSCU conducted program, whether full-time or part-time, and whether pursuing undergraduate, graduate or professional studies, or continuing education; (2) any person who is not officially enrolled for a particular term but who has a continuing relationship with a CSCU; or (3) any person within two calendar years after the conclusion of their last registered Community College course if the student has formally withdrawn, graduated or been expelled from the College.


21. “Student Organization” means an association or group of persons that have complied with the formal requirements for University or College recognition.

22. “Support Person” means a person, who accompanies an Accused Student, a Reporting Party or a victim to a hearing for the limited purpose of providing support and guidance. A support person may not directly address the Hearing Body, question witnesses, or otherwise actively participate in the hearing process.

23. “University” means any of the following institutions: Central Connecticut State University, Eastern Connecticut State University, Southern Connecticut State University, Western Connecticut State University; Asnuntuck Community College, Capital Community College, Gateway Community College, Housatonic Community College, Manchester Community College, Middlesex Community College, Naugatuck Valley Community College, Northwestern Connecticut Community College, Norwalk Community College, Quinebaug Valley Community College, Three Rivers Community College, Tunxis Community College, and Charter Oak State College.

24. “Shall” and “will” are used in the imperative sense.

25. “May” is used in the permissive sense.

Part B: Application, Distribution and Administration of the Student Code of Conduct

1. Application of the Student Code: The Student Code shall apply to the four Connecticut State Universities, the twelve Community Colleges, and the on-line college: Central Connecticut State University, Eastern Connecticut State University, Southern Connecticut State University, Western Connecticut State University; Asnuntuck Community College, Capital Community College, Gateway Community College, Housatonic Community College, Manchester Community College, Middlesex Community College, Naugatuck Valley Community College, Northwestern Connecticut Community College, Norwalk Community College, Quinebaug Valley Community College, Three Rivers Community College, Tunxis Community College, and Charter Oak State College.

An alleged violation of the Student Code shall be addressed in accordance with the Code of Conduct, even if the accused Student has withdrawn from the Institution prior to the completion of the disciplinary procedures.

The Student Code shall apply to Students and to University Student Organizations. The term “student” shall generally apply to the student as an individual and to a Student Organization as a single entity. The officers or leaders of a particular Student Organization usually will be expected to represent the organization during the disciplinary process. Nothing in this Student Code shall preclude holding certain members of a Student Organization accountable for
their individual acts committed in the context of or in association with the organization’s alleged violation of this Code.

2. Distribution of the Student Code: The Student Code shall be made readily available electronically and/or in a printed publication to students, faculty and staff. The office responsible for Student Affairs will annually distribute and make available to students, faculty and staff, electronically and/or in a printed publication, any revisions to the Code.

3. Administration of the Student Code: A University’s and Charter Oak State College’s Provost or a Community College’s Dean of Students shall be the person designated by the institution President to be responsible for the administration of the Academic Misconduct portion of the Student Code. A University’s Vice President for Student Affairs, a Community College’s Dean of Students, or Charter Oak State College’s Provost shall be the person designated by the institution President to be responsible for the administration of the Non-Academic Misconduct portion of the Student Code.

Part C: Scope of Authority
A Student who is found responsible for engaging in conduct that violates the Student Code on any CSCU campus or on property controlled by the BOR or by any CSCU Affiliate or any CSCU sponsored function or event shall be subject to the sanctions described in this Code. The Student Code of Conduct also applies to online activities, where applicable. Students who attempt to engage in conduct that violates this Code, who knowingly encourage, aid or assist another person in engaging in such conduct, or who agree with another person, explicitly or otherwise, to engage in such conduct, may also be subject to disciplinary action.

Off-campus misconduct by University students may be subject to the jurisdiction of the University and addressed through its disciplinary procedures if one of the following conditions is met: (i) a Student engages in prohibited conduct at an official University event, at a University-sanctioned event, or at an event sponsored by a recognized University Student Organization; or (ii) a Student engages in prohibited conduct under such circumstances that reasonable grounds exist for believing that the Accused Student poses a threat to the life, health or safety of any member of the CSCU or to the property of the CSCU.

Community College students conduct is subject to the Code on campus and off-campus whenever such conduct impairs College-related activities or affairs of another member of the College community or creates a risk of harm to a member or members of the College community. Students must be aware that, as citizens, they are subject to all federal and state laws in addition to all CSCU regulations governing student conduct and responsibilities. Students do not relinquish their rights nor do they shed their responsibilities as citizens by becoming members of the CSCU Community. However, where a court of law has found a student to have violated the law, an institution has the right to impose the sanctions of this Code even though the conduct does not impair institution-related activities of another member of the university or college community and does not create a risk of harm to the college or university community. The decision to exercise this right will be in the sole discretion of the President of the impacted institution or his/her designee.

Charter Oak State College applies this Code to matriculated and non-matriculated students, including those participating in portfolio assessment, credential evaluation, testing, or contract learning. Jurisdiction shall be limited to student conduct that occurs while students are taking Charter Oak State College courses or availing themselves of Charter Oak State College services. However, if a matriculated Charter Oak State College student is found guilty of student misconduct at another institution, including but not limited to misrepresentation of records from other institutions, the student may be subject to disciplinary action at Charter Oak State College.

Part D: Prohibited Conduct
The following list of behaviors is intended to represent the types of acts that constitute violations of this Code.

1. Academic misconduct, which includes, but is not limited to, plagiarism and all forms of cheating.

Plagiarism is defined as the submission of work by a student for academic credit as one’s own work of authorship which contains work of another author without appropriate attribution.

Cheating includes, but is not limited to: (i) use of any unauthorized assistance in taking quizzes, tests or examinations; (ii) use of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems or carrying out other assignments; (iii) the acquisition, without permission, of tests or other academic material belonging to a member of the University faculty or staff; and (iv) engaging in any other behavior specifically prohibited by a faculty member in the course syllabus.

2. Acts of dishonesty, including but not limited to the following:
   a. Misuse of University or College documents, including, but not limited to forging, transferring, altering or otherwise misusing a student fee card, student payroll card, identification card or other College or University identification document, course registration document, schedule card, transcript, or any other institution-issued document or record.
   b. Knowingly furnishing false information to any CSCU Official, faculty member or office.

3. Theft of property or services, or damage to, defacement or destruction of, or tampering with, real or personal property owned by the State of Connecticut, CSCU/BOR, the institution, or any member of the CSCU Community.

4. Actual or threatened physical assault or abuse, threatening behavior, intimidation, or coercion.

5. Sexual misconduct may include engaging in one of more behaviors: (a) Sexual harassment, which can include any unwelcome sexual advance or request for sexual favors, or any conduct of a sexual nature when submission to such conduct is made either explicitly or implicitly a term or condition of an individual’s education; submission to or rejection of such conduct by an individual is used as a basis for academic decisions affecting the individual; or such conduct has the purpose or effect of substantially interfering with an individual’s academic performance or creating an intimidating, hostile or offensive educational environment. Examples of conduct which may constitute sexual harassment include but are not limited to:
   - sexual flirtation, touching, advances or propositions
   - verbal abuse of a sexual nature
   - pressure to engage in sexual activity
   - graphic or suggestive comments about an individual’s dress or appearance
   - use of sexually degrading words to describe an individual
   - display of sexually suggestive objects, pictures or photographs
   - sexual jokes
   - stereotypic comments based upon gender
   - threats, demands or suggestions that retention of one’s educational status is contingent upon tolerance or acquiescence in sexual advances.
   (b) Sexual assault shall include but is not limited to a sexual act directed against another person when that person is not capable of giving consent, which shall mean the voluntary agreement by a person in the possession and exercise of sufficient mental capacity to make a deliberate choice to do something proposed by another.
A person who initially consents to sexual activity shall be deemed not to have consented to any such activity which occurs after that consent is withdrawn. Consent cannot be assumed because there is no physical resistance or other negative response. A lack of consent may result from mental incapacity (e.g., ingestion of alcohol or drugs which significantly impair awareness or judgment) or physical incapacity (e.g., the person is unconscious or otherwise unable to communicate consent). Consent must be affirmative. (See Sexual Misconduct Reporting, Support Services and Processes Policy).

Sexual assault is further defined in sections 53a-70, 53a-70a, 53a-70b, 53a-71, 53a-72a, 53a-72b and 53a-73a of the Connecticut General Statutes.

(c) Sexual exploitation occurs when a person takes non-consensual or abusive sexual advantage of another for anyone’s advantage or no physical resistance or other negative response. A lack of consent does not otherwise constitute one of the preceding sexual misconduct offenses. Examples of behavior that could rise to the level of sexual exploitation include:

- Prostituting another person;
- Non-consensual visual (e.g., video, photograph) or audio-recording of sexual activity;
- Non-consensual distribution of photos, other images, or information of an individual’s sexual activity, intimate body parts, or nakedness, with the intent to or having the effect of embarrassing an individual who is the subject of such images or information;
- Going beyond the bounds of consent (such as letting your friends hide in the closet to watch you having consensual sex);
- Engaging in non-consensual voyeurism;
- Knowingly transmitting an STI, such as HIV to another without disclosing your STI status;
- Exposing one’s genitals in non-consensual circumstances, or inducing another to expose his or her genitals; or
- Possessing, distributing, viewing or forcing others to view illegal pornography.

6. Intimate partner violence is defined as:

- Including intimate partner violence, which is any physical or sexual harm against an individual by a current or former spouse or by a partner in a dating relationship that results from (1) sexual assault, as defined in section 5 above; (2) sexual assault in a spousal or cohabiting relationship; (3) domestic violence; (4) sexual harassment, as defined in section 5 above or, (5) sexual exploitation, as defined in section 5 above.
- Physical abuse, which can include but is not limited to, slapping, pulling hair or punching.
- Threat of abuse, which can include but is not limited to, threatening to hit, harm or use a weapon on another (whether victim or acquaintance, friend or family member of the victim) or other forms of verbal threat.
- Emotional abuse, which can include but is not limited to, damage to one’s property, driving recklessly to scare someone, name calling, threatening to hurt one’s family members or pets and humiliating another person.

7. Violations of privacy, including, but not limited to, voyeurism and the use of web-based, electronic or other devices to make a photographic, audio or video record of any person without his or her express consent, when such a recording is intended or likely to cause injury or distress. This includes, but is not limited to: (i) surreptitiously taking pictures or videos of another person in spaces such as sleeping areas, bathrooms, gymnasiums, locker rooms, and changing areas; and (ii) sexually exploiting another person by electronically recording or permitting others to view or electronically record, consensual sexual activity without a partner’s knowledge or permitting others to view or listen to such video or audio tapes without a partner’s knowledge and consent. Publicizing or threatening to publicize such records will also be considered a violation of this Code.

8. Hazing, which is defined as an act which endangers the mental or physical health or safety of a Student, or which destroys, damages, or removes public or private property for the purpose of initiation or admission into, affiliation with or as a condition for continued membership in a group or organization. The express or implied consent of the victim will not be a defense to an allegation of hazing. Consenting to the activity by remaining silent or not objecting in the presence of hazing is not a neutral act and is also a violation of this Student Code.

9. Stalking, which is defined as repeatedly contacting another person when:

- a. The contacting person knows or should know that the contact is unwanted by the other person; and
- b. The contact causes the other person reasonable apprehension of imminent physical harm or the contacting person knows or should know that the contact causes substantial impairment of the other person's ability to perform the activities of daily life.

As used in this definition, the term “contacting” includes, but is not limited to, communicating with (including internet communication via e-mail, instant message, on-line community or any other internet communication) or remaining in the physical presence of the other person.

10. Harassment, which is defined as conduct which is abusive or which interferes with a person’s pursuit of his or her customary or usual affairs, including, but not limited to, such conduct when directed toward an individual or group because of race, ethnicity, ancestry, national origin, religion, gender, sexual orientation or expression, age, physical attribute, or physical or mental disability or disorder, including learning disabilities and mental retardation.

11. Conduct that is disorderly, lewd or indecent (including, but not limited to, public nudity and sexual activity in areas generally open to members of the campus community), breach of peace or aiding, abetting or procuring another person to breach the peace on CSCU premises or at functions sponsored by, or affiliated with the University or College.

12. Behavior or activity which endangers the health, safety, or well-being of oneself or others.

13. Offensive or disorderly conduct which causes interference, annoyance or alarm or recklessly creates a risk thereof at CSCU or CSCU premises, CSCU web or social media sites, at a CSCU-sponsored activity or in college or university courses, including cyber bullying. This offense does not apply to speech or other forms of constitutionally protected expression.

14. Unauthorized possession, duplication or use of keys (including, but not limited to, card access, card keys, fobs, etc.) to any CSCU premises or forcible and/or unauthorized entry on or into CSCU premises.

15. Starting fires, causing explosions, falsely reporting the presence of fire, bombs, incendiary or explosive devices, or falsely reporting an emergency.

16. Unauthorized or improper possession, use, removal, tampering or disabling of fire and/or safety equipment and warning devices, failure to follow standard fire and/or emergency safety procedures, or interference with fire fighting or emergency response equipment or personnel.

17. Use, possession, purchase, sale or distribution of alcoholic beverages, except as expressly permitted by law and CSCU
regulations. Alcoholic beverages may not, under any circumstances, be used by, possessed by, or distributed to any person under twenty-one (21) years of age.

18. Use, possession, purchase, sale, distribution or manufacturing of narcotics, controlled substances and/or drugs, including, but not limited to, marijuana and heroin, or drug paraphernalia, except as expressly permitted by law.

19. Use, possession or distribution of firearms, ammunition for firearms, other weapons or dangerous instruments, facsimiles of weapons or firearms, fireworks, explosives or dangerous chemicals. A dangerous instrument is any instrument, article or substance that, under the circumstances in which it is being utilized, is capable of causing death or serious physical injury. The possession of a deadly weapon or dangerous instrument on campus is strictly prohibited, even if such item is legally owned.

20. Gambling, including, but not limited to, promoting, wagering, receiving monies for wagering or gambling for money or property on CSCU premises.

21. Disruption or obstruction of any College or University function, activity or event, whether it occurs on or off the campus, or of any non-University or College function, activity or event which is authorized by the institution to occur on its premises.

22. Intentional obstruction of the free flow of pedestrian or vehicular traffic on CSCU premises or at University or College-sponsored or supervised functions or interference with entry into or exit from CSCU premises or with the free movement of any person.

23. Failure to comply with the directions of CSCU officials or law enforcement officers acting in the performance of their duties and/or failure to identify oneself to these persons when requested to do so.

24. Conduct that violates published BOR/CSCU policies, rules, and regulations, including, but not limited to, residence hall rules and regulations.

25. Conduct prohibited by any federal, state, and/or local law, regulation or ordinance.

26. Unauthorized use of CSCU property or the property of members of the CSCU Community or of CSCU Affiliates.

27. Theft, unauthorized use, or abuse of University or College computers and/or peripheral systems and networks, including, but not limited to:
   a. Unauthorized access to CSCU computer programs or files;
   b. Unauthorized alteration, transfer or duplication of CSCU computer programs or files;
   c. Unauthorized use of another individual’s identification and/or password;
   d. Deliberate disruption of the operation of CSCU computer systems and networks;
   e. Use of the Institution’s computing facilities and resources in violation of copyright laws (including unauthorized peer-to-peer file sharing of copyrighted material, including, but not limited to, copyrighted music, movies, and software);
   f. Use of computing facilities and resources to send obscene messages (which are defined as messages which appeal mainly to a prurient, shameful or morbid interest in nudity, sex, excretion, sadism or masochism, go well beyond customary limits of candor in describing or representing such matters, and are utterly without redeeming social value); and
   g. Violation of the BOR Policy Statement on Acceptable and responsible use of Information Technology resources and/or any applicable BOR computer use policy.

28. Abuse of the CSCU conduct and disciplinary system, including but not limited to:
   a. Failure to obey the notice from a Hearing Body or CSCU Official to appear for a meeting or hearing as part of the Student Conduct system;
   b. Falsification, distortion, or intentional misrepresentation of information to a Disciplinary Officer or Conduct Administrator, or before a Hearing Body;
   c. Initiation of a conduct or disciplinary proceeding knowingly without cause;
   d. Disruption or interference with the orderly conduct of a disciplinary proceeding;
   e. Attempting to discourage an individual’s proper participation in, or use of, the disciplinary system;
   f. Attempting to influence the impartiality of a Disciplinary Officer, Conduct Administrator or member of a Hearing Body prior to, and/or during the course of, the disciplinary proceeding;
   g. Harassment (verbal or physical) and/or intimidation of a Disciplinary Officer, Conduct Administrator, or member of a Hearing Body prior to, and/or during the course of the disciplinary proceeding;
   h. Failure to comply with the sanction(s) imposed under the Student Code; and
   i. Influencing or attempting to influence another person to commit an abuse of the disciplinary system.

Part E: Hearing Procedures for Sexual Misconduct, Sexual Intimate Partner, Domestic Violence & Stalking Reports

In addition to disciplinary procedures applicable to State University students in Section II, Community College students in Section III, or Charter Oak State College Students in Section IV, for any hearing conducted involving allegations of sexual misconduct, including sexual harassment, sexual assault, sexual exploitation, stalking and intimate partner violence the reported victim and the accused student shall each have the following rights:

1. At any meeting or proceeding, both the reported victim and accused student may be accompanied by an advisor or support person of the student’s choice provided the advisor or support person does not cause a scheduled meeting or hearing to be delayed or postponed and provided an advisor or support person may not directly address the Hearing Body, question witnesses, or otherwise actively participate in the hearing process (or other proceeding or pertaining to a report of sexual misconduct);

2. The reported victim of sexual misconduct is entitled to request that disciplinary proceedings begin promptly;

3. Any hearing regarding an accusation of sexual misconduct shall (i) be fair, prompt and impartial; (ii) be conducted by a Hearing Body annually trained in issues relating to sexual misconduct (iii) use the preponderance of evidence (more likely than not ) standard; (iv) shall allow both the accused student and reported victim the opportunity to present evidence and witnesses on their behalf during any disciplinary proceeding; (v) shall provide both the accused student and the reported victim with equal access to any information that will be used during meetings and hearings; and (vi) invoke the standard of “affirmative consent” in determining whether consent to engage in sexual activity was given by all persons who engaged in sexual activity.

4. In accordance with the Family Educational Rights and Privacy Act (FERPA), the accused student and the reported victim have the right to keep their identities confidential;

5. Any reported victim shall be provided written notice of the decision of the Hearing Body at the same time as the accused student, normally within one (1) business day after the conclusion of the Hearing.
accordance with the Family Educational Rights and Privacy Act (FERPA) the notice to any reported victim of sexual misconduct shall contain only the following: the name of the accused student, the violation committed, if any, and any sanction imposed against the accused student.

6. The reported victim shall have the same right to request a review of the decision of the Hearing Body (appeal rights) in the same manner and on the same basis as shall the accused student; however, if a request for review by a reported victim is determined to be properly made and if the review determines there is sufficient grounds for altering the decision of the Hearing Body, among the other actions that may be taken as set forth above, the sanction of the hearing may also be increased. Notwithstanding the foregoing, in any hearing pertaining to sexual misconduct both the reported victim and the accused student are entitled to be simultaneously provided notice of any change in the results of the hearing prior to the time when the results become final as well as to be notified when such results become final.

Part F: Conduct and Disciplinary Records
The decision resulting from an administrative conference or a hearing under this Code shall become part of the student’s educational record and shall be subject to the provisions of the Family Educational Rights and Privacy Act (FERPA). A student’s disciplinary record shall be maintained separately from any other academic or official file maintained by the Institution. Disciplinary records will be maintained for a period of five (5) years from the date of the incident, except that the sanction of expulsion shall be noted permanently.

While student education records are generally protected from disclosure by FERPA, there are a number of exceptions to this rule. Students should be aware that a record concerning his/her behavior while a student at the College or University may be shared with other colleges or universities to which the student may subsequently wish to transfer or be admitted. Similarly, prospective employers may require a student to provide access to his/her education records as part of the employment application process. A record of having been sanctioned for conduct that violates Section I.D. of the Code may disqualify a student for admission to another college or university, and may interfere with his/her selection for employment.

Part G: Interpretation and Revision
Questions regarding the interpretation of this Code shall be referred to the University’s and Charter Oak State College’s Provost or a Community College’s Dean of Students or their designees for the administration of the Non-Academic Misconduct portion of the Student Code and to the University’s Vice President for Student Affairs, a Community College’s Dean of Academic Affairs or Charter Oak State College’s Provost or their designees for the administration of the Academic Misconduct portion of the Student Code.

This Code shall be reviewed and revised, if and as necessary, every five (5) years, or as directed by the President of the Board of Regents for Higher Education.

CONDUCT AND DISCIPLINARY PROCEDURES APPLICABLE TO COMMUNITY COLLEGE STUDENTS
Procedures for Community College students differ from those procedures applicable to either the Universities or Charter Oak State College. This is due to the environmental, cultural and administrative differences within the types of the institutions comprising CSCU. Procedures for addressing allegations and sanctions regarding academic misconduct (as defined in Section I.D.1 above) for Community College Students are set for in this Section III of the Code.

Part A: Disciplinary Procedures (Academic and Non-Academic Misconduct)
In regard to College Students, the following procedures shall govern the enforcement of the Code:

1. Information that a student may have violated the Code should be submitted to the Dean of Students, Dean of Academic Affairs or other designee of the President (hereinafter referred to as “the Dean”), normally within thirty (30) calendar days of the date of a possible violation or within thirty (30) calendar days of the date that the facts constituting a possible violation were known.

2. Upon receipt of information relating to a possible violation, the Dean may immediately place restrictions on or suspend a student on an interim basis if, in the judgment of the Dean, the continued presence of the student at the College or continued participation in the full range of college activities poses a danger to persons or property or constitutes an ongoing threat of disrupting the academic process.

   a. “Interim restrictions” are limitations on the Student’s participation in certain College functions and activities, access to certain locations on campus or access to certain persons, that do not prevent the Student from continuing to pursue his/her academic program. A Student upon whom the Dean has placed interim restrictions shall be afforded written reasons for the restrictions, as well as the time period during which the interim restrictions shall apply. The decision of the Dean regarding interim restrictions shall be final.

   b. “Interim suspension” is the temporary separation of the Student from the College that involves the denial of all privileges, including entrance to College premises. Prior to imposing an interim suspension, the Dean shall make a good faith effort to meet with the Student. At this meeting, the Dean shall inform the Student of the information received and provide the Student an opportunity to present other information for the Dean’s consideration. Based upon the information available at that time, the Dean shall determine whether the Student’s continued presence on campus poses a danger to persons or property or constitutes an ongoing threat of disrupting the academic process. A Student suspended on an interim basis by the Dean shall be provided written reasons for the suspension and shall be entitled to an administrative conference or a hearing as soon as possible, normally within ten (10) calendar days from the date the interim suspension was imposed. The decision of the Dean regarding an interim suspension shall be final.

3. Following the imposition of interim restrictions or interim suspension, if any, the Dean shall promptly investigate the information received by meeting with individuals who may have knowledge of the matter, including the accused Student, and by reviewing all relevant documents.

   If upon the conclusion of the Dean’s investigation, the Dean determines that there is insufficient reason to believe the Student has committed a violation of any part of Section I.D. of this Policy, the Dean shall dismiss the matter and shall so inform the Student in writing.

4. If upon the conclusion of the Dean’s investigation, the Dean determines that there is reason to believe the Student has committed a violation of any part of Section I. D. of this Code and, after considering both the possible violation and the prior conduct record of the Student, that a sanction of less than suspension or expulsion is appropriate, the Dean shall schedule an administrative conference with the Student. The Student shall be given reasonable notice of the time and place of the conference. At the administrative conference, the Student shall have the opportunity to present information for the Dean’s consideration. At the conclusion of the administrative conference, the Dean shall determine whether it is more likely than not that the Student has violated the Policy and, if so, impose a
sanction less than suspension or expulsion. The Dean shall provide the Student with a written explanation for the determination. The decision of the Dean shall be final.

5. If upon the conclusion of the Dean’s investigation, the Dean determines that there is reason to believe the Student has committed a violation of any part of Section I.D. of this Code and, after considering both the violation and the prior conduct record of the Student, that a sanction of suspension or expulsion is appropriate, the Dean shall provide the Student with reasonable written notice of a meeting and shall inform the Student that his/her failure to attend the meeting or to respond to the notice may result in the imposition of the maximum permissible sanction. At the meeting, the Dean shall provide the Student with a written statement that shall include the following:

a. a concise statement of the alleged facts;

b. the provision(s) of Section I.D. that appear to have been violated;

c. the maximum permissible sanction; and

d. a statement that the student may resolve the matter by mutual agreement with the Dean, or may request a hearing by notifying the Dean in writing, which must be received by 5:00 pm on the following business day.

6. If the Student requests a hearing, he/she is entitled to the following:

a. to be heard within five (5) days or as soon as reasonably possible, by an impartial party or panel whose members shall be appointed by the Dean;

b. if the Dean appoints an impartial panel, to have a Student on the panel if requested by the Student;

c. to appear in person and to have an advisor who shall not attend as a representative of the Student. However, if there is pending at the time of the hearing a criminal matter pertaining to the same incident that is the subject of the hearing, a lawyer may be present for the sole purpose of observing the proceedings and advising the Student concerning the effect of the proceedings on the pending criminal matter;

d. to hear and to question the information presented;

e. to present information, to present witnesses, and to make a statement on his or her behalf; and

f. to receive a written decision following the hearing.

7. As used herein, the term “impartial” shall mean that the individual was not a party to the incident under consideration and has no personal interest in the outcome of the proceedings. Prior to the commencement of the hearing, the Student who is subject to the hearing may challenge the appointment of an impartial party or panel member on the ground that the person(s) is (are) not impartial. The challenge shall be made in writing to the Dean and shall contain the reasons for the assertion that the person(s) is (are) not impartial. The decision of the Dean shall be final.

8. The written decision of the impartial party or panel shall specify whether, based on the information presented, it is more likely than not that the Student committed the violation(s) reported and shall state the sanction to be imposed, if any. The written decision shall be provided to the Student.

9. Sanctions imposed by an impartial party or panel are effective immediately. The President may, for good cause, suspend imposition of the sanctions imposed by the impartial party or panel to allow the Student time to prepare a written request for review. If a written request is received, the President may continue to suspend imposition of the sanctions until he has reviewed and acted on the Student’s request.

10. A written request for review of the decision of the impartial party or panel must be received by the President within three (3) calendar days after the Student is notified of the decision and must clearly identify the grounds for review. The review by the President is limited to the record of the hearing, the written request, and any supporting documentation submitted with the request by the Student. The decision of the impartial party or the panel shall be upheld unless the President finds that:

a. a violation of the procedures set forth herein significantly prejudiced the Student; and/or

b. the information presented to the impartial party or panel was not substantial enough to justify the decision; and/or,

c. the sanction(s) imposed was (were) disproportionate to the seriousness of the violation.

11. Decisions under this procedure shall be made only by the college officials indicated.

Part B: Disciplinary Actions

The prior conduct record of a Student shall be considered in determining the appropriate sanction for a Student who has been found to have violated any part of Section I.D. of this Code. Sanctions shall be progressive in nature; that is, more serious sanctions may be imposed if warranted by the prior conduct record of the Student.

A “sanction” may be any action affecting the status of an individual as a Student taken by the College in response to a violation of this Policy, and for the purposes of this Section III of the Code include but are not limited to the following:

1. “Expulsion” is a permanent separation from the College that involves denial of all Student privileges, including entrance to College premises;

2. “Suspension” is a temporary separation from the College that involves denial of all Student privileges, including entrance to College premises for the duration of the suspension, and may include conditions for reinstatement;

3. “Removal of College Privileges” involves restrictions on Student access to certain locations, functions and/or activities but does not preclude the Student from continuing to pursue his/her academic program;

4. “Probation” is a status that indicates either (a) serious misconduct not warranting expulsion, suspension, or removal of College privileges, or (b) repetition of misconduct after a warning has been imposed;

5. A “Warning” is a written notice to the Student indicating that he or she has engaged in conduct that is in violation of Section I.D. of this Code and that any repetition of such conduct or other conduct that violates this Code is likely to result in more serious sanctions;

6. “Community Restitution” requires a Student to perform a number of hours of service on the campus or in the community at large.

Clery Act

Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act Report In compliance with Section 486(e) of Public Law: 105-244 available at nv.edu/clery.

STUDENT RIGHTS POLICY

Naugatuck Valley Community College adheres to the Board of Trustees of Community-Technical Colleges non-discrimination policy as stated in the General Overview section of this catalog. Students are entitled to an atmosphere conducive to learning and to impartial treatment in all aspects of the teacher-student relationship. The student should not be forced by the authority inherent in the instructional role to make particular personal choices as to political action on his or her own part in society. Evaluation of students and the award of credit must be based on academic performance, regardless of personality, race, religion, degree of political activism, or personal beliefs. Students are free to take reasoned exception to the data or views offered in any course of study, but they are responsible for learning the content of the course of study as defined by official college publications.
Community college students are both citizens and members of the academic community. As citizens they enjoy the same freedom of speech, peaceful assembly, and right of petition that other citizens enjoy, and as members of the academic community they are subject to the obligations which accrue to them by virtue of this membership.

**STUDENT GRIEVANCE PROCEDURE**

**Definition**
A grievance is an allegation by a student that an agent of the College has violated Board or College policies relating to students other than assignment of grades or other academic evaluation (see also Section 3: Review of Academic Standing).

**How to File a Grievance**
A grievance is to be submitted in writing to the Dean of Student Services or such other college official as the President may designate (hereinafter, the Dean of Student Services), within thirty (30) days of the date the grievant knew or reasonably should have known of the alleged violation. The written grievance shall specify the right claimed to have been violated and state briefly the underlying facts.

**Procedure for Grievance Resolution**
The Dean of Student Services shall investigate the grievance and WITHIN THIRTY (30) DAYS FROM THE TIME THE GRIEVANCE WAS SUBMITTED, recommend to the President a disposition of the grievance, except as provided hereinafter:

- in the course of each investigation, the Dean of Student Services shall consult with the director responsible for the area of the college operations in which the grievance arose,
- in the case of a grievance alleging discrimination based on race, color, religious creed, sex, age, national origin, ancestry, present or past history of mental disorder, marital status, mental retardation or physical disability, prior conviction of a crime, political beliefs, veteran status, or sexual preference, the Dean of Student Services shall consult with the College’s affirmative action person during the course of the investigation, and
- in the case of a grievance against a Dean, the grievance shall be filed with the President.

The President may accept or reject the recommendation, or direct such further investigation as he or she deems appropriate. The President shall notify the student of the final disposition of the grievance WITHIN FIFTEEN (15) DAYS OF RECEIVING THE RECOMMENDATION, EXCEPT FOR GOOD CAUSE OR AS PROVIDED BELOW.

**Advisory Committee**
The President may establish an advisory committee of students and staff which may be charged with the responsibility of making recommendations at either the level of the Dean or the President. The President may appoint and remove members of the committee. IF AN ADVISORY COMMITTEE IS APPOINTED, THE PRESIDENT SHALL ESTABLISH A REASONABLE TIME FRAME WITHIN WHICH THE COMMITTEE MUST MAKE RECOMMENDATIONS.

**VIOLENCE PREVENTION AND RESPONSE POLICY AND PROCEDURES**
In accordance with Governor’s Executive Order No. 16 signed on August 4, 1999, which instituted a “zero tolerance” policy for workplace violence and in an effort to provide a safe environment for employees, students, visitors and guests while on the premises of the Community Colleges, the Board of Trustees of Community-Technical Colleges has adopted and expanded the application of the Governor’s policy. Executive Order No. 16 is fully incorporated herein.

For the purposes of this policy, “violence” is defined as an overt act or threat of harm to a person or property, or any act that poses a substantial threat to the safety of any person or property. “Premises” is defined as any space owned or leased by the Community Colleges or any of its constituent units, including vehicles and any location where college or system business or activities are conducted. Conduct that may violate this policy includes, but is not limited to, the following:

- Intimidating, harassing or threatening behaviors
- Physical abuse, including hitting, slapping, poking, kicking, punching, grabbing, etc.
- Verbal abuse, including yelling, shouting, use of sexually, racially or ethnically charged epithets, etc.
- Vandalism
- Carrying or possessing weapons or dangerous instruments of any kind on Community College premises, unless properly authorized in accordance with the Board of Trustees and college policy governing weapons on campus
- Using such weapons
- Any other act that a reasonable person would consider to constitute a threat of violence, including oral or written statements, gestures or expressions that communicate a direct or indirect threat of physical harm.

**Reporting Threats or Violent Acts**
A person who feels that he or she has been subjected to threats or acts of violence as defined herein, or a person who witnesses such threats or acts, must report the incident to a supervisor, manager or to the Human Resources office. Supervisors and managers who receive such reports shall seek advice from the Human Resources office regarding investigating the incident and initiating appropriate action. Serious incidents or serious threats of imminent danger to the safety of persons or property should immediately be reported to the Public Safety Department.

Any individual who has applied for or obtained a protective or restraining order which lists the premises of the Community Colleges as protected areas must provide to the Human Resources office and to the Public Safety Department a copy of the petition and declaration used to seek the order, a copy of any temporary protective or restraining order that is granted, and a copy of any protective or restraining order that is made permanent. The sensitivity of the information requested is understood and colleges are responsible for treating such information in a manner that recognizes and respects the privacy of the reporting person.

**Enforcement of this Policy**
All reported incidents of violence will be taken seriously and will be dealt with appropriately, including prompt evaluation, investigation and response. An individual who makes a substantial threat of violence or commits an act of violence as defined in this policy shall be removed from the premises. Any weapon or dangerous instrument will be confiscated and turned over to appropriate law enforcement/public safety authorities. There is no reasonable expectation of privacy with respect to such items on college premises.

Violations of this policy, including knowingly providing a false report, or failing to cooperate fully with an investigation, may lead to disciplinary action up to and including dismissal from employment or expulsion from the college. Violations may also result in criminal penalties.

**WEAPONS ON CAMPUS**
(Excerpted from the Board of Trustees’ Policy, 4.23, adopted May 18, 1992)
The use or possession of weapons (as defined in section 53-206 of the Connecticut General Statutes) is prohibited on college campuses or at college activities except as authorized by Board or College policies. Colleges are hereby authorized to develop policies that allow for specific exemptions to the extent permitted by law.
"Deadly weapon" means any weapon, whether loaded or unloaded, from which a shot may be discharged, or a switchblade knife, gravity knife, billy, blackjack, bludgeon, or metal knuckles. The definition of "deadly weapon" in this subdivision shall be deemed not to apply section 29-38 or 53-206. "Firearm" means any sawed-off shotgun, machine gun, rifle, shotgun, pistol, revolver or other weapon, whether loaded or unloaded from which a shot may be discharged.

CGS 53-206 defines a dangerous weapon as "any BB gun, black jack, metal or brass knuckles, or any dirk knife, or any switch knife, or any knife having an automatic spring release device by which a blade is released from the handle, having a blade of over one and one-half inches in length, or stiletto, or any knife the edged portion of the blade of which is four inches or more in length, any police baton or nightstick, martial arts weapon or electronic defense weapon, as defined in section 53a-3, or any other dangerous or deadly weapon or instrument. "Martial Arts Weapon" means a hunchaku, kama, kasari-fundo, octagon sal, tonfa or chinese star, "electronic defense weapon" means a weapon which by electronic impulse or current is capable immobilizing a person temporarily but is not capable of inflicting death or serious physical injury, including a stun gun or other conductive energy device.

"Dangerous instrument" means any instrument, article or substance which under the circumstances in which it is used or attempted or threatened to be used, is capable of causing death or serious physical injury, and it includes a "vehicle" as that term is defined in this section and includes a dog that has been commanded to attack, except a dog owned by law enforcement agency of the state or any political subdivision thereof or of the federal government when such a dog is in the performance of its duties under the direct supervision, care and control of an assigned law enforcement officer.

NVCC Policy Exemptions
(Clarified by College President, July 1998)
The NVCC Policy follows the Board of Trustees’ Policy, 4.23 with these specific exemptions that allow the following individuals to use or possess weapons under the specific conditions described:

1. On-duty peace officers with jurisdiction* on campus, in uniform with proper carry device (holster).
2. On-duty police officers with jurisdiction* on campus, in civilian clothing, with proper concealment from view.
   *Jurisdiction is to be recognized as the officer being on official business and having the statutory right of carrying out that business on NVCC properties.
3. The use or possession of a weapon may be approved to illustrate in an educational class, lecture, demonstration, or as part of an approved ceremony or program. This third exemption must have the prior written approval of the Dean of Academic Affairs, the Provost/Senior Dean of Administration and the Director of Public Safety. Forms to be used in seeking this approval are available in the Public Safety Department. The Public Safety Department will not take the responsibility of storing, caring for or handling personal weapons in any manner, except in cases of confiscation for a criminal offense or policy violation.

COMMUNICABLE DISEASES/AIDS POLICY
The Community-Technical College System reaffirms its commitment to provide a safe and healthy educational environment, safeguard the rights of individuals, and comply with state and federal anti-discrimination laws and regulations. Sound and compassionate legal, ethical, moral, and educational principles require that students and employees with AIDS, HIV infection, and other communicable diseases be accorded the same rights and assume the same responsibilities as all other members of the community-technical college community. It is recognized that the best method of allaying fears and promoting understanding is education: the dissemination of information based on fact and current scientific knowledge.

1. People with AIDS and other communicable diseases shall be accorded the same rights as all other students and employees. State and federal laws and regulations prohibit discrimination against and harassment of individuals solely because of disability. No individual shall be discriminated against in any college programs, services, or employment solely because of his or her status as AIDS- or HIV-infected or having any other communicable disease.
2. Each college shall provide information and educational programs and activities concerning AIDS and other communicable diseases for students and employees. Such information and programs shall rely on the most current knowledge about such diseases and shall focus on how such diseases are and are not transmitted, how they can be prevented, and the rights of persons with such diseases.
3. Each college president shall designate an individual responsible for coordination, delivery, and evaluation of the college’s AIDS education program. A committee representative of the college community should be involved in formulating educational and information activities.
4. Restrictions shall not be placed on admission, programs, services, or employment offered to an individual on the basis of a diagnosis of AIDS, HIV infection, or other communicable disease, except in individual cases when it has been medically determined that there is risk of infection or danger to others or in programs from which individuals with specific communicable diseases are excluded by law or regulation.
5. Colleges shall not require testing of students or employees for AIDS, HIV infection, or other communicable diseases for participation in employment, programs, or services of the college, except as required by law or regulation. Where possible, colleges shall maintain a listing of local referral sources for such testing and shall publish such listing with other educational information.
6. All student or employee information related to inquiries, testing, and disclosure of AIDS, HIV, or other infection status shall be treated confidentially as all other health records. All reasonable steps shall be taken to protect the identity of an individual with AIDS.
7. Students and employees involved in the direct delivery of health care services and those who might otherwise come in contact with blood and other body fluids (such as in science laboratories or allied health practicals) shall at all times follow the guidelines regarding precautions to be taken in the handling of such fluids disseminated by the Department of Health Services (January 1987, provided as Appendix A) or other approved guidelines.
8. Violations of any part of this policy shall be dealt with under the appropriate disciplinary procedures for students or employees.
9. This policy shall be published in all college catalogs and student handbooks and shall be made available to all employees.

All questions about this policy may be directed to the Coordinator of College Health Services and Students with Disabilities.

COMPUTER RESOURCES POLICY
The Connecticut Community College (CCC) System provides information technology resources (IT resources) to faculty, staff and students for academic and administrative use. IT resources may also be available to members of the college community through college libraries and websites. This policy applies to all users of IT resources.

IT resources include, but are not limited to, computers and peripheral hardware, software, networks, databases, electronic communications and Internet connectivity. CCC IT resources are the property of the Board of Trustees. Use of such resources is a privilege and is subject to such IT policies, standards and procedures as may be promulgated from time to time.
IT resources shall be used solely for legitimate and authorized academic and administrative purposes, and in furtherance of CCC mission and goals. They shall not be used for personal purposes, including monetary gain. Use of IT resources may be monitored by the appropriate CCC authority to ensure proper and efficient usage, as well as to identify problems or to check for security violations.

Any unauthorized or illegitimate use of IT resources may subject the user to disciplinary action, up to and including dismissal or expulsion, as well as loss of computing privileges. Users must comply with all applicable state and federal laws and may be subject to criminal prosecution for violation thereof under state and federal laws.

The Chancellor is authorized to promulgate necessary and appropriate IT policies, standards and procedures, including but not limited to those affecting acceptable uses of IT resources, electronic communications and network security. Colleges shall ensure that users of IT resources are aware of all IT policies, standards and procedures, as appropriate.

**Acceptable Use Policy**

This Policy governs the acceptable use of Connecticut Community Colleges (CCC) Information Technology (IT) resources. These resources are a valuable asset to be used and managed responsibly to ensure their integrity, security, and availability for appropriate academic and administrative use.

Users of CCC IT resources are responsible for using those resources in accordance with CCC policies and the law. Use of CCC IT resources is a privilege that depends upon appropriate use of those resources. Individuals who violate CCC policy or the law regarding the use of IT resources are subject to loss of access to those resources as well as to CCC disciplinary and/or legal action.

In making acceptable use of CCC IT resources you must:

- Use resources solely for legitimate and authorized administrative and academic purposes.
- Protect your User ID and IT resources from unauthorized use. You are responsible for all activities on your User ID or that originate from IT resources under your control.
- Access only information that is your own, that is publicly available, or to which you have been given authorized access.
- Use only legal versions of copyrighted software in compliance with vendor license requirements.
- Use shared resources appropriately. (e.g. refrain from monopolizing systems, overloading networks with excessive data, degrading services, or wasting computer time, connect time, disk space, printer paper, manuals, or other resources).

In making acceptable use of CCC IT resources you must NOT:

- Directly or indirectly cause strain on IT resources such as downloading large files, unless prior authorization from the appropriate CCC authority is given.
- Use CCC IT resources for personal purposes including but not limited to, monetary gain, commercial or political purposes.
- Engage in any other activity that does not comply with the general principles presented above.

**No Expectation of Privacy**

There is no expectation of privacy in the use of CCC IT resources. CCC reserves the right to inspect, monitor, and disclose all IT resources including files, data, programs and electronic communications records without the consent of the holder of such records.

For the complete version of the Computer Resources policy for the CT Community Colleges, go to this weblink: [http://www.commnet.edu/it/policy](http://www.commnet.edu/it/policy)

**POLICY ON RACISM AND ACTS OF INTOLERANCE**

The Community Colleges have long been committed to providing educational opportunities to all who seek and can benefit from them, as evidenced in the mission statements and policies concerning student rights, affirmative action, and equal opportunity. The board and the colleges recognize that an important part of providing opportunity is creating a welcoming environment in which all people are able to work and study together, regardless of their differences. At the same time, colleges and universities have traditionally been at the cutting edge of protection of our most cherished freedoms, most notable freedom of speech and non-violent action, which protect even unpopular or divisive ideas and perspectives.

Such constitutionally-protected expression can contribute to an unwelcoming and even offensive social and educational environment for some individuals in the college community, particularly when it concerns race, religion, sex, sexual orientation, disability, national origin, or ethnicity, and the first amendment does not preclude colleges from taking affirmative steps to sensitize the college community to the effects of creating such a negative environment.

Therefore, the Community Colleges recognize that they have an obligation not only to punish proscribed actions, but also to provide programs which promote pluralism and diversity and encourage the college community to respect and appreciate the value and dignity of every person and his or her right to an atmosphere not only free of harassment, hostility, and violence but supportive of individual academic, personal, social, and professional growth.

Acts of racism or harassment directed against individuals or specific groups of individuals will not be tolerated and will be dealt with under the employee affirmative action grievance procedures and the student grievance and disciplinary procedures.

Each college will provide a comprehensive educational program designed to foster understanding of difference and the value of cultural diversity. This will include plans to (1) promote pluralism, (2) educate the college community about appropriate and inappropriate behaviors to increase sensitivity and encourage acceptance, and (3) widely disseminate this policy statement to the entire college community.

**SEXUAL HARASSMENT POLICY**

It is the policy of Naugatuck Valley Community College to prohibit “sexual harassment.” Sexual harassment is a form of sex discrimination which is illegal under state and federal law and is also prohibited by the Board of Trustees’ Nondiscrimination Policy.

- Any unwelcome sexual advances or requests for sexual favors or any conduct of a sexual nature when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual’s employment or education, (2) submission to
or rejection of such conduct by an individual is used as a basis for employment or academic decisions affecting the individual, or (3) such conduct has the purpose or effect of substantially interfering with an individual’s work performance or creating an intimidating, hostile or offensive employment environment.

Also prohibited is any romantic/sexual liaison between a professional or classified staff member and a student for whom that staff member has a teaching, advisory or other supervisory responsibility.

Sexual harassment may be verbal, visual or physical. It may be overt or implicit and may, but need not, have tangible adverse effects on the victim’s employment or learning experience. The perpetrator of sexual harassment, like the victim of such conduct, may be a man or a woman. It may involve individuals of the same or opposite sex. This college will not tolerate sexual harassment in any form. All employees shall be responsible and accountable for maintaining an environment free from sexual harassment. Any employee or agent found to have engaged in sexual harassment as defined above will be subject to serious disciplinary action up to and including dismissal.

Employees who feel that they have been sexually harassed have the right to file a complaint. Employees may report incidents of sexual harassment to the Dean of the area of the College in which the individual is involved, the College’s Affirmative Action Officer, or to the President of the College. Ronald Clymer is the college’s Affirmative Action Officer. His office is located in Kinney Hall, Room K705A, and he may be reached at 203-575-8110. Dr. Daisy Cocco De Filippis is the President of the College, her office is located in Kinney Hall, Room K703B, and her telephone number is 203-575-8044.

SEXUAL HARASSMENT:
(Excerpted from the Board of Trustees policy, via Employee Relations Memorandum 98-2, rev. 12/5/97.)

What is Sexual Harassment?
Sexual harassment is a form of sex discrimination which is illegal under state and federal law and is also prohibited by the Board of Trustees’ Nondiscrimination Policy. The Board’s policy recognizes that sexual harassment undermines the integrity of employer-employee and student-faculty-staff relationships and interferes with the right of all members of the College community to work and learn in an environment free from harassment. Such conduct will not be tolerated.

Sexual harassment may be described as: Any unwelcome sexual advance or request for sexual favors, or any conduct of a sexual nature when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual’s employment or education, (2) submission to or rejection of such conduct by an individual is used as a basis for employment or academic decisions affecting the individual, or (3) such conduct has the purpose or effect of substantially interfering with an individual’s academic or work performance or creating an intimidating, hostile or offensive employment or educational environment.

Sexual harassment may be verbal, visual or physical. It may be overt or implicit and may, but need not, have tangible adverse effects on the victim’s employment or learning experience.

Examples of conduct which may constitute sexual harassment include but are not limited to:

- sexual flirtation, touching, advances or propositions
- verbal abuse of a sexual nature
- pressure to engage in sexual activity
- graphic or suggestive comments about an individual’s dress or appearance
- use of sexually degrading words to describe an individual
- display of sexually suggestive objects, pictures, or photographs
- sexual jokes
- stereotypic comments based upon gender
- threats, demands or suggestions that retention of one’s employment or educational status is contingent upon toleration of or acquiescence to sexual advances

The perpetrator of sexual harassment, like the victim of such conduct, may be a man or a woman. Sexual harassment may involve individuals of the same or opposite sex and, in the College environment, may involve an employee and a student, an employee and another employee or a student and another student. Harassment in any of these relationships is a violation of the Board’s policy.

Because of the power relationship between faculty and student, and between supervisor and subordinate employee, freedom of choice may be compromised in such relationships. Accordingly, this policy holds that where a faculty member or professional staff member has responsibility for a student through teaching, advising, supervision or other obligation, romantic or sexual liaisons between such persons shall be deemed a violation of this policy.

It should be noted, additionally, that retaliation against a person for complaining or being associated in any way with the resolution of a complaint of sexual harassment also violates Board policy.

What To Do If You Are The Victim of Sexual Harassment
When an employee or student feels that he or she has been the victim of sexual harassment, he or she should report such incident(s) to a College official.

- Employees may report incidents of sexual harassment to the Dean of the area of the College in which the individual is involved, the College’s Affirmative Action Officer, or another College official who has been designated by the President as a recipient of such complaints.

- Students may report incidents of sexual harassment to the Dean of Students or to such other College official as the President may have designated. Nothing shall prevent students from speaking to a college counselor about their concerns. However, such communication is not a substitute for filing a complaint of sexual harassment with an appropriate College designee.

- A claim that an employee of a third party contractor has engaged in sexual harassment on College premises or in connection with the performance of the third party contract should be reported immediately to the President or to another appropriate College official as set forth in this document. The President will ensure that appropriate follow-up action is taken.

Depending on the nature of the complaint and the desires of the complainant, the College official to whom the complaint has been made may attempt to resolve the complaint informally. Any informal resolution of a complaint must be approved by the College President. No person shall be forced to pursue informal avenues of resolution before filing a formal complaint of sexual harassment.

If informal resolution is not possible or appropriate, a written complaint should be filed in accordance with the existing Affirmative Action Grievance Procedure for Employees (see Board Policy 2.1.3) or Student Grievance Procedure for students (see Board Policy 5.2.2).

- For employees, a written complaint should be filed within fifteen (15) calendar days of the alleged harassment. This time frame may be extended by up to fifteen (15) additional calendar days if efforts at informal resolution have been made.

- For students, a written complaint should be filed within thirty (30) days of the date the grievant knew or should have known of the alleged harassment. However, a delay in filing a formal complaint will not be a reason for refusing to investigate such complaints. Although the ability to investigate may be compromised by delay, a written complaint will be treated in the manner prescribed by this policy if filed within 180 days of the date the student knew or should have known of the alleged harassment.
When a formal complaint of sexual harassment is received, the College will investigate it. The rights of all persons involved in the investigation shall be respected and every effort will be made to protect the confidentiality of both the alleged victim and the alleged harasser. Toward this end, only persons with a need to know shall be made privy to the complaint. However, complete anonymity cannot be assured, given the College’s obligation under law to investigate and take appropriate action in all cases of sexual harassment.

All complaints of sexual harassment shall be taken seriously. It is expected that complaints will be made in good faith, however. Frivolous or vexatious complaints can cause irremediable damage to the reputation of an accused person, even though he or she is subsequently vindicated. Therefore, any person who files a false complaint of sexual harassment shall himself or herself be subject to disciplinary action, up to and including termination, if an employee, or expulsion, if a student.

In addition to invoking the available grievance procedure, an employee who believes he or she has been sexually harassed may file a complaint with the Connecticut Commission on Human Rights and Opportunities, 21 Grand Street, Hartford, CT 06106 and/or with the Equal Employment Opportunity Commission, One Congress Street, Boston, Massachusetts 02114, within 180 days of the date when the harassment occurred. A student who believes he or she has been sexually harassed may, in addition to the available grievance procedure, file a complaint with the Federal Office for Civil Rights, U.S. Department of Education (Region1), John W. McCormack Post Office and Courthouse, Room 222, Post Office Square, Boston, Massachusetts 02109.

**Publication of Sexual Harassment Policy**

This document shall be distributed to all members of the College community. Notice of the Board’s policy against sexual harassment also shall be given to any independent contractor with whom a College has a business relationship, as a mandatory part of that contract.

**Training**

Training in the implementation of the Board’s policy against sexual harassment and in sexual harassment prevention shall be provided for all supervisory employees, in accordance with the provisions of State law. Attendance at such training sessions shall be mandatory. In addition, awareness and sensitivity training for all employees is required and for students is strongly encouraged.

Informal concerns may be brought to the attention of the Dean of Students. Formal complaints of sexual harassment will be addressed according to our established Affirmative Action Student Grievance procedure contained in the Student Handbook, on the College website, in the Learning Resource Center and widely available from college Deans and Division Leaders.

A student who believes he or she has been sexually harassed may, in addition to the available student grievance procedure, file a complaint with the Office for Civil Rights, U.S. Department of Education (Region1), John W. McCormack Post Office and Courthouse, Room 222, Post Office Square, Boston, Massachusetts 02109.

All complaints of sexual harassment shall be taken seriously.

**SEXUAL ASSAULT RESOURCE TEAM (SART)**

Naugatuck Valley Community College’s Sexual Assault Resource Team (SART) is designed to provide a collaborative victim-centered team response to sexual assault. The mission of SART is to provide services that ensure a transition from victim to survivor for every individual whose life is impacted by sexual violence. The SART members can provide a survivor with referrals and general information regarding sexual assault.

The college works with Safe Haven of Greater Waterbury, which is our community-based sexual assault and domestic violence agency. They provide a wide range of free and confidential services including counseling, criminal court advocacy, referrals, support groups, assistance with restraining orders, Police accompaniment and advocacy, hospital accompaniment for sexual assault survivors and emergency shelter.

Should a survivor choose to file a police report, the College Public Safety Office, The Dean of Students, or Title IX Coordinator will assist the individual with the reporting process. We will strive to empower the survivor to make their own decisions by providing on and off campus resources, offer support as needed, and hold perpetrators accountable. The team includes a coordinator and designated individuals from the College and local community organizations including Safe Haven and the Waterbury Police Department. The Sexual Assault Resource Team is available to help anyone who reports a violation of the sexual assault policy. In cases of immediate danger or an emergency call 911. On campus contact the Public Safety office at (203) 575-8113 – ROUTINE CALLS (203) 575-8112 – EMERGENCY LINE.

For information or to report a sexual assault case, students may contact the Dean of Students at 203-575-8086, Title IX Coordinator at 203-575-8043 or any other team member. Please visit: nv.edu/sart for team members’ contact information and details of services.

**ACADEMIC APPEALS POLICY**

Good communication between faculty and students will make disputes between them infrequent, but if disagreements occur, it is the College’s policy to provide a mechanism whereby a student may formally appeal faculty decisions. When a student uses the appeals procedure, all parties should endeavor to resolve the dispute amicably at the earliest possible stage.

Any student has the right to appeal a decision of a faculty, adjunct faculty, staff, program director, clinical coordinator, or employee of the college. Definition of an academic appeal is an allegation by a student that as to him or her, an employee of the college has violated federal or state laws and regulations, college or department policies, accreditation standards, or the faculty member's own stated policy relating to student's assignment of grades or other academic evaluation.

**Types of Appeals**

There are two types of Academic Appeals at Naugatuck Valley Community College:

(A) General Academic Appeals are for appeals by students in any program or discipline.

(B) Allied Health/Nursing Clinical Academic Appeals are for those appeals which deal specifically with clinical evaluation judgments.

Copies of the policy and forms may be obtained through the Academic Division Offices, from the Dean of Academic Affairs, or by contacting the Academic Appeals Committee Chairperson.

**FINANCIAL DISCLOSURE POLICY**

Individuals can request a copy of the college's most recent audited financial statement or a fair summary thereof by submitting a request in writing to the dean of administration.

**SMOKING POLICY (Effective January 2018)**

Naugatuck Valley Community College is committed to providing a safe and healthy working/learning environment for all members of our campus community and is a smoke-free campus.

**SMOKE-FREE CAMPUS POLICY**

Section 19a-342 of the General Statutes of Connecticut prohibits smoking in any building or portion of a building owned or leased by the state. Smoking is also prohibited in any vehicles owned or leased by the state or any political subdivision thereof (this policy does not apply to personal vehicles.) Smoking shall also be prohibited in all outdoor areas of Naugatuck Valley Community College campus property, including but not limited to parking lots, paths, fields, and sports/recreational areas.

Violations will be dealt with as student discipline matters. Compliance will be monitored by Public Safety, employee supervisors and student services staff. Students are encouraged to direct smokers to the designated smoking areas and to report persistent violators to the appropriate authority.
"Smoking": inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, or pipe, or any other lighted or heated tobacco or plant product intended for inhalation, including hookahs and marijuana. "Smoking" also includes the use of an electronic smoking device which creates an aerosol or vapor, in any manner or in any form and is not limited to nicotine.

USE OF CELLULAR PHONES POLICY
Students are hereby notified that cellular phones and beepers are allowed in class only if they are turned off or turned to a silent mode. Under no circumstances are telephones to be answered in class. Students who ignore this Policy may be asked to leave class. When there are extenuating circumstances that require that a student be available by phone or beeper, the student should speak to the instructor prior to class, so that together they can arrive at an agreement concerning the device.
ACADEMIC STANDARDS

FEDERAL DEFINITION OF A CREDIT HOUR
Federal regulation define a credit hour as an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutional established equivalence that reasonably approximates not less than: (1) One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately 15 weeks for one semester or trimester hour of credit, or 10-12 weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or (2) At least an equivalent amount of work as described above for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit.

ACADEMIC HONESTY AND PLAGIARISM
At NVCC we expect the highest standards of academic honesty. Academic dishonesty is prohibited in accordance with the Board of Regents (BOR) Proscribed Conduct Policy in Section 5.2.1 of the BOR Policy Manual. This policy prohibits cheating on examinations, unauthorized collaboration on assignments, unauthorized access to examinations or course materials, plagiarism, and other proscribed activities. Plagiarism is defined as the use of another's idea(s) or phrase(s) and representing that/those idea(s) as your own, either intentionally or unintentionally.

ACADEMIC LOAD
PART-TIME Students registered for eleven (11) or fewer credit hours in a semester are considered to be part-time students. Students have the responsibility to take the correct courses to meet graduation requirements in their academic programs, but students should seek the advice of their faculty advisor, counselor, or program coordinator. Students desiring to deviate from the recommended courses sequences must review such plans with their faculty advisor, counselor, or program coordinator. Financial aid students must contact this office to discuss deviations from their program of study.

FULL-TIME Students registered for twelve (12) or more credit hours in a semester are considered to be full-time students. Students have the responsibility to take the correct courses to meet graduation requirements in their academic programs, but students should seek the advice of their faculty advisor, counselor, or program coordinator. Students desiring to deviate from the recommended course sequences must review such plans with their faculty advisor, counselor, or program coordinator. The average full-time student carries five courses (15-16 credits), depending upon program of study and/or academic preparation. Students who wish to carry more than sixteen credits, which is the maximum load allowed, must apply to the Dean of Academic Affairs for special permission prior to registration. The initial program of study for all students is developed at the time of entry to the College under the direction of the Director of the Center for Academic Planning and Student Success (CAPSS).

COURSE CHANGES
During the first week of each semester, students may Add/Swap courses. Students who wish to make course or schedule changes may do so without penalty on a space-available basis through the Office of the Registrar.

No student will be allowed to enter a course after the first week of classes without permission of the Division Director.

CLASS ATTENDANCE
Classroom attendance is an integral part of the college experience. The faculty of the College believes that regular class attendance is necessary for a student to derive the maximum benefit from the learning experience and the overall value of the classroom instruction. For absences due to extenuating circumstances, it is the responsibility of the student to contact the instructor. Specific attendance and grading policies will be included in the syllabus for each class.

There are some degree and certificate programs which have special attendance policies that must be satisfied due to licensing requirements. Students should refer to the program handbooks for these specific requirements.

MAKE-UP WORK
Academic work missed during class absences should be discussed with the individual instructor immediately upon the student’s return to class. It is the student’s responsibility to seek out the instructor in this case during office hours or at a mutually convenient time. Specific make-up policies are at the discretion of the instructor.

GRADING SYSTEM
Credit Courses
For the purpose of computing numerical credit point averages, grades are evaluated as follows for each semester hour of credit:

<table>
<thead>
<tr>
<th>Numeric Grade</th>
<th>Acceptable Letter Grade Range to be used by the Instructor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A- to A</td>
<td>Excellent</td>
</tr>
<tr>
<td>80-89</td>
<td>B-, B, B+</td>
<td>Above Average</td>
</tr>
<tr>
<td>70-79</td>
<td>C-, C, C+</td>
<td>Average</td>
</tr>
<tr>
<td>60-69</td>
<td>D-, D, D+</td>
<td>Below Average</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
<td>Failing</td>
</tr>
</tbody>
</table>

The symbols of “AU”, “I”, “M”, “P”, “TR”, “W”, are not included in the GPA.

Developmental grades do not count in the GPA. These grades will appear on the record with the # to designate their status. Note: since they do not count in the GPA, they will not contribute to academic warning, probation, or suspension.

Combined Academic Standing
The earned grades (GPA) will generate a status of Good Standing, Written Warning, GPA Probation, or Suspension. The record of credits completed is called Progress Evaluation, and will generate status of Good Standing or Progress Probation. The Combined Academic Standing (CAST) will include both of these evaluations.

Administrative Transcript Notations
The College uses a number of administrative transcript notations, apart from the grading system, to describe various situations. They are as follows:

• Incomplete (I) - No Quality Points
  At the discretion of the instructor, the notation “I” may be assigned if a student, for extenuating circumstances, has not completed all course requirements. The faculty member who assigns an “I” (incomplete) shall file a system report form. This notation will not be allowed for excessive absences. Usually, an “I” would be changed to a letter grade by the end of the next semester; however, the instructor has the option of establishing the completion date. If a grade change is not submitted to the Office of the Registrar by the instructor by the end of the semester following that in which the “I” was assigned, the “I” will be converted to a “F”.

• Withdrawal (W) - Student Initiated No Quality Points
  The College recognizes the potential for a student to withdraw from a course or to withdraw from college. Students have the right to formally leave a course or the College, and they also have the right to receive counseling and assistance in order to maintain enrollment in courses. Students are advised
that course withdrawal may alter progress toward program completion. Students are strongly encouraged to discuss their decision with the instructor and their counselor or advisor when contemplating a decision to withdraw.

**Withdrawal from Course(s)**

It is strongly recommended that students considering withdrawal from a course seek the advice of the instructor and a counselor or advisor. Students will be permitted to withdraw with a “W” notation no later than two weeks preceding the last Monday-Friday regularly scheduled class day. The last date for withdrawal will be published and announced.

Withdrawals (with signature) can be made:

- in person at the Office of the Registrar K516
- by mail: NVCC Office of the Registrar K516
  750 Chase Parkway
  Waterbury, CT 06708
- Fax: (203) 575-8085
- On-line: http://mycommnet.edu

Requests must be received by the deadline within the withdrawal period (i.e. requests received by midnight prior to the deadline will be honored).

**Note:** A withdrawal from a course(s) may jeopardize your financial aid status, car insurance coverage, health insurance coverage and other benefits.

**Note:** A student may not obtain a transcript notation of "W" if there exists substantial reason to believe that the student has engaged in academic misconduct in the course.

A transcript notation of "W" will only be permitted for such students when the final resolution results in finding the student did not commit academic misconduct in the course.

**Audit (AU) - No Quality Points**

See “Auditing Courses”.

**Pass (P)**

An administrative transcript notation for successful completion of courses taken on a pass/fail basis. Students failing will receive a grade of “F”.

**Transfer (TR)**

An administrative transcript notation in lieu of grades for courses accepted for credit from other colleges and universities.

**Non-credit Courses**

Non-credit classes, seminars, workshops and programs all meet The Non-Credit Program Development Quality Standards. Certification coursework and programs meet or exceed industry or professional standards. Continuing Education Units (CEU’s) are awarded based on recognized international, national, or state standards. Letter or number grades are assigned by college instructors and trainers based on demonstrated knowledge attainment and/or skill achievement.

**GRADE CHANGE POLICY**

The faculty member initiates the grade change process. Grade changes cannot be submitted later than one semester following the standard semester or session in which a course was originally graded. This policy is not intended to supersede the academic grievance policy or the policy governing incomplete grades. A grade can only be changed if it was miscalculated, if it was erroneously reported by the faculty member, or if it was an Incomplete that needs to be changed. Students will receive notification of the grade change from the Office of the Registrar.

**AUDITING COURSES**

Students who do not wish to earn course credit may be permitted to audit by notifying the Office of the Registrar of their intent at the time of registration within the first four weeks of the start of the course. Students must pay the regular tuition and college fees for each course audited.

The privileges of an auditor in a course are specifically limited to attending and listening. The auditor assumes no obligations to do any of the work of the course and is not expected to take any of the time of the instructor. The auditor does not submit any work and is not eligible to take any tests or examinations, nor to receive grades on all or any part of the course. Audited course(s) will be shown on the student’s transcript with the symbol “AU” in the grade column and will not carry any credit hours or quality points. An audited course does not earn any credit toward graduation.

**INDEPENDENT STUDY**

Faculty members in some subject areas permit qualified students to apply for Independent Study for credit and a grade when it has been proven that the student has the necessary background and qualifications to pursue this type of instruction.

The established syllabus in each independent course requires the student propose in writing the specific objectives and procedures of the independent study project. No more than one independent study may be taken in an academic year.

Before registration, a Request for Independent Study form (available from an academic division as well as the Office of the Registrar, Kinney Hall, Room K516) must be filled in with appropriate documentation and approved by the academic dean, division leader and the faculty member with whom the student will work. The proposal and the agreement become part of the student’s permanent record. Student must be matriculated in a degree or certificate program to be eligible for independent study.

**BOR POLICY ON REPEATING COURSES**

Naugatuck Valley Community College has policies regarding repeating courses multiple times. The Board of Regents for the Connecticut State Colleges and Universities policy states:

“No course may be repeated more than twice. The highest grade received will be used in calculating the student’s academic average. This does not apply to those courses that are designed to be repeated for additional credit.* College standards will be included in appropriate college publications and communications. These standards shall not be applied retroactively to the academic record of any student. A request for waiver of these standards shall be based on special circumstances and be approved by the college president, and be reported to the chancellor.”

*Courses such as music lessons, chorus, physical education, and wine and viticulture.

1. After the freeze date the Registrar provides the Dean of Academic Affairs with a list of students who are taking a course for the 3rd, the 4th, or more times.
2. Students who are taking a course for the 3rd time are sent a warning letter from the Dean of Academic Affairs.
3. Students who are taking a course for the 4th time are sent a letter from the Dean of Academic Affairs and asked to make an appointment to discuss a waiver. The Dean’s office will contact a department chair, coordinator, or division leader to assist the student with tutoring, etc. so that the student will not repeat the course for an additional time.

**SATISFACTORY ACADEMIC PROGRESS**

Satisfactory completion of fifty percent of the credits attempted (this phrase means actual continued enrollment beyond the add/drop period) will be the minimum standard of good standing. Students receiving Federal Title IV financial aid must successfully complete two-thirds (66.66% earned credits/attempted credits) of the attempted credits.

Students who have completed 11 or fewer credits whose Cumulative Grade Point Average (CGPA) falls below 1.5 will be
given a written warning. Students who have completed between 12 and 30 credits inclusive whose CGPA falls below 1.7, and those who have completed 31 or more credits whose CGPA falls below 2.0, will be given a written notice that they are placed on academic probation.

ACADEMIC PROBATION

Students placed on academic probation are required to seek counseling and will have a restricted credit load. They will be required to see a counselor or advisor in the CAPSS prior to registering for the next semester.

Students on academic probation who fail to attain the required CGPA as shown will be notified in writing that they are suspended for one semester.

After a period of suspension, a student may be reinstated as a probationary student. Students are required to meet with a counselor to complete an Academic Suspension Appeal as part of the reinstatement process.

A student may request a review of academic status by the Dean of Academic Affairs. Students are required to seek counseling and reduce their course load before returning to the college.

Veterans whose CGPA falls below the required 2.0 GPA will be placed on academic probation for one semester. If, at the end of the semester, the veteran has not raised his/her GPA to the required 2.0, veteran benefits will be terminated and the Veterans Administration will be notified. Once the veteran has returned to good academic standing, his/her benefits will be reinstated.

ACADEMIC ADVISING

In addition to the Center for Academic Planning and Student Success, the College has a faculty advising system. Students who have formally enrolled in a degree program are required to have academic advising. First semester students must meet with an assigned counselor, advisor or faculty advisor prior to registering for the following semester.

ACADEMIC HONORS

Honor societies representing several curriculum disciplines exist to recognize specific academic achievement. Student chapters of several professional societies are also available. The honors policy at Naugatuck Valley Community College is as follows:

Semester Honors:

• Dean's List - A 3.4 grade point average for the semester
• Full-time students who are matriculated in a certificate or degree program and who successfully complete 12 or more credits of work in a semester with a grade point average of 3.4 or higher shall be recognized by having their names placed on a Dean’s List.
• Part-time students who are matriculated in a certificate or degree program are also eligible for such recognition when they have completed 12 or more credits of work with a cumulative grade point average of 3.4 or higher. They may be subsequently recognized at the completion of an additional 12 or more credits of work with a cumulative grade point average of 3.4 or higher, and at successive intervals of 12 credits.
• A course Withdrawal or Incomplete shall make the student ineligible for Dean’s List recognition that semester.
• Upon completion of the Incomplete, the student may be recognized retroactively.
• Students who are in a probationary status are not eligible for Dean’s List recognition, even if their cumulative grade point average might otherwise make them eligible.

Phi Theta Kappa - Students with a semester GPA of 3.50 or higher.

Alpha Beta Gamma - Business Major students with a CGPA of 3.0 or higher and completion of at least 15 College credits.

Alpha Beta Gamma

Alpha Beta Gamma is an international business honor society established in 1970 to recognize and encourage scholarship among college students in business curricula at community, junior and technical colleges. The Society has over 35,000 members from 140 member colleges. To achieve this goal, Alpha Beta Gamma provides an opportunity for the development of leadership and service, an intellectual climate for the exchange of ideas and ideals, lively fellowship for business scholars, and the stimulation of interest in continuing academic excellence. The lives of members, chapter advisors and support administrators have been enriched by the Alpha Beta Gamma experience. Alpha Beta Gamma exists to honor the superior student in business programs.

Lambda Epsilon Chi (LEX)

LEX is a national Legal Assistant/Paralegal Honor Society. Students who have superior academic performance and complete two-thirds of the program requirements are eligible to be inducted.

Phi Theta Kappa

Phi Theta Kappa is a nationwide honor society for community college students. The criteria for invitation are a 3.50 or above grade point average with at least 24 completed credits, including all majors. The achievements and future plans of its members are focused to promote continued honors behavior and to maximize their educational attainment. These goals are accomplished by numerous articulation and transfer scholarships with many colleges and universities. A Faculty Honors Advisor offers guidance and assistance to the Phi Theta Kappa members who represent approximately the top three percent of the student body. Membership is a lifetime honor.

The Honors Institute

The Honors Institute will enable students who have demonstrated significant academic achievement to participate in a rigorous course of study to advance their knowledge and research skills. Graduates who meet the course work will receive an Honors designation on their transcript. Full time and part time students may apply. Applications are accepted until October 1 for the Spring semester, and April 1 for the Fall semester. In order to be admitted, students must have obtained at least 12 college credits (NVCC or transfer) with a cumulative GPA of at least 3.4 and must have obtained a letter of recommendation from a faculty member.

To graduate with Honors Distinction:

• A student must complete nine credits of Honors course work:
• Two honors by contract courses
• One capstone “Special Topics” course
• Attain a minimum 3.4 CGPA in each course
• Attain a minimum 3.4 CGPA in the degree program
• Each HBC course will conclude with a student presentation.

The Honors Institute affords students direct access to faculty mentoring, more independent study opportunities, and early entrance into Phi Theta Kappa Honor Society. Success in the Honors Institute increases transfer opportunities, gains student recognition at the Honors Showcase and commencement, and includes honor status on the student's transcript.

The President's Circle

Membership into the President's Circle represents the highest honor a student may receive while matriculating at the college. These students represent a select group of outstanding achievers who serve as the college’s student ambassadors. Circle ambassadors have the opportunity to attend major college, community and government events with the President and/or her cabinet, and lend voice to their experiences as NVCC students. They are given platforms to directly engage with community leaders, officials, alumni, and friends. Overall, membership
ACADEMIC STANDARDS, ACADEMIC SERVICES

represents an opportunity for these students to make connections, build networks, and further their roles as active citizens and leaders. Following two semesters of service, each Circle ambassador receives a scholarship to help defray the cost of textbooks (whether at NVCC or their 4-year transfer institution), as well as a letter of recommendation from the President of NVCC. Ambassadors are required to attend events, class schedules permitting, throughout their term of ambassadorship. They are expected to conduct themselves ethically, morally, and academically in a manner befitting a representative of the college.

Eligibility: Students should have completed at least 12 credits at NVCC at the time of application with a minimum 3.40 cumulative GPA and will have completed at least 2 semesters before their term as Ambassadors begins. Students must be enrolled in a credit program. Selection is based upon academic achievement and potential; work, leadership, and service experiences both on and off the campus; enthusiasm for NVCC; ability to articulate future plans and goals; and overall communication skills. The application includes 4 components:

• Personal Statement
• Transcript (3.40 cumulative GPA)
• Resume and a list of on-campus leadership and work experience, extracurricular activities, and volunteer work
• Letter of recommendation from an NVCC faculty member

For information, contact the Academic Center for Excellence: Ekstrom Hall Room E500, ace@nvcc.commnet.edu, (203) 596-8717.

GRADUATION HONORS

Students with exemplary academic performance shall be recognized at graduation with the following designations, either in Latin or English, as the college may choose:

• Summa Cum Laude/Highest Honors for students with a 3.9 – 4.0 grade point average
• Magna Cum Laude/High Honors for students with a 3.7 – 3.89 grade point average
• Cum Laude/Honors for students with a 3.4 – 3.69 grade point average

Students with an Incomplete may become eligible retroactively for graduation honors upon completion of the course requirements, and recognition shall appear on the transcript, provided that the student has earned the required grade point average. Grades received for developmental courses may be used to determine eligibility for semester honors. However, they cannot be used to determine eligibility for graduation honors.

Presidential Medal of Honor

Established in 2012, the Presidential Medal of Honor is a prestigious award presented by the President of Naugatuck Valley Community College to students, faculty, staff, administrators and community members who have distinguished themselves by their significant contribution to the mission accomplishment and program outcomes of our students and our College. The Presidential Medal of Honor will be presented each year at commencement by the President.

Criteria For Students:

The recipient has met eligibility criteria for graduation from an associate degree program and had a 4.0 G.P.A. in August for a September graduation; in December for a January graduation; in May for a May graduation. The student has evidenced good moral character and demonstrated personal commitment through service to the college community, the larger community we serve, or both.

To Graduate with Honors Distinction:

• A student must complete nine credits of Honors course work:
  • Two honors by contract courses
  • One capstone “Special Topics” course
  • Attain a minimum 3.4 G.P.A. in each course

• Attain a minimum 3.4 GPA in the degree program
• Each HBC course will conclude with a student presentation.

GRADUATION REQUIREMENTS

Degree/Certificate Eligible Students

The College awards the degrees of Associate in Arts and Associate in Science. To be eligible for an associate degree, the student must have fulfilled all of the following:

• been accepted into a degree program at the College.
• satisfactorily completed the courses required in the curriculum for the degree. In addition to the degree requirements, students are strongly urged to take advantage of courses available which will broaden their personal and professional lives.
• completed a minimum of 25 percent of all academic requirements for the degree at Naugatuck Valley Community College.
• earned a minimum cumulative grade point average of 2.0.
• been recommended for graduation by a vote of the Professional Staff of the College or an affirmative recommendation from the Division Director, Department Chairperson or the Program Coordinator.
• complete the graduation application which may be obtained from the Office of the Registrar or online at http://my.commnet.edu and submit by December 1 for January conferral or March 15 for May, or July 1 for August conferral. There is no application fee.
• paid to the College all bills incurred, and must have returned or paid for all materials loaned by the College, including library books, audiovisual and athletic equipment.

DEVELOPMENTAL COURSES

Credit Courses Which Do Not Apply to Electives or the Degree

The following credit courses do not satisfy the elective or degree requirements in any program except where specifically listed.

ENG*H096, 063
ESL* 013, 015, 017, 022, 025
MAT*H075, 092, 094, 095

Earning a Second Degree

A student who already holds an academic degree may earn a second degree in a different curriculum at a community college. Such a student shall be treated similarly to a transfer student with respect to the minimum number of credits he or she must take for the second degree. This will require that a student meet all program requirements and earn at least 25 percent of the minimum requirements for the new curriculum at the college through which the second degree is to be conferred.

• A student may earn two degrees simultaneously at a community college by fulfilling all requirements stated above.
• Requests for additional degrees beyond the second require prior approval from the academic dean. Students who receive approval must then complete all program requirements, including earning at least 25 percent of the minimum requirements for the new curriculum at the college through which the degree is to be conferred.
• Completion of the requirements of an additional program option does not constitute a different degree.

Certificate Requirements

Students who complete the requirements for a credit certificate are expected to follow the same procedures described for degree students. Individuals completing non-credit certification programs (e.g., Certified Nurse Aide, Emergency Medical Technician) should check with the Continuing Education Department to verify their completion of, and compliance with, all state-mandated regulations.
ACADEMIC SERVICES

PARTICIPATION IN COMMENCEMENT EXERCISES
Students who, in order to fulfill their degree program requirements, need to complete no more than two courses in the Summer Session following the spring semester may participate in Commencement Exercises; however, such students will not be considered as having graduated until all graduation requirements are completed. Students must have met all criteria stated in the section on GRADUATION REQUIREMENTS.

The December grade point average will be considered for honors recognition for the May commencement. If the grade point average changes when the grades for spring courses are recorded and honor status is affected, the official college record will reflect the changes.

POLICY CHANGES
Naugatuck Valley Community College reserves the right to change requirements, courses, prerequisites, regulations, tuition, fees and other policies without prior notice. Waivers of these policies, due to extenuating circumstances, may be made by the President of the College upon written request.

LIBRARY SERVICES
The Max R. Traurig Learning Resources Center Library is a full-service academic library fulfilling the needs of Naugatuck Valley Community College students, faculty and staff, as well as residents of Waterbury and its surrounding communities. The library’s policies and practices are developed using accepted industry standards current in academic and library literature. For more about our mission, goals, services, and policies, and all contact information, please visit nv.edu/library. The library is centrally located on the Waterbury campus in the L building, between Ekstrom Hall and the Student Center, with the main entrance located at L-523. Level 5 services include Circulation, Reserves, and Reference, and ready access to computers, printers, copiers and scanners, a study area, and books. The library may also be accessed from Level 4, at L-410. Level 4 areas include current and back issues of periodicals, the library’s Electronic Classroom, computers with printers, quiet and group study areas, DVD, VHS and CD collections, and staff offices. More books are located on the Mezzanine level, between Levels 4 and 5.

Danbury students can access reserve library textbooks in room D201. Library databases can be accessed via the library’s website or myCommNet. Librarians visit the campus for instruction and reference help, and materials from the Waterbury campus can be requested through the online catalog at http://library.ct.edu/nvcc.

The Max R. Traurig Library offers books, journals, DVD and VHS films, and CDs as well as items such as USBs, laptops, guitars, and calculators. Check http://nvcc.libguides.com/policies/circ for more information on borrowing.

Digital resources such as journal databases, streaming media, and ebooks are available on campus and via myCommNet. Off campus use requires a current student, staff, or faculty myCommNet username and password.

An Electronic Classroom (EC) equipped with 32 full-service computer workstations and a teaching console with projection system is used throughout the academic semester to conduct Library Instruction classes and workshops. When not reserved for classes, the computers in the EC may be used for academic purposes on a walk-in basis.

The Level 4 group study area includes a Collaboration Studio, where up to 6 people can simultaneously use laptops or notebook style computers at a Mediascape to work together on group projects. Please note: Laptops are available to check out at the Circulation Desk in L523.

Library Services to Patrons with Disabilities Assistive technology is available for blind and low vision users, for use in the library and classroom. Library staff are available on request to provide accommodation for patrons with limited mobility.

Borrowing privileges are extended to NVCC students, faculty, and staff. All other Connecticut residents may also borrow most materials from the NVCC library at no cost. To register for borrowing privileges, bring proof of identification to the Circulation Desk in L523.

Students, faculty, and staff at NVCC can now use all of the libraries in the CSCU system. Searching the system is easy and can be done using the NV Search at http://library.ct.edu/nvcc. Materials from other libraries can be requested from any library in the CSCU system and delivered to NVCC. Students, faculty and staff can also ask for items from other libraries to be delivered to NVCC for check-out, through NVCC’s participation in Connecticut’s RequestItCT InterLibrary Loan (ILL) program.

Connecticut residents with a public library card from their hometown library may borrow materials from other public libraries. In addition, the following libraries are located in the NVCC community and can be used by NVCC students. Please visit the library’s website, or phone ahead, for hours, directions, and library use policies. Be prepared with proof of current NVCC registration, and coins for photocopying in case borrowing of materials is limited.

Connecticut Judicial Branch Law Library at Waterbury
203-591-3338 • http://www.jud.state.ct.us/lawlib

Danbury Public Library
203-797-4505 • http://danburylibrary.org/

Danbury Hospital Library
203-797-7419 • http://www.danburyhospital.org

Post University’s Traurig Library
203-596-4560 • http://www.post.edu

Silas Bronson Library (Waterbury’s public library)
203-574-8225 • http://www.bronsonlibrary.org

University of Connecticut Waterbury Campus Library
203-236-9900 • http://lib.uconn.edu/libraries/waterbury-campus-library

Saint Mary’s Hospital Library
203-709-6408 • http://www.stmh.org/

Waterbury Hospital Health Center Library
203-573-6136 • http://www.waterburyhospital.org

Western Connecticut State Libraries Haas Library
203-837-9100 • Young Library 203-837-9139
http://library.wesu.edu/

ACADEMIC CENTER FOR EXCELLENCE (ACE)
Located in Ekstrom 500, the Academic Center for Excellence (ACE) is dedicated to helping Naugatuck Valley Community College students succeed and achieve academic success. The ACE is a complementary campus resource providing tutorial services in various subjects including math, writing, science, ESL, computer software applications, and accounting. Students can walk in and receive help from one of our professional or peer tutors who focus on students and their success. In addition, the ACE is where students can come for individual and group study, research assistance, exam proctoring, college success tip sheets, academic workshops and ACCUPLACER® preparation assistance. There are more than 45 computers in the ACE for student use. Students who frequently visit the ACE improve their overall grades and successfully complete their courses at higher rates than students who do not take advantage of the ACE.

Phone: 203-596-8729 / Website: nv.edu/ACE
MODIFIED SUPPLEMENTAL INSTRUCTION (mSI)

The Supplemental Instruction (SI) program at NVCC continues to evolve and grow. Currently we offer a modified Supplemental Instruction (mSI) program developed for developmental Math and English courses.

What is mSI?
mSI is the lab portion of the following courses:

- ENG 096T
- ENG 096
- MAT 095
- MAT 136

What is mSI not
mSI is not a study hall.

Purpose of mSI

The purpose of mSI is to help developmental students gain the skills necessary to succeed in these courses by providing assignments that promote active learning, critical thinking, and transferable skills. Working together with mSI leadership, students put forward their best efforts to pass the developmental courses on the first attempt with a C or better, thus, improving students' confidence to do well in the following college-level courses as well as improving retention rates.

Grading in mSI

Sections that meet once a week 10% of the overall grade comes from mSI and sections that meet twice a week 15% of the overall grade comes from mSI.

Summary

Naugatuck Valley Community College supports intensive and transitional (developmental students) (PA12-40 initiative) by offering mSI labs, which provides leader-guided learning sessions to improve student success with developmental English and Math courses. Students in the mSI sessions work on a computer platform with guidance from an mSI leader to build critical thinking and transferable skills. mSI also provides a place for students to review current course materials and clarify additional questions. Students in mSI receive participation percentage for their performance with the computer platforms.
ACADEMIC SERVICES

What You Can Expect from an ACE Tutor

- Encouragement
- Motivation
- Respect for Your Learning Style
- Tips on How to Study for a Test
- Assistance with Understanding Course Content
- Patience

What ACE Tutors Expect from You

- To attend class on a regular basis
- To have specific questions
- To bring information regarding course content and assignment details
- Use tutoring as assistance is needed, not just before a test

Math Tutoring: The math lab offers a quiet, convenient environment for students to work on their math homework and projects. A collection of textbooks, solution manuals and calculators are available for use and tutors are available to assist students through the process of problem solving. All computers in the ACE are equipped with interactive computer tutorials. We also offer access to MyMathLab®, a comprehensive software system designed to help students with basic mathematics through calculus with internet-based assignments and tests.

Writing Center: In the writing center, students can expect to receive assistance with a written assignment with the tutor paying particular attention to thesis development, argument, and organization. Our tutors help the student identify writing problems and develop possible strategies to correct them. The tutor helps in the brainstorming process when the student is just beginning a writing project. The tutor helps the student understand the purpose of an assignment. In the case of grammar or punctuation problems, the tutor reviews the rules and makes sure the student understands the details. The student is ultimately responsible for completing the assignment and correcting his or her work. Students can usually expect a twenty minute session with a writing tutor and they should limit their sessions to two or three per assignment.

Science Exploration Zone: In the science exploration zone, students can receive science tutorial assistance in chemistry, anatomy and physiology, biology, and physics. The zone is equipped with computers, complete with science simulation software, microscopes, videos and textbooks. Students have use of anatomical models including full-body skeletons, skulls, and vertebrae sets to aid learning and bring material to life.

Computer Assistance: Whether assistance is needed with designing a PowerPoint presentation, developing an Excel spreadsheet or learning the latest Microsoft Office version, tutors are available. Our peer tutors are experienced and eager to help students.

Placement Testing Preparation: Students are encouraged to review basic concepts in grammar, reading, arithmetic, trigonometry and algebra before taking the placement test, especially if they have been away from school for more than a year. The ACE offers a number of resources to help students prepare, including study guides, practice tests and tutors available to help strengthen skills.

Contact (203) 596-8717 if you have any questions, or utilize our website at: nv.edu/ace or follow us on Facebook.

PROGRAM ADMINISTRATION

The academic programs of the College are administered by instructional divisions. It is important for students to be aware of the division in which their program of study resides. The following are the instructional divisions and the courses or program designations for which they are responsible:

CREDIT PROGRAMS

Allied Health/Nursing: Nursing, Physical Therapist Assistant, Radiologic Technology, Respiratory Care.


NON-CREDIT/LIFELONG LEARNING PROGRAMS

The mission of the Naugatuck Valley Community College Community and Economic Development Unit is to support community and economic development by affecting positive change in our communities. We collaborate with community partners to respond actively to the changing workforce needs of our region. We empower individuals and businesses through quality education and training. We enrich lives with lifelong learning, personal, and professional development opportunities. Some of these opportunities include:

- Bartending
- Basic Life Support & AED
- Boating Safety
- Bookkeeper
- Business
- Central Sterile Processing Technician
- Certified Nurse’s Aide (CNA)
- Certified Wedding Planner
- Events Management
- Grant Writing
- Hospitality
- Manufacturing
- Medical Administrative Assistant
- Medical Coding and Billing Specialist
- Motorcycle Rider Education
- MS Office Essentials
- OSHA 10 General
- Patient Care Technician
- Personal Fitness Trainer
- Pharmacy Technician
- Phlebotomy Technician
- QuickBooks
- Real Estate
- Security Guard
- Wedding Planner
- Welding – SMAW (STICK)
- Welding – GMAW (MIG)
- Welding – GTAW (TIG)
Naugatuck Valley Community College offers associate degrees, credit certificates, and non-credit certificate programs. Curricular patterns are designed to implement the overall general and specific objectives of the College and lead to the degrees of:

Associate in Arts (A.A.)  Associate in Science (A.S.)

Degrees

- Accounting (A.S.) – HA03
- Automotive Technician (A.S.) – HA24
- Automotive Technician Management Option (A.S.) – HC23
- Aviation Science Management Option (A.S.) – HC21
- Behavioral Science (A.S.) – HC20
- Business Administration - Business Computer Applications (A.S.) – HA54
- Business Finance (A.S.) – HA57
- Business Management (A.S.) – HA68
- Computer Information Systems Technology (A.S.) – HA76
- Criminal Justice/Public Safety (A.S.) – HB04
- Criminal Justice - Corrections Option (A.S.) – HC13
- Criminal Justice - Forensics Option (A.S.) – HC17
- Criminal Justice - Law Enforcement Option (A.S.) – HC14
- Criminal Justice - Security Option (A.S.) – HC15
- Cybersecurity (A.S.) – HA35
- Digital Arts Technology – Audio/Video Option (A.S.) – HC25
- Digital Arts Technology – Graphics/Animation Option (A.S.) – HC26
- Digital Arts Technology – Multimedia/Web Authoring Option (A.S.) - HC27
- Drug and Alcohol Recovery Counselor (A.S.) – HF10
- Early Childhood Education (A.S.) – HB93
- Electronic Engineering Technology (A.S.) – HB11
- Engineering Science (A.S.) – HB12
- Engineering Technology (A.S.) – HB83
- Engineering Technology - Automated Manufacturing (A.S.) – HB84
- Engineering Technology - Computer-Aided Drafting/Design (A.S.) – HB86
- Engineering Technology - Mechanical (A.S.) – HB85
- Environmental Science (A.S.) – HB87
- Fire Technology and Administration (A.S.) – HF05
- General Studies (A.S.) – HB25
- Horticulture (A.S.) – HB37
- Hospitality Management - Foodservice Management (A.S.) – HB16
- Hospitality Management - Hotel Management (A.S.) – HB94
- Human Services / Pre-Social Work (A.S.) – HA06
- Legal Assistant/Paralegal (A.S.) – HB56
- Liberal Arts and Sciences (A.A.) – HB57
- Marketing (A.S.) – HB61
- Mathematics & Science (A.A.) - HB44
- Nursing (A.S.) – HF30
- Physical Therapist Assistant (A.S.) – HB71
- Radiologic Technology (A.S.) – HB73
- Respiratory Care (A.S.) – HB74
- Technology Studies (A.S.) – HF11
- Technology Studies – Engineering Technology Option (A.S.) – HF12
- Technology Studies – Lean Manufacturing and Supply Chain Management (A.S.) – HF20
- Visual and Performing Arts – Visual Art (A.A.) – HC28
- Visual and Performing Arts – Dance (A.A.) – HC29
- Visual and Performing Arts – Design (A.A.) – HC33
- Visual and Performing Arts – Music (A.A.) – HC31
- Visual and Performing Arts – Theater Arts (A.A.) – HC32

Certificates

- Accounting – HJ05
- Administrative Support – HJ81
- Advanced CADD Modeling – HJ03
- Advanced Engine Performance – HJ12
- Advanced English Proficiency – HJ80
- Advanced Manufacturing Machine Technology – HK60
- Applied Behavior Analysis – HJ08
- Audio/Video Production – HK01
- Automotive Fundamentals – HJ24
- Business Management – HJ38
- CADD Modeling 3D – HJ02
- Child & Family Services – HJ14
- CNC Machining – HJ04
- Computer-Aided Drafting 2D – HJ01
- Computer Crime Deterrence – HK26
- Computer Networking – HJ42
- Criminal Justice – HJ55
- Culinary Arts – HJ77
- Dance – HK28
- Dietetic Supervision – HJ65
- Disabilities/Mental Health – HJ11
- Drug and Alcohol Recovery Counselor – HJ10
- Early Childhood Education – HJ89
- Electronic Music and Audio Production – HJ06
- Engineering Technologies Exploratory – HJ73
- Finance – HJ70
- Fundamentals of Machine Technology – HJ20
- General Automotive Services – HK10
- Gerontology – HK11
- Graphics & Animation – HJ09
- Horticulture – HK18
- Landscape Design – HK30
- Lean Manufacturing – HJ13
- Legal Studies/Paralegal – HJ69
- Management Information Systems – HJ13
- Marketing Electronic Commerce – HJ63
- Modern Manufacturing Design – HJ15
- Multimedia/Web Authoring – HJ07
- Object-Oriented Programming – HK23
- Supply Chain Management – HN14
- Sustainable Food Systems – HK33
- Technical Communications – HJ61
- Visual Art – HJ78

Non-degree

- Non-Degree – HZ99

Students are no longer being accepted into these programs as they will not be continued.

Non-credit Proficiency Certificates are available. See the most current course schedule at nv.edu/nc.

Connecticut State Colleges and Universities (CSCU) Transfer Tier Degrees  www.ct.edu/transfer

- CSCU Transfer: Art (A.A.) – H12HG21
- CSCU Transfer: Biology Studies (A.A.) – H12HG01
- CSCU Transfer: Business Studies (A.A.) – H12HG12
- CSCU Transfer: Chemistry Studies (A.A.) – H12HG02
- CSCU Transfer: Communication Studies (A.A.) – H12HG03
- CSCU Transfer: Computer Science Studies (A.A.) – H12HG13
- CSCU Transfer: Criminology Studies (A.A.) – H12HG14
- CSCU Transfer: English Studies (A.A.) – H12HG05
- CSCU Transfer: French Studies (A.A.) – H12HG16

For important Gainful Employment information including graduation rates & median debt of students who completed certificate programs, please visit our website. www.ct.edu/ge/nvcc

3/20/18
Programs of Study

GENERAL EDUCATION CORE

DEFINITIONS YOU NEED TO KNOW WHEN SELECTING YOUR PROGRAM AND COURSES

1. **Credit Hours (cr.)** - College work is measured in units called credit hours. A credit-hour value is assigned to each course and is normally equal to the number of hours the course meets each week. Credit hours may also be referred to as semester hours.

2. **Contact Hours** - The actual number of hours required in a class or lab.

3. **Lecture Hours (lec.)** - The number of clock hours in the fall or spring semester the student spends each week in the classroom. This time frame is different for the shorter summer sessions.

4. **Laboratory Hours (lab.)** - The number of clock hours in the fall or spring semester the student spends each week in the laboratory or other learning environment. This time frame is different for the shorter summer sessions.

5. **Prerequisite** - A course that must be successfully completed or a requirement such as related life experiences that must be met before enrolling in another course.

6. **Corequisite** - A course that must be taken during the same or earlier semester as the course in which one is enrolling.

7. **General Education Requirements** - A term which refers to courses that meet the eleven General Education Competencies. (See next page.)

8. **Electives** - Courses which may be chosen from items 9 10 or 11.

9. **Liberal Arts Electives** - All course subjects listed in the General Education Core, modern languages, ESL, and advanced courses with the same designations. Exceptions: Horticulture, Business, and Allied Health courses do not qualify.

10. **General Electives** - All credit courses numbered 100 or higher listed in the catalog. Students should consider transferability of courses when choosing general electives.

11. **Directed Electives** - Credit courses that satisfy specific program requirements. These courses are listed with each program area.

12. **Foreign Language Equivalencies** - The following equivalencies satisfy the modern language requirements:
   
a) 3 years of high school work in a single foreign language ancient or modern or

b) 2 years of high school work and an added semester of a college course at a more advanced level in a single foreign language or

c) 2 semesters of a single foreign language in college.

**Note:** Students may also take CLEP (College Level Examination Program) to satisfy the modern language requirements. Information on these tests is available from the Testing Center.

**Note:** ESL students may use up to six credits of Intermediate and Advanced levels of ESL courses to fulfill the Modern Language requirements.

13. **Non-Credit** - A course of study that does not apply towards a college degree; college credit is not earned. Typically designed as short courses, workshops, and customized programs; non-credit programs focus on knowledge and skills that can be applied directly to the job or personal and professional growth.

14. **Continuing Education Unit (CEU) Certificates** - CEU certificates are awarded in conjunction with mandatory continuing education requirements across different fields including: teacher professional development real estate nursing allied health insurance appraisal. Prior approval from the learner’s Local Education Association must be obtained. Typically CEU’s are awarded on a 1:10 ratio (i.e. one CEU for every ten hours of qualified instruction).

*This College continues to add and adjust courses course designations and course numbers to its offerings. The General Education and the definitions will be adjusted accordingly.*
GENERAL EDUCATION CORE

OUR PHILOSOPHY AND REQUIREMENTS

Naugatuck Valley Community College considers general education an important component of its degree programs. While an appropriate level of mastery in occupations and technologies is clearly essential, students are better prepared to live in the world and use this mastery only if they are also capable of understanding fundamental theory weighing values and forming independent judgments.

The College defines General Education in terms of the following competencies and goals:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation of the Aesthetic Dimensions of Humankind</td>
<td>Students will understand the diverse nature, meanings, and functions of creative endeavors through the study and practice of literature, music, the theatrical and visual arts, and related forms of expression.</td>
</tr>
<tr>
<td>Appreciation of the Ethical Dimensions of Humankind (Across the Curriculum)</td>
<td>Students will identify ethical principles that guide individual and collective actions and apply those principles to the analysis of contemporary social and political problems.</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy</td>
<td>Students will be able to use traditional and digital technology to access evaluate and apply information to the needs or questions confronting them throughout their academic professional and personal lives.</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking (Across the Curriculum)</td>
<td>Students will be able to organize, interpret, and evaluate evidence and ideas within and across disciplines; draw reasoned inferences and defensible conclusions; and solve problems and make decisions based on analytical processes.</td>
</tr>
<tr>
<td>Historical Knowledge and Understanding</td>
<td>Students will study the interrelatedness of various realms of human experience from multiple historical perspectives.</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Students will be prepared to develop oral messages of varying lengths and styles that communicate effectively and appropriately across a variety of settings.</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>Students will learn to recognize, understand, and use the quantitative elements they encounter in various aspects of their lives. Students will develop a habit of mind that uses quantitative skills to solve problems and make informed decisions.</td>
</tr>
<tr>
<td>Scientific Knowledge and Understanding</td>
<td>Students will gain a broad base of scientific knowledge and methodologies in the natural sciences. This will enable them to develop scientific literacy the knowledge and understanding of scientific concepts and processes essential for personal decision making and understanding scientific issues.</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>Students will become familiar with science as a method of inquiry. Students will develop a habit of mind that uses quantitative skills to solve problems and make informed decisions.</td>
</tr>
<tr>
<td>Knowledge and Understanding of Social Phenomena</td>
<td>Students will develop an increased understanding of the influences that shape a person’s or group’s attitudes, beliefs, emotions, symbols, and actions and how these systems of influence are created, maintained, and altered by individual, familial, group, situational, or cultural means.</td>
</tr>
<tr>
<td>Written Communication (6 Credits and Across the Curriculum)</td>
<td>Students will be prepared to develop written texts of varying lengths and styles that communicate effectively and appropriately across a variety of settings.</td>
</tr>
</tbody>
</table>

GENERAL EDUCATION CORE COURSE REQUIREMENTS

Focusing on the above competencies, course work in the General Education Framework ensures that NVCC students gain the fundamental skills, knowledge, and values needed for success in their academic, professional, and personal lives. A list of courses that fulfill each competency may be found under the “Approved Courses” link on the General Education website: http://www.nv.edu/GEACC and in this catalog. Students will fulfill General Education Requirements by completing the requisite number of credits in courses associated with each competency. For competencies identified as “Across the Curriculum” students should adhere to program requirements in order to fulfill these areas.

SCIENTIFIC KNOWLEDGE OR REASONING REQUIREMENT

Students must successfully complete at least one Scientific Reasoning or Scientific Knowledge course that contains a lab component.

GENERAL EDUCATION PROGRAM OVERSIGHT AND ASSESSMENT

The General Education Requirements are reviewed and assessed by the General Education Assessment and Curriculum design Committee (GEACC). This committee is composed of one library representative, and 10 faculty as well as non-voting members from the Registrar, Center for Academic Planning and Student Success (CAPSS), Curriculum and Educational Affairs (CEAC) and the Dean of Academic Affairs. The committee must have at least one member with expertise in each competency area, and each academic division must have at least one and no more than 3 members.

The duties of the committee include identifying and approving college courses used to fulfill competency requirements. The committee is also responsible for researching, scheduling, and assisting in the implementation of assessment methods to determine if students are achieving competency outcomes.

GENERAL EDUCATION FOR CONNECTICUT STATE UNIVERSITY TRANSFER STUDENTS

In order to ease transfer between state colleges and universities within the Connecticut State Colleges and University system NVCC’s General Education program reflects the system’s General Education Framework. Based on this Framework students graduating with an Associate degree who complete NVCC’s General Education Requirements will be granted General Education credit upon transfer to any Connecticut State University or Community College.
NVCC General Education Requirements (including the TAP Framework 30)

With a few exceptions, all programs at NVCC will contain courses from all Core Competencies. See particular program requirements for program-specific requirements in how these competency areas will be met. Generally any given course can only be used to satisfy one competency area, even if it appears in multiple areas. If the program requirement is an “elective” from the competency, any course listed in that group may be used. Courses “taken sequentially” can be taken in any order as long as prerequisites are met.

Note: Letter H appears in all NVCC course numbers; it is the code letter for our college in the CT Community College system. Since it is redundant for our college, the H is not reproduced below. The * denotes the Common Course Numbering; courses with the * all have the same number as similar courses at other community colleges in Connecticut, though the other colleges will insert their appropriate code letter.

Aesthetic Dimensions/Written Communication
3 credits - Complete one course

ART*101 Art History I
ART*102 Art History II
ART*111 Drawing I
ART*121 Two-Dimensional Design
ART*122 Three-Dimensional Design
COM*154 Film Study & Appreciation
COM*157 American Film
COM*158 International Cinema
DAN*101 History & Appreciation of World Dance
DAN*102 Ballet I: Renaissance to Romantic
DAN*111 Jazz I: Afro-Caribbean/American
DAN*113 Modern I: Pioneers of America
DAT*102 Introduction to Photography
ENG*102 Literature & Composition
ENG*211 Short Story
ENG*214 Dramatic Literature
ENG*215 Children’s Literature
ENG*221 American Literature I
ENG*222 American Literature II
ENG*231 British Literature I
ENG*232 British Literature II
ENG*241 World Literature I
ENG*242 World Literature II
ENG*251 African-American Literature
ENG*269 Studies in Young Adult Literature
ENG*274 Graphic Novel as Literature
ENG*277 Science Fiction & Society
ENG*278 Contemporary Literature
ENG*281 Creative Writing
GRA*150 Intro to Graphic Design
LAS*201 Latin/Latino American Studies
MUS*101 Music History & Appreciation I
MUS*103 History of American Music
MUS*104 World Music
PHL*101 Intro to Philosophy
THR*101 Intro to Theatre
THR*110 Acting I

**only ECE Program students can meet this requirement through **ECE*109 Science & Math for Children

**only HRT Program students can meet this requirement through **HRT*202 Landscape Design I

Continuing Learning and Information Literacy/Ethical Dimensions
3 credits - Complete one course

CSA*105 Intro to Software Applications
CSC*101 Introduction to Computers
DAT*101 Intro to Digital Arts
ECN*101 Principles of Macroeconomics
ECN*102 Principles of Microeconomics
RES*211 Mentored Research Project I
TCN*101 Intro to Engineering Technology

**only ECE Program students can meet this requirement through **ECE*109 Science & Math for Children

**only EET Program students can meet this requirement through **EET*104 & EET*294 & EET*110 ^ taken sequentially

**only NUR Program students can meet this requirement through **NUR*101 Introduction to Nursing Practice

**only PTA Program students can meet this requirement through **PTA*125 & PTA*120 ^^ taken sequentially

**only RSP Program students can meet this requirement through **RSP*281 & RSP*282 & RSP*141 ^ taken sequentially

^ Meets Continuing Learning & Information Literacy Component

^^ Meets Ethical Dimensions Component

Critical Analysis and Logical Thinking
See specific degree program for requirements.
Met through ENG*101

LAS majors need one more course in this list.

COM* 100 Introduction to Communications
CSC*101 Introduction to Computers
ENG*101 Composition
ENG*102 Literature & Composition
ENG*200 Advanced Composition
ENG*202 Technical Writing
ENG* 211 Short Story
ENG*214 Dramatic Literature
ENG*215 Children’s Literature
ENG*221 American Literature I
ENG*222 American Literature II
ENG*231 British Literature I
ENG*232 British Literature II
ENG*241 World Literature I
ENG*242 World Literature II
ENG*251 African-American Literature
ENG*269 Studies in Young Adult Literature
ENG*274 Graphic Novel as Literature
ENG*277 Science Fiction & Society
ENG*278 Contemporary Literature
HRT*222 Greenhouse Management I
PHL*111 Ethics
PHL*112 Medical Ethics
PSY*201 Lifespan Development
PSY*245 Abnormal Psychology
SOC*201 Contemporary Social Issues
### GENERAL EDUCATION CORE

#### Historical Knowledge and Understanding
3 credits - Complete one course
- BBG*231 Business Law I
- ENG*221 American Literature I
- ENG*222 American Literature II
- ENG*231 British Literature I
- ENG*232 British Literature II
- ENG*241 World Literature I
- ENG*242 World Literature II
- HIS*101 Western Civilizations I
- HIS*102 Western Civilizations II
- HIS*201 U.S. History I
- HIS*202 U.S. History II
- LAS*201 Latin/Latino American Studies
- POL*103 Intro to International Relations
- POL*111 American Government
- SOC*211 Sociology of Gender

#### Oral Communications
3 credits - Complete one course
- COM*100 Introduction to Communications
- COM*173 Public Speaking
- ESL*157 Oral Communication V

#### Quantitative Reasoning
3 credits - Complete one course
- MAT*121 +Applications for Business & Other Careers
- MAT*122 +Statway II
- MAT*135 +++Topics in Contemporary Mathematics
- MAT*143 Math for Elementary Ed: Algebra, Number Systems
- MAT*144 Math for Elementary Ed: Geometry, Data
- MAT*146 Math for the Liberal Arts
- MAT*167 Principles of Statistics
- MAT*172 College Algebra
- MAT*185 Trigonometric Functions
- MAT*186 Precalculus
- MAT*232 Applied Calculus
- MAT*254 Calculus I
- MAT*256 Calculus II
- MAT*268 Calculus III Multivariable
- MAT*285 Differential Equations
  +Not accepted as part of the CSCU TAP Pathways Agreement
  +++Will not transfer as math credit at CSU’s

#### Social Phenomena
3 credits - Complete one course
- ANT*101 Introduction to Anthropology
- ANT*121 Introduction to Archaeology
- ANT*205 Cultural Anthropology
- COM*101 Mass Communications
- COM*172 Interpersonal Communication
- COM*202 Intercultural Communication
- ECN*101 Principles of Macroeconomics
- ECN*102 Principles of Microeconomics
- GEO*102 Introduction to Human Geography
- GEO*111 World Regional Geography
- LAS*201 Latin/Latino American Studies
- PSY*111 General Psychology I
- PSY*201 Lifespan Development
- PSY*203 Psychology of Child Development
- PSY*245 Abnormal Psychology
- PSY*260 Psychology of the Exceptional Child
- SOC*101 Principles of Sociology
- SOC*201 Sociology of Contemporary Issues
- SOC*210 Sociology of the Family
- SOC*211 Sociology of Gender

#### Scientific Knowledge and Understanding
3 or 4 credits - Complete one course
- AST*101 Principles of Astronomy
- AST*111 Introduction to Astronomy
- BIO*105 Intro to Biology
- BIO*110 Principles of the Human Body
- BIO*111 Introduction to Nutrition
- BIO*115 Human Biology & Lab
- BIO*121 General Biology I-Cellular Biology
- BIO*122 General Biology II-Organismal Biology
- BIO*126 Biotechnology
- BIO*155 General Botany
- BIO*171 Field Biology
- BIO*175 Intro to Marine Science
- BIO*180 Principles of Environmental Science
- BIO*181 Environmental Science & Lab
- BIO*211 Anatomy and Physiology I
- BIO*235 Microbiology
- CHE*111 Concepts of Chemistry
- CHE*121 General Chemistry I
- CHE*122 General Chemistry II
- GLG*121 Intro to Physical Geology
- HRT*102 Woody Plants
- PHY*110 Introduction to Physics
- PHY*122 General Physics II
- PHY*221 Calculus-Based Physics I
- PHY*222 Calculus-Based Physics II

#### Scientific Reasoning
3 or 4 credits - Complete one course
- BIO*105 Intro to Biology
- BIO*115 Human Biology & Lab
- BIO*121 General Biology I-Cellular Biology
- BIO*122 General Biology II-Organismal Biology
- BIO*155 General Botany
- BIO*171 Field Biology
- BIO*181 Environmental Science & Lab
- BIO*212 Anatomy and Physiology II
- BIO*235 Microbiology
- CHE*111 Concepts of Chemistry
- CHE*121 General Chemistry I
- CHE*122 General Chemistry II
- CSC*250 Systems Analysis and Design
- CSC*252 Information Systems Project Management
- DAN*175 Kinesiology for Dancers
- DAR*158 Biology of Addiction
- EET*252 Digital Electronics
- GLG*121 Intro to Physical Geology
- HRT*222 Greenhouse Management I
- HRT*224 Plant Propagation & Hybridization
- PHY*110 Introduction to Physics
- PHY*121 General Physics I
- PHY*122 General Physics II
- PHY*221 Calculus-Based Physics I
- PHY*222 Calculus-Based Physics II
- PSY* 258 Behavior Modification
- RES*212 Mentored Research Project II
GENERAL EDUCATION CORE

**Written Communication**
6 credits - Complete two courses
- ENG*101 Composition
- ENG*102 Literature & Composition
- ENG*200 Advanced Composition
- ENG*202 Technical Writing
- ENG*211 Short Story
- ENG*214 Dramatic Literature ENG*215 Children’s Literature
- ENG*221 American Literature I
- ENG*222 American Literature II
- ENG*251 African-American Literature
- ENG*269 Studies in Young Adult Literature
- ENG*274 Graphic Novel as Literature
- ENG*277 Science Fiction & Society
- ENG*278 Contemporary Literature

**TAP-specific Gen Ed Competency Areas: Creativity and Global Knowledge**
(only required for certain TAP Transfer Ticket degrees; please see requirements for specific program)

**Creativity**
3 credits - Complete one course
- ART*111 Drawing I
- DAN*102 Ballet I: Renaissance to Romantic
- DAN*111 Jazz I: Afro-Caribbean/American
- DAN*113 Modern I: Pioneers of America
- DAN*221 Repertory/Ensemble I
- DAN*222 Choreographic Principles/Ensemble I
- DAT*104 Multimedia Authoring
- DAT*108 Digital Imaging I
- ENG*281 Creative Writing

**Global Knowledge**
3 credits - Complete one course
- ANT*101 Introduction to Anthropology
- ECN*102 Principles of Microeconomics
- ENG*242 World Literature II
- GEO*111 World Regional Geography
- POL*103 International Relations
- SOC*101 Principles of Sociology
- SOC*210 Sociology of the Family
- SOC*211 Sociology of Gender
COOPERATIVE EDUCATION (CO-OP)

What is Cooperative Education?
Cooperative Education at Naugatuck Valley Community College is designed to integrate students’ academic learning with career related work experience. The program is designed in the School-to-Career model with three interlinking components:

School-based learning - courses the students must complete in a particular major prior to beginning co-op;
Work-based learning - an employment experience in the student's chosen field of study; and
Connecting activities - students must attend a weekly co-op seminar during their work experience.

Cooperative education provides students with an answer to a common question asked by employers “What experience have you had?” Upon successful completion of a Co-op experience students will have an up-to-date resume with hands-on experience in their field of study and three to six academic credits for their work experience.

Who is eligible for Co-op?
Students who have completed a minimum of 24 college credits and have maintained a “C” average overall and in their major and have a GPA of 2.0 or better are eligible. NVCC graduates are not eligible for Co-op. Students must meet specific curriculum requirements related to their major prior to enrollment in Co-op. In some fields of study Co-op is required; in others it is elective. Current majors with a Co-op component include:

(E - Elective; R - Required)
Automotive Technician (R)
Criminal Justice (R)
Early Childhood Education (R)
Fire Technology and Administration (E)
Horticulture (R)
Human Services (R)
Legal Assistant/Paralegal (E)

How Does Co-op Work?
Students who wish to participate in Co-op should meet with their program coordinator and fill out a Cooperative Education Application. The faculty coordinator will meet with the student to review his/her college transcript to ensure that all mandatory coursework has been completed and to discuss the type of work experience the student is interested in pursuing. The faculty coordinator will contact area employers to assist the student in finding a suitable Co-op placement. Students who enroll in Co-op must attend a professional development workshop on resume writing and interview techniques prior to beginning their work experience. Most Co-op placements require the student to complete 225 hours of paid work experience and register for a Co-op course.

How Is Academic Credit Awarded?
Faculty facilitators supervise the work experience through regular site visits and through the weekly Co-op courses. Granting of college credit is based on the evaluation of the student’s learning and job performance by the faculty facilitator in consultation with the employer. The awarding of credit is directly linked to the quality of the work experience and the learning that results.

PRIOR LEARNING EVALUATION
Naugatuck Valley Community College acknowledges its role in assisting adults to learn throughout their lives; therefore the College enthusiastically supports the functions of continuing education in all divisions. The College promotes “learning as a lifelong process” and believes that everyone should have the opportunity to pursue different interests at convenient times and at different rates of speed.

Prior Learning Evaluation at Naugatuck Valley Community College was accepted by the President’s Cabinet in June 1982 as a result of a two-year study which originated within the College’s advisory system. The intent is to recognize the varied backgrounds of students coming to the College and to provide them with opportunities to begin their college careers or to make adjustments in their professions without duplicating proficiencies which they may already have attained.

No more than 50 percent of the credits required for a degree shall be awarded for prior learning. The credits must be awarded within the approved curricula of the College.

The student may apply for the evaluation of prior learning through one of the following procedures:

Credit by Examination
If the student wishes to have prior learning assessed through examination for select courses he or she may use:

• College Level Examination Program (CLEP)
• College-Produced Examinations

The assessment verifies that learning has occurred and that the learning is equivalent in level and nature to learning acquired in an approved college course or program. Please contact Division Directors for a list of courses available through credit-by-examination.

Advanced Placement
Degree credit will be granted on the basis of scores on the Advanced Placement Examinations administered by the College Entrance Examination Board. Students who earn scores of 3 or higher receive credit for the courses for which the examinations are stipulated as measures.

Board for State Academic Awards
(Chartier Oak State College)
Students may also have their prior learning evaluated by Charter Oak College by calling (860) 832-3846.
DISTANCE LEARNING
Distance Learning serves students who need flexibility in course scheduling and learning media. These courses are designed to instruct highly motivated self-learners whose busy schedules make a distance learning course a worthwhile option. Distance Learning courses are offered primarily through the Blackboard learning management system and will include media-rich learning objects such as video, audio and digital print. Computer literacy and high speed access to the internet, the ability to produce word processed documents and view electronic presentations are required, as well as specific technical settings on the computer being used. Refer to course description for prerequisites, as each course has different requirements. Distance Learning courses follow the standard academic calendar of the College and may include face-to-face class meetings. For more information refer to the Distance Learning section of the College website at http://www.nv.edu/Academics/Academic-Programs/Educational-Technology.

Naugatuck Valley Community College offers 3 formats of Distance Learning delivery:

Online Courses
Online courses take place fully online and do not meet on specific days or times; they generally operate on weekly assignments and due dates.

Online Courses with Campus Requirement
These are courses in which all instruction occurs online but also require on-campus meetings, such as an orientation or testing.

Hybrid Courses
Hybrid courses are defined as courses whose contact hours are split between online and on-ground (in a classroom).

SPECIAL INTEREST AND GROUP CONTRACT COURSES
Special credit or non-credit courses can be designed or existing courses tailored to meet specific requirements or needs of individual professional groups agencies businesses and industries.

These courses can be offered on an individual fee basis or on a contract basis. Contractual arrangements are possible for individual businesses or agencies to have courses given on campus and also on-site for their management mid-management secretarial and other staff to enhance their ability on the job. In the past these have included nursing home administrators area hospitals factories small business associations and public service agencies among others. Costs vary depending on instructional and administrative fees. For additional information call the Center for Business and Industry Training Center.

STUDY ABROAD
As a member college in The College Consortium for International Studies Naugatuck Valley Community College may enroll students for semester abroad programs in the following countries and institutions of higher education:

- Bulgaria: University of Ploudiv
- China: Nanjing University
- Colombia: Universidad Javeriana
- Cyprus: Frederick Polytechnic University
- Ecuador: Universidad San Francisco de Quito
- England: Thames Valley University
- France: The Institute for American Universities
- Germany: Collegium Palatinum and Schiller International University
- Greece: Anatolia College
- Ireland: St. Patrick’s College
- Israel: University of Haifa and Specialized Schools
- Italy: The American University of Rome
- Japan: Suny/Toyama-Ken
- Mexico: Universidad Lorenzo de Medici (Florence)
- Portugal: CIAL Centrok de Linguas
- Russia: The Institute of Youth Moscow
- Spain: CCIS Institute
- Switzerland: The University of Seville
- Turkey: Anatolia College
- Ukraine: International University
- United Kingdom: The Institute for American Studies
- United States: Universities
- Various: Contractual arrangements are possible for individual small business associations and public service agencies among others.

Summer study is also available in England, France, Germany, and Italy.

Admission to Study Abroad
Students are evaluated for admission to academic studies abroad according to their academic ability maturity motivation and potential adaptability to a foreign culture. They have usually completed their first year of college. A cumulative grade point average of at least 2.5 is required and letters of recommendation must be secured from professors who know the student.

Credits Transcripts Costs
Students register at Naugatuck Valley Community College and pay the appropriate tuition and fees. Upon successful completion of the formal courses abroad each student receives a transcript from the college reflecting grades achieved and credits earned.

Most courses taken abroad transfer readily to four-year institutions. A full semester of courses usually earns fifteen (15) credits. Summer session earns six (6) to nine (9) credits. Total program costs range from $4250 to $9000 depending on the country selected. Financial aid is available to qualified students.

For Further Information
Complete details about host institutions abroad what is covered by the total program cost and application materials may be obtained from the Liberal Arts and Behavioral/Social Sciences Division.
Accounting

As society becomes more complex, trained personnel are needed to interpret and manage the fiscal aspects of business and industry. The curriculum is designed either as a transfer or career program. Career-oriented students are prepared for beginning positions in public and private accounting. Typical positions for which graduates are qualified include: junior account clerk, assistant auditor, cost accounting clerk, and assistant office manager.

Students who plan to transfer to a four-year business program are urged to see a counselor or the division director for guidance regarding the transferability of courses to the four-year program. Courses listed under Naugatuck Valley's business programs may not automatically transfer to a four-year college.

Students also have the opportunity to join the Accounting/Finance Club.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSC*H101 Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>BBG*H231 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H167 Principles of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed except ENG*H101</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>ACC*H113 Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC*H117 Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BBG*H210 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BBG*H232 Business Law II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC*H271 Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC*H272 Intermediate Accounting II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECN*H102 Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Directed Elective in Accounting, Business, or Computers</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1Selection of Finance courses should be made in consultation with Accounting faculty advisor.

2At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:
1. Demonstrate the use of the concepts and techniques of generally accepted accounting principles in the recording and reporting of financial information.
2. Describe accounting system procedures and techniques.
3. Analyze and use financial reports for decision-making.
4. Explain the use of financial information in controlling and evaluating performance.
5. Use the vocabulary of financial and managerial accounting and economics for communicating.
6. Explain how budgeting, activity-based costing and strategic cost management foster the effective use of resources and help an organization accomplish its goals.
7. Use computerized spreadsheets and accounting software.
8. Apply basic knowledge from history, social sciences, behavioral sciences, arts, literature and science to create solutions to problems that they have not encountered before.
9. Demonstrate reasoning and analytic skills.
10. Work with others, including culturally and intellectually diverse peoples.
11. Demonstrate the ability to acquire, organize and present information effectively, regardless of medium – written, spoken or electronic.
12. Show how organizational dynamics, socio-political and economic environments shape the creation of solutions.
13. Display the traits and attitudes that promote ongoing success and a strong work ethic.
AUTOMOTIVE TECHNICIAN

The ASE Certified Master Automotive Technician Program is a course of study designed to accommodate both full and part-time students, culminating in an Associate of Science degree. Service of today's complex automobiles requires highly trained technicians who have mastered a wide range of talents and skills. Naugatuck Valley Community College, in cooperation with the National Automotive Dealership Association, the U.S. Department of Labor, local, and national dealership associations, and the major automotive manufacturers, developed the Automotive Technician Program to meet the longstanding need for skilled automotive service technicians.

Students wishing to enroll in the Automotive Technician Program must demonstrate basic mathematics, written English, reading, and mechanical competency as determined by the College Placement Tests. Individuals interested in the Automotive Technician Program should contact the Program Coordinator or the Admissions Office. Students may be admitted to the College prior to admission to the program. The instruction, course of study, facilities, and equipment of Naugatuck Valley Community College, has been evaluated by the National Automotive Technicians Education Foundation (NATEF) and has met the National Institute for Automotive Service Excellence (ASE) standards of quality for the training of automotive technicians as a Master Automotive Technician Training Certification Program. These organizations can be contacted as follows: NATEF, 13505 Dulles Technology Dr., Suite 2 • Hemdon, VA 20171-3413, ASE, 13505 Dulles Technology Dr., Suite 2 • Hemdon, VA 20171-3413.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Exempt</td>
<td>0</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSA<em>H105 Introduction to Software Applications or CSC</em>H101 Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>BBG*H231 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT<em>H121 Applications for Business and other Careers, MAT</em>H135 Topics in Contemporary Mathematics, MAT*H167 Principles of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>PHY*H110 Introduction to Physics</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Written Communication course listed</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ATP*H100 Integrated Automotive</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ATP*H110 Automotive Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ATP*H120 Engine Repair</td>
<td>3</td>
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<tr>
<td></td>
<td>ATP*H130 Brake Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ATP*H140: Automotive Heating and Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ATP*H150 Suspension and Steering Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ATP*H185 Automotive Service &amp; Parts Management</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ATP*H190 Metallurgy/Welding or ATP Course Approved by Coordinator</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ATP*H210 Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ATP*H220 Automotive Emissions</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ATP*H261 Manual Drivetrain and Axles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ATP*H262 Automatic Transmission and Transaxles</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ATP*H290 Co-op Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ATP*H291 Co-op Work Experience II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 63

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊◊At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Apply Language Arts and Communications skills related to the occupation, including but not limited to: reading, writing, and oral communication.
2. Perform Mathematics related to the occupation, including but not limited to: algebraic expressions, arithmetic, decimals and graphs.
3. Use scientific methods and critical thinking to solve problems in Science related to the occupation, including but not limited to: electricity, chemical reactions, heat motion, and hydraulics.
4. Demonstrate Workplace Skills related to the occupation, including but not limited to, preparing a resume, seeking employment, maintaining a safe and healthy workplace environment, demonstrating workplace ethics and teamwork.
5. Apply knowledge of theory and safety to accomplish certain tasks related to the occupation.
6. Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.
7. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
8. Apply knowledge of general engine diagnosis and repair, including but not limited to the engine's: cylinder heads, valve train, block, lubrication, and cooling system.
9. Apply knowledge of general transmission and transaxle maintenance, adjustment, diagnosis and repair.
10. Apply knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment and repair.
11. Apply knowledge of general disc and/or drum brake system hydraulics, power assist, and ABS (antilock brakes), maintenance, adjustment diagnosis and repair.
12. Apply knowledge of general electrical/electronic systems, including but not limited to: starting, charging, lighting, wiring, accessories, diagnosis and repair.
13. Apply knowledge of general heating and air conditioning systems and their components, maintenance, adjustment, diagnosis and repair.
14. Apply knowledge of general engine performance, including but not limited to: computer controls, ignition, fuel, exhaust, and emission systems, and their maintenance, diagnosis, adjustments and repair.
15. Apply knowledge of computer applications including word processing, spreadsheets, graphs and other software related to the occupation.
Automotive Technicians require more sophisticated technicians and specialists than ever before. The need for qualified personnel has expanded beyond the bay into service and shop management. Until now students had to decide whether to take the Automotive Technician Program Degree or a Business Degree if they aspired towards Automotive Management. The Management Option creates a sensible way for employers to fill management positions.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

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<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
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<td>CSA<em>H105 Introduction to Software Applications or CSC</em>H101 Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>BBG*H221 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning◊◊</td>
<td>MAT<em>H121 Applications for Business and other Careers, MAT</em>H135 Topics in Contemporary Mathematics, or MAT*H167 Principles of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge◊◊</td>
<td>PHY*H110 Introduction to Physics</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Reasoning◊◊</td>
<td>Waived</td>
<td>0</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
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<tr>
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<td>ATP*H130 Brake Systems</td>
</tr>
<tr>
<td>ATP*H150 Suspension and Steering Systems</td>
</tr>
<tr>
<td>ATP*H185 Automotive Service &amp; Parts Management</td>
</tr>
<tr>
<td>BBG*H101 Introduction to Business</td>
</tr>
<tr>
<td>BES*H118 Small Business Management</td>
</tr>
<tr>
<td>ACC*H113 Principles of Financial Accounting</td>
</tr>
<tr>
<td>BMG*H202 Principles of Management</td>
</tr>
<tr>
<td>ACC*H117 Managerial Accounting</td>
</tr>
</tbody>
</table>

**Total Credits: 60**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊◊At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

<table>
<thead>
<tr>
<th>Program Outcomes</th>
</tr>
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<td>Upon successful completion of all program requirements, graduates will be able to:</td>
</tr>
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<td>1. Apply Language Arts and Communications skills related to the occupation, including but not limited to: reading, writing, and oral communication.</td>
</tr>
<tr>
<td>2. Perform Mathematics related to the occupation, including but not limited to: algebraic expressions, arithmetic, decimals and graphs.</td>
</tr>
<tr>
<td>3. Use scientific methods and critical thinking to solve problems in Science related to the occupation, including but not limited to: electricity, chemical reactions, heat, motion, and hydraulics.</td>
</tr>
<tr>
<td>4. Demonstrate Workplace Skills related to the occupation, including but not limited to, preparing a resume, seeking employment, maintaining a safe and healthy workplace environment, demonstrating workplace ethics and teamwork.</td>
</tr>
<tr>
<td>5. Apply knowledge of Computer Applications including word processing, spreadsheets, graphs and other software related to the occupation.</td>
</tr>
<tr>
<td>6. Apply knowledge of theory and safety to accomplish certain tasks related to the occupation.</td>
</tr>
<tr>
<td>7. Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.</td>
</tr>
<tr>
<td>8. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.</td>
</tr>
<tr>
<td>9. Apply knowledge of general engine diagnosis and repair, including but not limited to the engines: cylinder heads, valve train, block, lubrication, and cooling system.</td>
</tr>
<tr>
<td>10. Apply knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment and repair.</td>
</tr>
<tr>
<td>11. Apply knowledge of general disc and/or drum brake system, hydraulics, power assist, and ABS (antilock brakes), maintenance, adjustment, diagnosis, and repair.</td>
</tr>
<tr>
<td>12. Apply knowledge of general electrical/electronic systems, including but not limited to: starting, charging, lighting, wiring, accessories, diagnosis and repair.</td>
</tr>
<tr>
<td>13. Demonstrate basic knowledge of management, human resources, and organizational development in an entry-level management position.</td>
</tr>
<tr>
<td>14. Understand and practice the various functions of management as well as the nature and responsibilities of a manager.</td>
</tr>
<tr>
<td>15. Interpret management information from various sources such as financial statements, annual reports, and publications.</td>
</tr>
<tr>
<td>16. Demonstrate a responsible attitude in relationships with employers, fellow employees, working groups, and the macro-environment.</td>
</tr>
</tbody>
</table>
AVIATION SCIENCE (MANAGEMENT CURRICULUM)

The Aviation Science Management Program consists of the basic degree in aviation science, and electives that allow students to focus on a management option. Directed Electives from either flight or management courses of study may be used to fulfill a student’s Open Elective requirements.

This degree program is designed to provide students with the knowledge and skills necessary to be successful in a broad range of entry-level aviation management careers including airport operations, land-side/air-side management, aircraft manufacturing, airlines, corporate flight departments, airport authorities, and state and federal aviation regulatory agencies including the Federal Aviation Administration (FAA) and the National Transportation Safety Board (NTSB).

This program can also serve as the first two years of a bachelor’s degree in Aviation Science for those students interested in transferring to a four-year institution. Students could pursue a bachelor’s degree in one of several standard aviation majors: Aviation Management, Air Traffic Control, Aviation Electronics, Aviation Maintenance, and Aviation Computer Science.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

Upon successful completion of all program requirements, graduates will:

1. Communicate clearly using both oral and written communications.
2. Demonstrate a detailed understanding of the National Airspace System Plan (NASP).
3. Understand and interpret Federal Aviation Regulations (CFR 14) applicable to airport and air transport operations.
4. Demonstrate an understanding of aviation history and aviation law and the role of each in shaping the current aviation industry.
5. Have a thorough understanding of airport management issues including financing, revenue/expense sources, safety, security, planning, design, and management of airports in the United States.
6. Have a thorough understanding of air transportation and aerospace issues including air transportation/aerospace history, economics of airlines and general aviation, airline management and organization, forecasting methods, pricing/demand/output determination, airline scheduling, fleet planning, and labor relations.

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊ At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
This program is a course of study for students who intend to pursue a Bachelor Degree in one of the Behavioral Sciences (Psychology, Sociology, or Anthropology). It provides the foundation for an education in these disciplines, while also ensuring a more general education in the arts and sciences. The requirements for this degree will allow students to transfer seamlessly to most four-year colleges and to successfully complete their Bachelor Degree in Psychology, Sociology, or Anthropology without loss of credit or time.

Job market trends reveal continued high interest and opportunities in the Behavioral Sciences. This program provides students with the type of educational foundation that is necessary to achieve success in psychology, sociology, or anthropology.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

Upon successful completion of all program requirements, graduates will be able to:

1. Present a well-written research report that demonstrates the ability to think and write critically.
2. Present oral reports before a group.
3. State the major theories, processes, and research methods important in psychology.
4. State the major theories, concepts, and research methods important in sociology.
5. Read and explain the presence and importance of behavioral science concepts in literature.
6. Use basic psychological concepts in applied settings and circumstances.
7. Evaluate the causes and consequences of perceived differences and inequalities among groups of people.
9. Use microcomputers to complete research in the behavioral sciences.
10. Use statistical methods for behavioral science research.
11. Describe the basic biological processes involved in human genetics, evolution, and physiology.
12. Evaluate the perceived differences among groups of people.
13. Critically analyze the effects of biological forces on the behaviors of groups and individuals.

**Competency or Program Requirement** | **Course Number and Title** | **Required Credits**
---|---|---
Aesthetic Dimensions/Written Communications | Choose any Aesthetic Dimensions/ Written Communications listed | 3
Continuing Learning and Information Literacy/Ethics | Prefer CSA*H105 Introduction to Software Applications OR CSC*H101 Introduction to Computers | 3
Critical Analysis and Logical Thinking/Written Communication | ENG*H101 Composition | 3
Historical Knowledge | Choose any Historical Knowledge listed | 3
Oral Communication | Choose any Oral Communication course listed | 3
Quantitative Reasoning | MAT*H167 Principles of Statistics | 3
Scientific Knowledge◊ | BIO*H115 Human Biology | 4
Scientific Reasoning◊ | Choose any Scientific Reasoning listed | 3-4
Social Phenomena | Choose any Social Phenomena listed | 3
Written Communication | Choose any Written Communication listed other than ENG*H101 | 3

**Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. Present a well-written research report that demonstrates the ability to think and write critically.
2. Present oral reports before a group.
3. State the major theories, processes, and research methods important in psychology.
4. State the major theories, concepts, and research methods important in sociology.
5. Read and explain the presence and importance of behavioral science concepts in literature.
6. Use basic psychological concepts in applied settings and circumstances.
7. Evaluate the causes and consequences of perceived differences and inequalities among groups of people.
9. Use microcomputers to complete research in the behavioral sciences.
10. Use statistical methods for behavioral science research.
11. Describe the basic biological processes involved in human genetics, evolution, and physiology.
12. Evaluate the perceived differences among groups of people.
13. Critically analyze the effects of biological forces on the behaviors of groups and individuals.

**Total Credits: 60-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

◊◊Students completing 3 years of modern language in high school may substitute 6 credits of General Electives. Note: Some 4-year colleges may require a language proficiency exam.
The goal of the Business Administration - Business Computer Applications program is to prepare students for employment in jobs in business and industry by providing a theoretical and practical foundation of business subject matter and by equipping them with needed skills in the use of application software that is appropriate for today’s marketplace. The degree provides the student with strong business skills, coupled with a proficiency in the use of computers. The computer courses supplement the business skills and answer the question, "How do computers relate to business?" rather than "How do computers work?" Graduates of the program will be well qualified for entry-level positions in business and industry.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communication</td>
<td>Choose any Aesthetic Dimensions/Written Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSA<em>H105 Introduction to Software Applications or CSC</em>H101 or Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>BBG*H231 Business Law 1</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning*</td>
<td>Choose any Quantitative Reasoning listed (Advising recommended for transfer)</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge**</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Reasoning***</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
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</tr>
<tr>
<td>Program Requirements</td>
<td>ACC*H113 Principles of Financial Accounting</td>
<td>3</td>
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<tr>
<td></td>
<td>ACC*H117 Principles of Managerial Accounting</td>
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<td>ECN*H102 Principles of Microeconomics</td>
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<tr>
<td></td>
<td>CSA*H135 Spreadsheet Applications</td>
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<td></td>
<td>CSA*H205 Advanced Applications</td>
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<tr>
<td></td>
<td>CSC Program Electives 1</td>
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</tr>
</tbody>
</table>

**Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

*Choose any five classes in the following areas:
CSC* - Computers - Computer Science
CST* - Computers - Computer Technology
CSA* - Computers - Applications
ACC* - Accounting
BFN* - Business - Finance
BBG* - Business - General
BMG* - Business - Management
BMK* - Business - Marketing

*MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

**At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
This program is designed to provide students with a course of study which will prepare them to assume positions as support personnel in banking, real estate, the insurance industry, and corporate finance departments or non-profit organizations. It is envisioned as a career program. The primary goal of the Finance Program is to prepare students for entry level employment in the field. Also available is the Finance Certificate which is designed for individuals seeking professional advancement. Students are strongly urged to seek the advice of a counselor if they intend to pursue a baccalaureate degree or certificate in finance.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

### Business Division

#### Business Finance

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate knowledge of business finance including financial planning, long and short-term financing, fixed assets management and management of long-term debt.
2. Identify strategies and practices in government and consumer financing.
3. Demonstrate knowledge of monetary, fiscal and debt management policies of government.
4. Demonstrate knowledge of basic analytical techniques, problem-solving and decision-making.
5. Identify the basic concepts of Asset Management and be able to provide an overview of Liability- and Deposit-Management as they relate to the financial services industry.
6. Identify techniques for managing working capital and demonstrate knowledge of the capital budgeting process.
7. Provide an understanding of how the United States economic system is organized, how it functions and how it impacts the global economy.
8. Identify the major goals and functions of financial management.
9. Understand the principle components of financial analysis in all levels of the business organization.
10. Demonstrate an understanding of the interrelationships between Finance and all other areas within a business, including working with other departments, to achieve overall strategic goals.

### Competency or Program Requirement

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communication</td>
<td>Choose any Aesthetic Dimensions/Written Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSA*H105 Introduction to Software Applications or</td>
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</tr>
<tr>
<td></td>
<td>CSC*H101 Introduction to Computers</td>
<td></td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>BBG*H231 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H167 Principles of Statistics</td>
<td>3</td>
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<tr>
<td>Scientific Knowledge◊</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Reasoning◊</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed—Prefer ENG*H102</td>
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</tr>
<tr>
<td></td>
<td>Literature and Composition or ENG*H200 Advanced Composition</td>
<td></td>
</tr>
<tr>
<td>Program Requirements</td>
<td>ACC*H113 Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC*H117 Principles of Managerial Accounting</td>
<td>3</td>
</tr>
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<td></td>
<td>BFN*H201 Principles of Finance</td>
<td>3</td>
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<tr>
<td></td>
<td>BBG*H232 Business Law II</td>
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<tr>
<td></td>
<td>ECN*H250 Money and Banking</td>
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<tr>
<td></td>
<td>BMG*H202 Principles of Management</td>
<td>3</td>
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<tr>
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<td>BFN*H220 Financial Management</td>
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</tr>
<tr>
<td></td>
<td>BBG*H210 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECN*H102 Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Elective 1</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits: 61-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1. Choose one of the following:
   - BFN*H125 Principles of Banking
   - BFN*H126 Principles of Insurance
   - BFN*H203 Principles of Investment
   - BRE*H205 Real Estate Law
   - BFN*H208 Financial Analysis
   - BRE*H201 Real Estate Principles

2. Selection of Finance courses should be made in consultation with Business faculty advisor.

3. At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
BUSINESS MANAGEMENT

The Business Management Program is intended to provide students with a broad background in the field of management. Students completing this program will be qualified to accept entry-level positions in a variety of profit and non-profit organizations. Students who plan to transfer to a four-year college should choose electives which conform to the curricular patterns of the college in which they plan to enroll after receiving the associate in science degree.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communication</td>
<td>Choose any Aesthetic Dimensions/ Written Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSA<em>H105 Introduction to Software Applications or CSC</em>H101 Introduction to Computers</td>
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</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>BBG*H231 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
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</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT<em>H167 Principles of Statistics or MAT</em>H172 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any listed - Prefer ENG<em>H102 Literature and Composition or ENG</em>H200 Advanced Composition</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>ACC*H113 Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC*H117 Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BBG*H101 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BBG*H232 Business Law II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BMG*H202 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BMG*H105 Supervision and Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BMG*H220 Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BBG*H210 Business Communications</td>
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</tr>
<tr>
<td></td>
<td>ECN*H102 Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate basic knowledge of management, human resources, and organizational development in an entry-level management position.
2. Identify the skills needed to organize thoughts and ideas and demonstrate the ability to communicate, verbally and in writing, in a manner that can be easily understood in the business environment.
3. Solve math problems related to various aspects of management including accounting, finance and operations.
4. Understand and practice the various functions of management as well as the nature and responsibilities of a manager.
5. Develop an understanding of the decision-making process and demonstrate effective decision-making.
6. Demonstrate an ability to define management problems, examine alternatives and decide on the best course of action, and submit these in writing to higher management.
7. Develop a personal philosophy of management, enabling him/her to perform as a manager, staff specialist or as a subordinate.
8. Develop an understanding of the nature of change and how to adapt to the accelerating, global environment.
9. Demonstrate a knowledge and use of technological innovations as they apply to management.
10. Develop an ability to interpret management information from various sources such as financial statements, annual reports, and publications.
11. Demonstrate an understanding of the competitive pressures brought by effectiveness, efficiency and innovation issues on organizations.
12. Demonstrate a responsible attitude in relationships with employers, fellow employees, working groups, and the macro environment.

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1. Choose one of the following
   BMK*H220 Sales
   BMK*H201 Principles of Marketing
   BMK*H207 Consumer Behavior
   BBG*H295 Management Cooperative Work Experience
   BFN*H201 Principles of Finance
   BFN*H203 Investment Principles
   BFN*H126 Principles of Insurance
   CSA*H105 Introduction to Software Applications

2. At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
COMPUTER-AIDED DRAFTING / DESIGN ENGINEERING TECHNOLOGY

Computer-aided design (CAD) is an advanced, rapidly evolving technology used by designers and engineers to create technical drawings and computer models. It is essential to many industries because drawings and computer models are required before any product can be manufactured. Examples include automobiles, aircraft, marine vessels, machinery, electronics, plastic parts, medical devices, bridges, buildings, and roads, to name a few. Because of its broad application, computer-aided design offers many employment opportunities for people who maintain up-to-date skills.

Computers have made conventional manual drawing and design methods obsolete, thereby fundamentally changing the process of technical documentation. CAD enables a designer to make rapid revisions in a drawing and to evaluate many potential solutions to a design problem, thereby allowing the best one to be selected. In contrast to traditional methods, the designer works with computer models of the complete three-dimensional geometry of an object, rather than the two-dimensional views required when drawing on a sheet of paper. These models allow viewing of the object from any direction and enable a designer to visualize the assembly and fit of complex parts. Although the departmental program emphasizes this new technology, intelligent use of the computer relies upon a thorough knowledge of the principles of engineering graphics and conventional drafting practices. Therefore, topics such as orthographic and isometric projection, section and auxiliary views, descriptive geometry and dimensioning continue to be the starting point for the curriculum. The departmental program combines comprehensive instruction in the use of several current CAD software systems with industrial practice. Employment opportunities include: CAD Drafts person/Operator, Mechanical Drafts person, Designer, Engineering Technician, and Technical Illustrator.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>TCN*H101 Introduction to Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>CAD*H150 CAD 2D</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H172 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>PHY*H121 General Physics I</td>
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<tr>
<td><strong>SECOND SEMESTER</strong></td>
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</tr>
<tr>
<td>Scientific Knowledge</td>
<td>CHE<em>H111 Concepts of Chemistry OR CHE</em>H121 General Chemistry I</td>
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<tr>
<td>Written Communication</td>
<td>ENG<em>H102 Literature and Composition OR ENG</em>H200 Advanced Composition OR ENG*H202 Technical Writing</td>
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<td>Program Requirement</td>
<td>MAT*H185 Trigonometric Functions</td>
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<tr>
<td>Program Requirement</td>
<td>MFG*H104 Manufacturing Processes</td>
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<tr>
<td>Program Requirement</td>
<td>CAD*H200 3D CAD Modeling</td>
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<tr>
<td><strong>THIRD SEMESTER</strong></td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communications listed</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>MEC*H114 Statics (fall only)</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>MFG*H106 Computer-Aided Manufacturing I (fall only)</td>
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<tr>
<td>Program Requirement</td>
<td>CAD*H220 Parametric Design</td>
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<td>Program Requirement</td>
<td>Directed Elective1</td>
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<tr>
<td><strong>FOURTH SEMESTER</strong></td>
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<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
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<tr>
<td>Program Requirement</td>
<td>MEC<em>H251 Materials Strength (spring only) OR MFG</em>H275 Mechanics of Materials</td>
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<tr>
<td>Program Requirement</td>
<td>CAD*H294 Senior Project</td>
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<tr>
<td>Program Requirement</td>
<td>Directed Elective2</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>Directed Elective2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 65-66**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1Choose if planning to transfer to a Bachelor's degree program.
2ENG*H202 Technical Writing and COM*H173 Public Speaking recommended for transfer to CCSU.
3Directed Electives: (9 credits total) Choose from any 200-level CAD*; EET 102 or any 200-level EET*; any 200-level MAT*; any 200-level MEC*; MFG* 171 or above.

**Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. Have a thorough knowledge and understanding of CAD tools and processes.
2. Demonstrate team-oriented human skills that permit effective participation in multicultural work and social environments.
3. Apply appropriate mathematical and scientific principles to CAD applications, particularly descriptive geometry.
4. Demonstrate a thorough knowledge and understanding of engineering graphics and conventional drafting practices such as orthographic and isometric projection, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
5. Demonstrate the ability to develop an engineering concept through the detail design process and produce professionally finished engineering drawings suitable for use in manufacturing.
6. Be able to work with specialists to resolve technical problems in design, manufacturing engineering, quality assurance, and production.
7. Demonstrate a high level of proficiency in the use of state-of-the-art CAD software and be able to adapt to new CAD systems as they emerge.
8. Demonstrate a thorough understanding of 3-dimensional solid modeling concepts, procedures, and applications.
9. Be aware of new developments in CAD and related areas, and assimilate new technologies as they emerge.
10. Be able to organize activities and perform work in an efficient, accurate manner.
11. Apply knowledge of computer applications including word processing, spreadsheets, and other software related to CAD processes.

Also see:
- Electronic Engineering Technology
- Engineering Technology
- Manufacturing (Automated) Engineering Technology
- Mechanical Engineering Technology
COMPUTER INFORMATION SYSTEMS TECHNOLOGY

The Computer Information Systems program is built on a foundation of strong technical knowledge in information systems. The program emphasizes the areas of computer programming, database systems, computer networking, network security, project management and systems analysis. It also reinforces a broad understanding of other disciplines related to information systems, such as accounting, math, management, and communication. The CIS program allows students to tailor their degree to their interests by offering a wide range of electives. Certificates are also provided as a guide to assist students in the selection of electives. Many classes are fully mapped to industry certifications. The CIS Department is located in Technology Hall, a 100,000 sq. ft. facility on the eastern side of the NVCC campus. Classes are held in Smart classrooms featuring instructors’ workstations that control an advanced classroom audio visual presentation system. Every CIS classroom also includes student workstations with state-of-the-art computers. The CIS Department also has three specialized Smart classrooms that are dedicated to the Networking courses and are connected to an adjacent Server Room.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed — Prefer ENG<em>H102 Literature and Composition or ENG</em>H200 Advanced Composition</td>
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<td>Written Communication</td>
<td>CST*H130 Networking Essentials I</td>
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<td>CST<em>H205 Visual Basic or CST</em>H113 Programming I</td>
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<td></td>
<td>CST*H120 Introduction to Operating Systems</td>
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<tr>
<td></td>
<td>CST*H231 Database Design I</td>
<td>3</td>
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<tr>
<td></td>
<td>ACC*H113 Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSC Programming Elective I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSC Programming Electives ***</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate desirable attitudes and work habits—creative thinking, the ability to solve problems, cooperation, good judgment, responsibility, and self-reliance.
2. Understand and respect the employer-employee relationship and appreciate the need to produce high quality work.
3. Communicate clearly, both verbally and in writing.
4. Demonstrate sufficient understanding of information technology for entry-level employment and advancement in the field.
5. Demonstrate a commitment to professional organizations through attending meetings, seminars, and continuing education programs.
6. Apply knowledge of interpersonal and motivational skills and communication techniques learned in English, speech, psychology, and social sciences when working with customers, peers, and subordinates.
7. Develop sound ethical, philosophical, and moral professional characteristics.
8. Demonstrate a responsible attitude in relationships with employers, fellow employees, and toward the working environment.
9. Acquire a level of math skills appropriate for student's area of concentration.
10. Be able to list and describe emerging technologies.

Choose four of the following:
CSC*H205 Visual Basic I or CSC*H113 Programming I (if both are taken, can be used to meet the programming elective requirement.)
CSC*H206 VISUAL BASIC II
CSC*H211 VB & ASP.NET Web Programming
CSC*H213 Object-Oriented Programming Using C++
CSC*H214 Advanced C++ Programming
CSC*H217 Object-Oriented Programming Using C#
CSC*H220 Object-Oriented Programming Using JAVA
CSC*H222 Mobile Device Programming
CSC*H228 Programming II
CSC*H232 Database Design II
CSC*H233 Database Programming with VB.NET 3
CSC*H235 Programming I (if both are taken, one can be used to meet the programming elective requirement.)
CSC*H113 Programming I
CSC*H237 Database Programming with VB.NET 3
CSC*H1183 Information Systems in Organizations
CSC*H236 Introduction to Client/Server Systems
CSC*H252 Information Systems Project Management
CSC*H295 Co-op Education Work Experience
CST*H235 Network Systems
CST*H236 Advanced Network Systems
CST*H239 Servicing & Support of Local Area Networks
CST*H274 Network Security Technology
ACC*H117 Principles of Managerial Accounting

Choose not more than two of the following:
CSA*H135 Spreadsheet Applications
CSA*H205 Advanced Applications
BMK*H216 Internet Marketing
CJS*H224 Computer Crimes
CJS*H234 Computer Security and Data Protection
DAT*H101 Introduction to Digital Arts
DAT*H108 Digital Imaging I
DAT*H205 Multimedia Authoring II
DAT*H215 Multimedia Web Authoring
Criminal Justice/Public Safety

(This program is being discontinued and is no longer accepting new students for this major.)

The Criminal Justice/Public Safety Program provides training for career opportunities in law enforcement and policing, and also offers a broad liberal arts education for those students who wish to transfer their earned college credits from the program to four-year academic institutions. Five options are offered in the Program: Corrections, Law Enforcement, Security, Computer Crime Deterrence, and Forensics. Each of these options is in a growing field with increasing opportunities for employment. Although all five options are included in the same program, they offer the student a diverse choice of career fields. These options are explained on the following pages.

Cooperative Work Experience

One of the special characteristics of the program is the Cooperative Work Experience, whereby the student, under professional supervision, actually engages in practical hands-on training in the Criminal Justice/Public Safety area of his or her choice. The Cooperative Work Experience is an integral and required part of the Criminal Justice/Public Safety curriculum. All students are required to take one semester of Co-op. The Co-op usually takes place during the second semester of the second year, after the student has satisfied all of the prerequisites. The Co-op experience allows students who have successfully met eligibility criteria to integrate and apply classroom theory to the field-based setting. Students participate under the supervision of qualified professionals in Criminal Justice/Public Safety organizations. The Coordinator of the Criminal Justice/Public Safety Program or the Division Director should approve all Co-op placements. Students in the Criminal Justice/Public Safety Program should consult with the coordinator of the program before registering for courses, especially for the choice of electives and the cooperative work experience.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
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<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
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<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*101 Composition</td>
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<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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<tr>
<td>Oral Communication</td>
<td>COM<em>100 Introduction to Communications or COM</em>173 Public Speaking</td>
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<tr>
<td>Quantitative Reasoning</td>
<td>MAT*167 Principles of Statistics</td>
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<tr>
<td>Scientific Knowledge</td>
<td>BIO*105 Introduction to Biology</td>
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<td>Scientific Reasoning</td>
<td>DAR*158 Biology of Addiction</td>
<td>3</td>
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<td>Social Phenomena</td>
<td>SOC*101 Principles of Sociology</td>
<td>3</td>
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<tr>
<td>Written Communication</td>
<td>ENG102 Literature and Composition</td>
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<td>Program Requirements</td>
<td>CJS*H101 Introduction to Criminal Justice</td>
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<tr>
<td></td>
<td>CJS*H102 Introduction to Corrections</td>
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<td>CJS*H103 Introduction to Security</td>
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<td>CJS*H105 Introduction to Law Enforcement</td>
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<tr>
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<td>CJS*H211 Criminal Law</td>
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<tr>
<td></td>
<td>CJS*H217 American Legal Systems</td>
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</tr>
<tr>
<td></td>
<td>CJS*H220 Criminal Investigation</td>
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</tr>
<tr>
<td></td>
<td>CJS*H293 Criminal Justice Cooperative Work Experience</td>
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</tr>
<tr>
<td></td>
<td>SOC*H240 Criminology</td>
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</tr>
<tr>
<td></td>
<td>CJS*H210 Constitutional Law</td>
<td>3</td>
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</tbody>
</table>

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1 Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

2 Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

3 At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Given a set of circumstances and occurrences, present a well written investigative report and any accompanying documents.
2. Explain the basic structure and functions of the American Criminal Justice System.
3. Explain the structure of the Federal and State court systems.
4. Identify the functions and services of private security.
5. Explain the computer crime problem.
6. Explain the development of probation, parole and community supervision.
7. Explain the development of the corrections system in the United States.
8. Explain what effects the social conditions in the United States have upon the criminal justice system.
9. Read and explain relevant literature in the field of Criminal Justice.
10. Demonstrate the various methods of taking written statements and confessions.
11. Define the term investigation and the objectives of a criminal investigation.
12. State the psychological theories that may explain criminal behavior.
13. Identify the major sociological theories of criminal behavior.
14. Describe and evaluate the ways in which data are collected on crimes, criminals, and victims.
15. Present oral reports before a group.
16. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
17. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments.
18. Explain the contributions of both the classical and positivist schools of criminology.
19. Show how events in early American history influenced the development of the American Criminal Justice System.
20. Explain what bearing state and local political issues have on the Criminal Justice System.
21. Explain the concept of criminal law, including its purpose as an agent of social control.
22. Define and explain the elements which identify the offenses of: assault, sex crimes, burglary, arson, larceny, robbery and homicide.
23. Explain how state and local law enforcement agencies originated in the United States and how they currently function.
24. Identify the areas that establish a police officer’s authority for arrest.
25. Demonstrate work skills relevant to a criminal justice agency.
26. Integrate the theoretical and practical application of the Criminal Justice Program.
The program provides an excellent preparation for students to obtain entry-level positions in the field of computer crime deterrence. It also provides preparation and assistance to students for successful transfer to other institutions of higher education. Work has already begun to strengthen articulation agreements with four-year colleges.

Specifically, the Computer Crime Deterrence Option is designed to prepare students for the successful transfer to other institutions of higher learning as well as for entry level job opportunities in the field of law enforcement and computer security. It provides the essential skills required to gain and to maintain employment at entry level positions as police officers on the state and local level, Federal law enforcement officers, computer crime investigators and computer security specialists.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Course Number &amp; Title</th>
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<tr>
<td>Core Communications</td>
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<td>Core Communications</td>
<td>ENG*H101 Composition</td>
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<tr>
<td>Core Humanities</td>
<td>ENG*H102 Literature and Composition</td>
<td>3</td>
</tr>
<tr>
<td>Core Mathematics</td>
<td>MAT<em>H135 Topics in Contemporary Mathematics or higher (except MAT</em>H137)</td>
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<tr>
<td>Core Science</td>
<td>BIO<em>H105 Introduction to Biology or BIO</em>H115 Human Biology or PHY*H110 Introduction to Physics</td>
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<td>Core Behavioral Science</td>
<td>SOC*H101 Principles of Sociology</td>
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<td>Program Behavioral Science</td>
<td>SOC*H240 Criminology</td>
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<td>Program Behavioral Science</td>
<td>Any Sociology (SOC) course</td>
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<td>Program Behavioral Science</td>
<td>PSY*H111 General Psychology I</td>
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<tr>
<td>Core Social Science</td>
<td>HIS<em>H201 U.S. History 1 or POL</em>H112 State &amp; Local Government</td>
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<tr>
<td>Core Arts or Humanities</td>
<td>PHL*H111 Ethics</td>
<td>3</td>
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<td>Program Business</td>
<td>CSC*H101 Introduction to Computers</td>
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<td>Program Business</td>
<td>CST*H120 Introduction to Operating Systems</td>
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<td>Program Requirement</td>
<td>CJS*H101 Introduction to Criminal Justice</td>
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<td>Program Requirement</td>
<td>CJS*H211 Criminal Law I</td>
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<td>Program Requirement</td>
<td>CJS*H217 American Legal Systems</td>
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<tr>
<td>Program Requirement</td>
<td>CJS*H224 Computer Crimes</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>CJS*H234 Computer Security &amp; Data Protection</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>CJS*H235 Information Warfare &amp; Security</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>CJS*H293 Criminal Justice Cooperative Work Experience²</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 61

²Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

²Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Given a set of circumstances and occurrences, present a well written investigative report and any other accompanying documents.
2. Explain the basic structure and functions of the American Criminal Justice System.
3. Understand the growing dependence and reliance on personal computers in our society.
4. Understand the uses of database management software and its applicability to the business environment.
5. Identify a variety of Network Operating System Software and the features and functionality each provides.
6. Discuss the various problems encountered in the area of information security.
7. Identify current strategies used to protect data.
8. List and describe some of the more common viruses that have infected computer systems.
9. Develop security measures to neutralize various threats and risks.
10. Describe several forms of computer hacking.
11. Explain the purpose and use of the memory management software.
12. Explain various Network Operating Systems (NOS) used in Local Area Networks (LANS).
13. Identify the major sociological theories of criminal behavior.
14. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments.
15. Explain the contributions of both the classical and positivist schools of criminology.
16. Explain the concept of criminal law, including its purpose as an agent of social control.
17. Identify methods used to safeguard information.
18. Discuss the legal issues affecting the recovery of evidence during investigations involving the Internet.
19. List and describe the civil liability issues associated with Internet investigations.
20. Explain the investigative process as it relates to computer crime.
21. Explain the problem of establishing a crime scene for a computer crime.
22. Demonstrate work skills relevant to a criminal justice agency.
23. Discuss the concepts of offensive and defensive information warfare.
24. Describe the various information warfare technologies.
25. Explain how information warfare helped to win the Gulf War.
26. Explain how information can be pirated and what can be done about it.
The modern Corrections System needs people with ability, sensitivity and professional training. The Corrections Option provides training for career opportunities in Corrections and also offers a broad liberal arts education for those students who wish to transfer their earned college credits from the program to four-year academic institutions. To be admitted formally to the program, a student must complete all prerequisite courses (if applicable) and must pass CJS*H101 Introduction to Criminal Justice with a minimum grade of “C”. Employment opportunities after successful training in the Corrections Option include, but are not limited to, Corrections Officer, Corrections Administration, Probation Officer, Parole Officer and Correctional Counselor.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
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</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>COM<em>H100 Introduction to Communications or COM</em>173 Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H167 Principles of Statistics¹</td>
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<tr>
<td>Scientific Knowledge²</td>
<td>BIO*H105 Introduction to Biology</td>
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<td>Scientific Reasoning³</td>
<td>DAR*H158 Biology of Addiction</td>
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<td>Social Phenomena</td>
<td>SOC*H101 Principles of Sociology</td>
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<td>Written Communication</td>
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<td>CJS*H102 Introduction to Corrections</td>
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<tr>
<td></td>
<td>CJS*H261 Victim and Offender Mediation</td>
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<tr>
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<td>CJS*H246 Juvenile Corrections</td>
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<tr>
<td></td>
<td>CJS*H211 Criminal Law I</td>
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</tr>
<tr>
<td></td>
<td>CJS*H217 American Legal Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CJS*H241 Correctional Counseling I</td>
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<td>CJS*H293 Criminal Justice Cooperative Work Experience²</td>
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<td>SOC*H240 Criminology</td>
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<tr>
<td></td>
<td>CJS*H244 Community Based Corrections</td>
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</tr>
</tbody>
</table>

**Total Credits: 61**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

¹Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

²Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

³At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

**Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. Present a well written investigative report and any other accompanying documents when given a set of circumstances and occurrences.
2. Explain the basic structure and functions of the American Criminal Justice System.
3. Explain the structure of the federal and state court systems.
4. Explain the development of probation, parole and community supervision.
5. Explain the development of the correctional system in the United States.
6. Explain the role of the victim in rehabilitating the offender.
7. Identify methods used to manage conflict.
8. Explain what effects the social conditions in the United States have upon the criminal justice system.
9. Read and explain relevant literature in the field of criminal justice.
10. Explain the development of the juvenile corrections system.
11. Explain the specific problems of juveniles in the criminal justice system.
12. State the psychological theories that may explain criminal behavior.
13. Identify the major sociological theories of criminal behavior.
14. Describe and evaluate the ways in which data are collected on crimes, criminals and victims.
15. Present oral reports before a group.
16. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth, and Fourteenth Amendments.
17. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
18. Explain the contributions of both the classical and positivist schools of criminology.
19. Show how events from early American history influenced the development of the American Criminal Justice System.
20. Explain the concept of criminal law, including its purpose as an agent of social control.
21. Define and explain the element of: assault, sex crimes, burglary, arson, larceny, robbery and homicide.
22. List the various forms of intervention techniques available in corrections.
23. Explain how correctional counseling works.
24. Demonstrate work skills relevant to a criminal justice agency.
25. Integrate the theoretical and practical applications of the Criminal Justice Program.
26. List alternatives to incarceration that are now in use.
27. Explain the concept of community corrections.
CRIMINAL JUSTICE/PUBLIC SAFETY
Forensics Option

The Forensics Option is a two-pronged approach to employment in the Criminal Justice field. On the one hand, the Option will prepare students for entry-level employment in the field of law enforcement on the local, state, and federal level. On the other hand, the Option will prepare students for successful transfer to other institutions of higher learning where they will obtain the baccalaureate degree necessary for employment in criminal laboratories.

The program will provide an academic and learning experience that promotes common sense, ethics, civic responsibility, cultural appreciation, and respect for diversity. These characteristics are inherent issues and will be discussed in every required course in the program. The program has a strong connection with the community. Representatives of some area agencies such as the State Police Crime Lab have served as advisors in the development of the program to ensure that it contributes to the production of an educated and trained work force that responds to the needs of the region.

Specifically, the Forensics Option is designed to prepare students for the successful transfer to other institutions of higher learning as well as for entry level job opportunities in the field of law enforcement. It provides the essential skills required to gain and to maintain employment at entry level positions as police officers on the state and local level as well as Federal law enforcement officers.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
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<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
<td>3</td>
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<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*101 Composition</td>
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<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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</tr>
<tr>
<td>Oral Communication</td>
<td>COM<em>100 Introduction to Communications or COM</em>173 Public Speaking</td>
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<tr>
<td>Quantitative Reasoning</td>
<td>MAT*167 Principles of Statistics1</td>
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<td>Scientific Knowledge2</td>
<td>BIO*105 Introduction to Biology</td>
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</tr>
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<td>Scientific Reasoning2</td>
<td>DAR*158 Biology of Addiction</td>
<td>3</td>
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<td>Social Phenomena</td>
<td>SOC*101 Principles of Sociology</td>
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<td>CJS*225 Forensic Science</td>
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<td>CJS*H229 Crime Scene Investigation</td>
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<td>CJS*H105 Introduction to Law Enforcement</td>
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<td>CJS*H211 Criminal Law</td>
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<td>CJS*H217 American Legal Systems</td>
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<td>CJS*H255 Ethical Issues in Criminal Justice</td>
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<td>CJS*H293 Criminal Justice Cooperative Work Experience2</td>
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<td>SOC*H240 Criminology</td>
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<td>Criminal Justice Directed Elective1</td>
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</tbody>
</table>

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

2Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

3Choose one: CJS*H250 Victimology or CJS*H224 Computer Crimes

4At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

The Criminal Justice/Public Safety graduate should be able to:

1. Given a set of circumstances and occurrences, present a well written investigative report and any other accompanying documents.
2. Explain the basic structure and functions of the American Criminal Justice System.
3. Explain the structure of the Federal and State court systems.
4. Manage a crime scene.
5. Recognize evidence at a crime scene.
7. Mark and record evidence.
8. Discuss the capabilities of the crime lab.
9. Explain the concept of transfer of evidence.
10. Conduct basic laboratory analysis.
11. Conduct field tests.
12. Identify and describe a crime scene.
13. Discuss the capabilities of various pieces of equipment used at a crime scene.
15. Name the types of evidence
16. Describe the "linkage triangle" for physical evidence.
17. Explain what effects the social conditions in the United States have upon the criminal justice system.
18. Read and explain relevant literature in the field of Criminal Justice.
19. List the major categories of physical evidence.
20. Explain the difference between class and individual characteristics of physical evidence.
21. Explain the legal requirements effecting the crime scene.
22. Explain the concept of chain of custody.
23. Explain the scientific requirements effecting the crime scene.
24. Explain the responsibilities of the first responder at the crime scene.
25. State the psychological theories that may explain criminal behavior.
26. Identify the major sociological theories of criminal behavior.
27. Describe and evaluate the ways in which data are collected on crimes, criminals and victims.
28. Present oral reports before a group.
29. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments.
30. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
31. Explain what hearing state and local political issues have on the criminal justice system.
32. Explain the concept of criminal law, including its purpose as an agent of social control.
33. Define and explain the elements of: assault, sex crimes, burglary, arson, larceny, robbery and homicide.
34. Demonstrate work skills relevant to a criminal justice agency.
35. Integrate the theoretical and practical application of the Criminal Justice Program.
36. Explain the impact of the development of ethical thought on the Criminal Justice System.
CRIMINAL JUSTICE/PUBLIC SAFETY

Law Enforcement Option

The field of law enforcement needs people with ability, sensitivity and professional training. The Law Enforcement Option provides training for career opportunities in law enforcement and policing and also offers a broad liberal arts education for those students who wish to transfer their earned college credits from the program to four-year academic institutions. To be admitted formally to the program, a student must complete all prerequisite courses (if applicable) and must pass CJS*H101 Introduction to Criminal Justice with a minimum grade of “C”. Employment opportunities after successful training in the Law Enforcement Option include, but are not limited to, municipal and state police officers, federal law enforcement officers, environmental protection enforcement officers, fish and game wardens, and court investigators. The general objective of the option is to prepare students for jobs in the law enforcement field or to transfer to a baccalaureate degree program.

Connecticut Police Academy Graduate

Successful graduates of the Connecticut Police Academy are granted a maximum of nine (9) credits toward their degree in the Criminal Justice/Public Safety Program. Graduates from the Academy are granted credits for CJS*H220 Criminal Investigation, CJS*H105 Introduction to Law Enforcement, and CJS*H293 Criminal Justice Cooperative Work Experience, with an additional eighty (80) hours of field work and appropriate scholarly paper.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
<td>3</td>
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<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*101 Composition</td>
<td>3</td>
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<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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<tr>
<td>Oral Communication</td>
<td>COM<em>100 Introduction to Communications or COM</em>173 Public Speaking</td>
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</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*167 Principles of Statistics(^1)</td>
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</tr>
<tr>
<td>Scientific Knowledge(^2)</td>
<td>BIO*105 Introduction to Biology</td>
<td>4</td>
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<tr>
<td>Scientific Reasoning(^6)</td>
<td>DAR*158 Biology of Addiction</td>
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<tr>
<td>Social Phenomena</td>
<td>SOC*101 Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENGI02 Literature and Composition</td>
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<tr>
<td>CJS*H101 Introduction to Criminal Justice</td>
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<tr>
<td>CJS*H210 Constitutional Law</td>
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<tr>
<td>CJS*H220 Criminal Investigation</td>
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<tr>
<td>CJS*H105 Introduction to Law Enforcement</td>
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<tr>
<td>CJS*H211 Criminal Law I</td>
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<tr>
<td>CJS*H217 American Legal Systems</td>
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<tr>
<td>CJS*H255 Ethical Issues in Criminal Justice</td>
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<td>CJS*H293 Criminal Justice Cooperative Work Experience(^2)</td>
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<tr>
<td>SOC*H240 Criminology</td>
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<tr>
<td>CJS*H280 Victimology</td>
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<td><strong>Total Credits: 61</strong></td>
<td></td>
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</tr>
</tbody>
</table>

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

\(^1\)Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

\(^2\)Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

\(^6\)At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
CRIMINAL JUSTICE/PUBLIC SAFETY

Security Option

The security industry needs people with ability, sensitivity and professional training. The Security Option provides training for career opportunities in the security industry and also offers a broad liberal arts education for those students who wish to transfer their earned college credits from the program to four-year academic institutions. To be admitted formally to the program, a student must complete all prerequisite courses (if applicable) and must pass CJS*H101 Introduction to Criminal Justice with a minimum grade of “C”. Employment opportunities after successful training in the Security Option include, but are not limited to, retail security, physical security, corporate security, private investigations, executive protection, loss prevention, surveillance and undercover operations. The general objective of the option is to prepare students for jobs in the security field or to transfer to a baccalaureate degree program.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
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<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
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<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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<tr>
<td>Oral Communication</td>
<td>COM<em>H100 Introduction to Communications or COM</em>173 Public Speaking</td>
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<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H167 Principles of Statistics&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
<td>Scientific Knowledge&lt;sup&gt;2&lt;/sup&gt;</td>
<td>BIO*H105 Introduction to Biology</td>
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<tr>
<td>Scientific Reasoning&lt;sup&gt;3&lt;/sup&gt;</td>
<td>DAR*H158 Biology of Addiction</td>
<td>3</td>
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<tr>
<td>Social Phenomena</td>
<td>SOC*H101 Principles of Sociology</td>
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</tr>
<tr>
<td>Written Communication</td>
<td>ENG*H102 Literature and Composition</td>
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<tr>
<td>CJS*H101 Introduction to Criminal Justice</td>
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<tr>
<td>CJS*H218 Legal Aspects of Security</td>
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<td>CJS*H103 Introduction to Security</td>
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<td>CJS*H230 Security Management</td>
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<td>CJS*H211 Criminal Law I</td>
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<td>CJS*H217 American Legal Systems</td>
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<tr>
<td>CJS*H232 Industrial and Retail Security</td>
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<td>CJS*H293 Criminal Justice Cooperative Work Experience&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>SOC*H240 Criminology</td>
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<tr>
<td>CJS*H233 Institutional Security</td>
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</tbody>
</table>

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

<sup>1</sup>Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

<sup>2</sup>Placement is required. Students need to contact the program coordinator or the Liberal Arts and Behavioral/Social Sciences Division early in the semester prior to taking the course.

<sup>3</sup>At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Present a well written investigative report and any other accompanying documents when given a set of circumstances and occurrences.
2. Explain the basic structure and functions of the American Criminal Justice System.
3. Explain the structure of the federal and state court systems.
4. Identify the functions and services of private security.
5. Explain the computer crime problem.
6. Explain how institutional security may differ from other types of security.
7. Explain the various security systems in use in institutional establishments.
8. Read and explain relevant literature in the field of criminal justice.
9. Explain the problems of theft from industrial and retail establishments.
10. Explain the various security systems in use in industrial and retail establishments.
11. State the psychological theories that may explain criminal behavior.
12. Identify the major sociological theories of criminal behavior.
13. Describe and evaluate the ways in which data are collected on crimes, criminals and victims.
14. Present oral reports before a group.
15. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments.
16. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
17. Explain the contributions of both the classical and positivist schools of criminology.
18. Show how events from early American history influenced the development of the American Criminal Justice System.
19. Explain the concept of criminal law, including its purpose as an agent of social control.
20. Define and explain the elements of: assault, sex crimes, burglary, arson, larceny, robbery and homicide.
21. List and explain some of the legal problems that may be encountered in the field of security.
22. Explain the problem of liability as it applies to the field of security.
23. Demonstrate work skills relevant to a criminal justice agency.
24. Integrate the theoretical and practical application of the Criminal Justice Program.
25. Explain the legal problems encountered in security management and supervision.
26. Explain the supervision practices used in the security field.
CYBERSECURITY

The program provides preparation for students to obtain entry-level positions in the field of cybersecurity and computer crime deterrence. It also provides preparation and assistance to students for successful transfer to other institutions of higher education. It provides essential skills required to gain and to maintain employment at entry level positions as computer crime investigators, computer security specialists, and federal law enforcement officers. This new program combines elements of both NVCC’s Criminal Justice and Computer Information Systems programs to offer students a strong grounding in understanding the investigative nature of cybersecurity in the criminal justice realm as well as gaining technical skills in computer science networking and programming.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

Upon successful completion of all program requirements, graduates will be able to:

1. Explain the landscape, key terms, challenges and concepts related to the many layers of cybersecurity. Methodologies include quizzes, tests, written work, and presentations.
2. Explain fundamental architectures of networks (networks build on each other) and demonstrate an understanding of network security. Methodologies include quizzes, tests, written work, presentations, and case studies.
3. Demonstrate an understanding of the legal and ethical issues and concepts associated with cybersecurity responsibilities. Methodologies include exams, quizzes, and written work.
4. Effectively communicate technical information and approaches for incident analysis and response verbally, in writing, and in presentations. Methodologies include written work and presentations.
5. Determine if and when criminal charges will be initiated for different security breaches. Analyze range of security breaches and identify if/when criminal charges are appropriate. Methodologies: case studies.
7. Identify and discuss career opportunities and the necessary skills that will increase the likelihood of success in the field of cybersecurity, e.g., technical skills, network certifications, interpersonal communications, critical thinking, and leadership skills. Methodologies include presentations and case studies.

Total Credits: 61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1 Students planning to transfer to a 4-year school should plan to complete MAT*H167 Principles of Statistics or MAT*H172 College Algebra.

5 Scientific Knowledge must have a lab component.
Digital Arts Technology

The Digital Arts Degree is a comprehensive and tightly knit sequence of courses designed to provide the student with an in-depth understanding of interactive software development and digital media design. The program mission and focus synthesizes interactive design principles, human-computer interaction theory, software engineering structures and instructional design methods with visual and audio design principles to produce interactive software/media designers eligible for career paths in fine arts, advertising, audio production, broadcasting, education, electronic publishing, graphic art production, instructional design, marketing, and Web development. Digital artists have become an integral part of the communication media, creative arts, business, and education and positions in interactive software development and media design exist, and continue to grow, in virtually every profession.

The Digital Arts Degree provides students with a basic general education component that is transferable to four-year institutions. In addition, through a series of options, it leads students to three areas of interest. Listed below are the options, including related professional opportunities.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Audio/Video Option</th>
<th>Graphics/Animation Option</th>
<th>Multimedia/Web Authoring</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>DAT*H101 Introduction to Digital Arts</td>
<td>DAT*H101 Introduction to Digital Arts</td>
<td>DAT*H101 Introduction to Digital Arts</td>
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<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>ENG*H101 Composition</td>
<td>ENG*H101 Composition</td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>Choose any Oral Communication listed</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
</tbody>
</table>
| Quantitative Reasoning  
   (MAT*H135 or higher than MAT*H137) | MAT*H135 or higher than MAT*H137 | MAT*H135 or higher than MAT*H137 | 3               |
| Program Requirement              | ART*H121 Two Dimensional Design or DAT*H102 Intro to Photography or GRA*H150 Introduction to Graphic Design | ART*H121 Two Dimensional Design or DAT*H102 Intro to Photography or GRA*H150 Introduction to Graphic Design | ART*H121 Two Dimensional Design or DAT*H102 Intro to Photography or GRA*H150 Introduction to Graphic Design | 3               |
| **SECOND SEMESTER**             |                    |                           |                           |                 |
| Scientific Reasoning  
   (Choose any Scientific Reasoning listed) | Choose any Scientific Reasoning listed | Choose any Scientific Reasoning listed | Choose any Scientific Reasoning listed | 3-4             |
| Written Communication           | Choose any Written Communication listed | Choose any Written Communication listed | Choose any Written Communication listed | 3               |
| Program Requirement             | DAT*H108 Digital Imaging I | DAT*H104 Multimedia Authoring I | DAT*H104 Multimedia Authoring I | 3               |
| Program Requirement             | DAT*H218 Electronic Music Composition and Audio Technology I | DAT*H110 Digital Video I | DAT*H110 Digital Video I | 3               |
| **THIRD SEMESTER**              |                    |                           |                           |                 |
| Aesthetic Dimensions/Written Communication | Choose any Aesthetic Dimensions/Written Communication listed | Choose any Aesthetic Dimensions/Written Communication listed | Choose any Aesthetic Dimensions/Written Communication listed | 3               |
| Scientific Knowledge  
   (Choose any Scientific Knowledge listed) | Choose any Scientific Knowledge listed | Choose any Scientific Knowledge listed | Choose any Scientific Knowledge listed | 3-4             |
| Program Requirement             | DAT*H104 Multimedia Authoring I | DAT*H205 Multimedia Authoring II | DAT*H116 Interactive Media Design | 3               |
| Program Requirement             | DAT*H220 Acoustics and Sound Design | DAT*H212 Graphics and Animation I | DAT*H205 Multimedia Authoring II | 3               |
| Program Requirement             | DAT*H224 Digital Video II | DAT*H230 Digital Imaging II | CSC*H205 Visual Basic I | 3               |
| **FOURTH SEMESTER**             |                    |                           |                           |                 |
| Historical Knowledge            | Choose any Historical Knowledge listed | Choose any Historical Knowledge listed | Choose any Historical Knowledge listed | 3               |
| Social Phenomena                | Choose any Social Phenomena listed | Choose any Social Phenomena listed | Choose any Social Phenomena listed | 3               |
| Program Requirement             | DAT*H226 Motion Graphics and Animation | DAT*H234 Graphics and Animation II | DAT*H240 Multimedia Authoring III | 3               |
| Program Requirement             | DAT*H290 Digital Arts Project | DAT*H290 Digital Arts Project | DAT*H290 Digital Arts Project  
   (Will require waiver) | 3               |

**Total Credits: 61-62**

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

†MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

0 At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
DIGITAL ARTS TECHNOLOGY
Audio/Video Option

The Audio/Video Option will focus on the detailed study of acoustics, audio production, recording engineering, sound design, motion graphics, visual composition, and non-linear video editing and production. Students will be qualified to seek positions in the fields of audio production, video production, post-production, advertising, interactive design, and electronic publishing.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST SEMESTER</td>
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<td></td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>DAT*H101 Introduction to Digital Arts</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
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</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>ART<em>H121 Two Dimensional Design or DAT</em>H102 Intro to Photography or GRA*H150 Introduction to Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MAT<em>H135 or higher than MAT</em>H137</td>
<td>3</td>
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<td>SECOND SEMESTER</td>
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<tr>
<td>Scientific Reasoning</td>
<td>Choose any Scientific Reasoning listed (Prefer DAN*H175)</td>
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<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed (Prefer ENG*H102)</td>
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<td>Program Requirement</td>
<td>DAT *H108 Digital Imaging I</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H110 Digital Video I</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H218 Electronic Music Composition and Audio Technology I</td>
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<td>THIRD SEMESTER</td>
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<tr>
<td>Aesthetic Dimensions/Written Communication</td>
<td>Choose any Aesthetic Dimensions/ Written Communication listed (Prefer ART*H101 or 102)</td>
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<tr>
<td>Scientific Knowledge</td>
<td>Choose any Scientific Knowledge listed (Prefer BIO*H105)</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H104 Multimedia Authoring I</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H220 Acoustics and Sound Design</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H224 Digital Video II</td>
<td>3</td>
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<tr>
<td>FOURTH SEMESTER</td>
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<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed (Prefer HIS*H101 or 102)</td>
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<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed (Prefer COM*H101)</td>
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<td>Program Requirement</td>
<td>DAT*H205 Multimedia Authoring II</td>
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<td>Program Requirement</td>
<td>DAT*H226 Motion Graphics and Animation</td>
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<td>Program Requirement</td>
<td>DAT*H290 Digital Arts Project</td>
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Total Credits: 60-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊ MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.
◊◊ At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:
1. Analyze and evaluate the properties of sound, human hearing, psychoacoustics, electro-acoustic and digital sound reproduction systems.
2. Design and edit digital and analog audio files.
3. Synthesize and apply the processes involved in transforming a concept to a video production.
4. Design, produce, edit, and complete original video projects.
5. Utilize state-of-the-art special effect techniques currently used in the film and video industry.
6. Complete significant projects terminating in deliverable software/media products with technical documentation.
The Graphics/Animation Option will focus on the detailed study of two-dimensional digital graphics design, three-dimensional object modeling, and digital animation. Students will be qualified to seek positions in the fields of broadcasting, character animation, electronic publishing, graphic ART production, and Web design.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below.

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<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>DAT*H101 Introduction to Digital Arts</td>
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<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
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<td>Oral Communication</td>
<td>Choose any Oral Communication listed (Prefer COM*H101)</td>
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<tr>
<td>Quantitative Reasoning</td>
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<td>ART<em>H121 Two Dimensional Design or DAT</em>H102 Intro to Photography or GRA*H150 Introduction to Graphic Design</td>
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<td>Scientific Reasoning</td>
<td>Choose any Scientific Reasoning listed (Prefer DAN*H175)</td>
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<td>Program Requirement</td>
<td>DAT*H108 Digital Imaging I</td>
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<td>Program Requirement</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H212 Graphics and Animation I</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>DAT*H230 Digital Imaging II</td>
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<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
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<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed (Prefer HIS*H101 or 102)</td>
<td>3</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed (Prefer COM*H110)</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H106 Digital Design</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H234 Graphics and Animation II</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H290 Digital Arts Project</td>
<td>3</td>
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</tbody>
</table>

**Total Credits: 60-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊ MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

◊◊ At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

**Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. Design, edit and manipulate digital graphic and image files.
2. Utilize advanced techniques for character modeling and the design of virtual space.
3. Design, model, and animate complete 3-dimensional virtual worlds.
4. Utilize state-of-the-art 3D special effect techniques currently used in the film and video industry.
5. Utilize current digital imaging equipment and techniques to create/acquire content
6. Complete significant projects terminating in deliverable software/media products with technical documentation.
Digital Arts Technology

Multimedia/Web Authoring Option

The Multimedia/Web Authoring Option will focus on the detailed study of the development of interactive multimedia systems, multimedia authoring, programming/scripting languages, and project development and management. Students will be qualified to seek positions in the fields of advertising, electronic publishing, interactive design, multimedia software authoring, and Web design and development.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>DAT*H101 Introduction to Digital Arts</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed (Prefer COM*H100)</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning 1</td>
<td>MAT<em>H135 or higher than MAT</em>H137 (Prefer MAT*H146 or higher)</td>
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<tr>
<td>Program Requirement</td>
<td>ART<em>H121 Two Dimensional Design or DAT</em>H102 Intro to Photography or GRA*H150 Introduction to Graphic Design</td>
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<tr>
<td><strong>SECOND SEMESTER</strong></td>
<td></td>
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<td>Scientific Reasoning 0</td>
<td>Choose any Scientific Reasoning listed (Prefer DAN*H175)</td>
<td>3-4</td>
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<td>Written Communication</td>
<td>Choose any Written Communication listed (Prefer ENG*H102)</td>
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<td>Program Requirement</td>
<td>DAT*H104 Multimedia Authoring I</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H108 Digital Imaging I</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H110 Digital Video I</td>
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<td><strong>THIRD SEMESTER</strong></td>
<td></td>
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<tr>
<td>Aesthetic Dimensions/Written Communication</td>
<td>Choose any Aesthetic Dimensions/ Written Communication listed (Prefer ART*H101 or 102)</td>
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<td>Choose any Scientific Knowledge listed (Prefer BIO*H105)</td>
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<td>DAT*H116 Interactive Media Design</td>
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<td>Program Requirement</td>
<td>DAT*H205 Multimedia Authoring II</td>
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<td>Program Requirement</td>
<td>CSC*H205 Visual Basic I</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<td>Choose any Historical Knowledge listed (Prefer HIS*H101 or 102)</td>
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<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed (Prefer COM*H101)</td>
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<td>Program Requirement</td>
<td>DAT*H215 Multimedia Web Authoring</td>
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<td>Program Requirement</td>
<td>DAT*H240 Multimedia Authoring III</td>
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<td>Program Requirement</td>
<td>DAT<em>H290 Digital Arts Project (Will require waiver) (To take concurrently with DAT</em>H240)</td>
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</table>

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1 MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

0 At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Utilize current design and delivery techniques to design advanced multimedia systems.
2. Utilize the phases of the project development life-cycle to assist in the design and completion of software development projects.
3. Storyboard, design, and implement multimedia systems.
4. Design and implement accessibility-compliant user interfaces.
6. Complete significant projects terminating in deliverable software/media products with technical documentation.
The Drug and Alcohol Recovery Counselor (DARC) program is nationally accredited through the National Addiction Studies Accreditation Commission (NASAC) and provides education and training for persons who want to become a Certified Addiction Counselor (CAC). The DARC curriculum (30 credits) meets the Connecticut Certification Board (CCB) requirements (300 hours of education, 300 hours of supervised practicum) to become a CAC. The DARC program is currently the only nationally accredited “Addiction Studies” program among all two and four year colleges in Connecticut.

**Employment**

Students with a DARC Degree are highly sought after for entry level opportunities as substance abuse counselors in public and private agencies such as community and residential health facilities, local hospitals, prevention organizations, youth service agencies, and criminal justice system. According to the Occupational Outlook Handbook (2016-17 Ed.), employment of addiction counselors is expected to grow by 22 percent from 2014-2024, much faster than average as addiction counseling services are increasingly covered by insurance. Connecticut is considered one of the states with the highest concentration of jobs in this field with a mean average wage of $46,920.

**Curriculum**

The DARC program consists of two years of academic study which includes general education, DARC specialty courses and a one year internship. All DARC courses (DAR*H101, H111, H112, H158, H213, H220) are open to any student at the college, provided they meet the prerequisite of ENG*H096 or tested into ENG H101. Students should take DAR H101 and DAR H111 in fall, DAR H112 and DAR H158 in spring. (This would be switched if a student is attending evening classes.) Students have to complete this sequence to apply for the DARC Internship which runs fall/spring of the next academic year. Students can be enrolled in the spring DAR courses and complete the Internship application/interview process.

**DARC Internship Admission Process**

Acceptance into the DARC Internship (DAR H251, DAR H252) is selective and not guaranteed. All students participate in a screening and interview process (spring semester) which is intended to evaluate whether the applicant possesses specific skills, behaviors and attitudes that are necessary to work with persons with addiction and co-occurring disorders. Interested applicants must have completed or be enrolled in DAR H101, H111, H112, H158 and ENG H101, and pass with a C or better prior to their internship. Students must complete and submit a formal DARC Application prior to the interview. Applications are distributed during the spring semester (Feb/March) each year. After the interviews, students are formally notified regarding acceptance to internship and ability to register for DAR H251 - Counseling Internship I.

*General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown on the following page. Note: The DARC program is highly sequenced. Students are encouraged to take courses in the order they are listed on the following page.*
DRUG AND ALCOHOL RECOVERY COUNSELOR (DARC)

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
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<td>Oral Communication</td>
<td>COM*H100 Introduction to Communication</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>PSY*H111 General Psychology I</td>
<td>3</td>
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<tr>
<td>Program Requirement</td>
<td>DAR*H101 Public Health Issues in Abuse and Addiction</td>
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<tr>
<td>Program Requirement</td>
<td>DAR*H111 Addiction Counseling I</td>
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<tr>
<td>Scientific Reasoning* must have a lab component.</td>
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<td>Social Phenomenon</td>
<td>SOC*H101 Principles of Sociology</td>
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<td>Written Communication</td>
<td>ENG*H102 Literature and Composition</td>
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<td>Program Requirement</td>
<td>PSY*H245 Abnormal Psychology</td>
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<tr>
<td>Program Requirement</td>
<td>DAR*H112 Group Counseling Theory &amp; Techniques</td>
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<td><strong>THIRD SEMESTER</strong></td>
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<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSA*H105 Introduction to Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning*</td>
<td>MAT<em>H135 Topics in Contemporary Mathematics or MAT</em>H167 Principles of Statistics*</td>
<td>3</td>
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<td>Scientific Knowledge*</td>
<td>BIO*H115 Human Biology</td>
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<tr>
<td>Program Requirement</td>
<td>DAR<em>H251 Counseling Internship (fall only)</em></td>
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<tr>
<td>Program Requirement</td>
<td>DAR*H220 Co-Occurring Disorders Counseling</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<td></td>
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<td>Aesthetic Dimensions/Written Comm.</td>
<td>Choose any Aesthetic Dimensions listed</td>
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</tr>
<tr>
<td>Historical Knowledge</td>
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<tr>
<td>Program Requirement</td>
<td>DAR<em>H252 Counseling Internship II (spring only)</em></td>
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<tr>
<td>Program Requirement</td>
<td>DAR*H213 Addiction Counseling II</td>
<td>3</td>
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</tbody>
</table>

**Total Credits: 64**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1Mathematics selection from MAT*H135 for career degree students, or MAT*H167 for students intending to transfer.
2DAR*H251 and DAR*H252 must be completed in consecutive semesters.
3MAT*H137 and courses numbered lower than MAT*H113 will not transfer to Connecticut State Universities as Quantitative Reasoning courses. 4At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Program Outcomes

Upon successful completion of the DARC program the graduate should be able to:

1. Describe the physical, emotional and psychological basis of addiction
2. Define the causes and characteristics of substance dependence and addiction relevant to various populations and cultures
3. Define and apply counseling theories to addiction counseling including Adlerian, Existential, Person-Centered, Harm Reduction, Motivational Interviewing, Gestalt, Reality, Behavior, Cognitive Behavioral, Solution Focused, and Feminist perspectives
4. Define, demonstrate and apply ethical principles and practices according to NAADAC, the CCB, and professional behavior for working directly in the counseling field
5. Demonstrate knowledge and skills related to relapse prevention education and strategies
6. Describe the categories of drugs and effects on psychological functioning
7. Describe characteristics of individuals with co-occurring disorders and specific treatment strategies for working with this population
8. Demonstrate the ability to develop, write and implement treatment plans for individuals with addiction and co-occurring disorders
9. Co-facilitate group counseling sessions under supervision
10. Describe the use of case management in the treatment of persons with addiction and co-occurring disorders
11. Demonstrate ability to develop discharge plans for persons with addiction and co-occurring disorders
12. Demonstrate understanding of the screening, intake and evaluation process in addiction and co-occurring disorders treatment
13. Demonstrate ability to keep accurate records of group/individual process, treatment and discharge planning
14. Describe and demonstrate skills involved in crisis intervention
15. Describe the purpose and availability of self-help groups for persons with addiction/co-occurring disorders
16. Describe the effects of substance abuse on the family, educational needs and stages of recovery for families
17. Describe the stages of change model and its application to treatment of addiction and co-occurring disorders
18. Describe the use of multicultural counseling skills to assessment, treatment and aftercare issues of persons of different gender, ethnicity, disability, adolescents, the elderly, GBLT and homeless
19. Describe the transdisciplinary foundations and competencies required of addiction counselor (TAP 21)
20. Describe the use of medication in the treatment of addiction and co-occurring disorders
21. Demonstrate engagement in community service activities to educate others about the process, dangers and treatment of addiction
22. Discuss the purpose of clinical supervision and participate in the supervision process
23. Write a comprehensive case study based on a biopsychosocial assessment, including diagnosis, treatment plan goals and interventions acceptable for submission to the Connecticut Certification Board (CCB)
EARLY CHILDHOOD EDUCATION

The Early Childhood Education Program has earned NAEYC Accreditation of Early Childhood Higher Education Programs, is validated under the Connecticut Early Childhood Education Articulation Plan and will lead to the associate in science degree. A 30-credit Early Childhood Certificate Program option is also available within the program. The curriculum prepares students for immediate employment in the field as well as for transfer to baccalaureate programs. Graduates of the associate degree program are eligible for admission as articulation students to any of the state’s participating baccalaureate institutions which offer Early Childhood Education Teacher Certification Programs Pre-K-Grade 3, to the University of Connecticut’s Human Development and Family Relations major or to Charter Oak State College’s child studies concentration. Graduates are also eligible to apply for the State of Connecticut’s Preschool Early Childhood Teacher Credential through the Connecticut Office of Early Childhood, which is free of charge.

Students must receive a grade of C- or better in each of the Early Childhood Education courses. Practical experience is received by observing and assisting in a variety of early childhood settings and students are required to student teach at the Center for Early Childhood Education laboratory school. Such experience provides opportunities to implement knowledge and skills learned in the college classroom as well as to receive valuable feedback in order to reflect on one’s own growth and competencies as a teacher working with young children.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning/Information Literacy and Ethical Dimensions</td>
<td>ECE*H109 Science &amp; Math for Children</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge◊◊</td>
<td>BIO<em>H105 Introduction to Biology or BIO</em>H115 Human Biology</td>
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<tr>
<td>Scientific Reasoning◊◊</td>
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<td>Social Phenomena</td>
<td>PSY*H111 General Psychology I</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H101 Introduction to Early Childhood Education</td>
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</tr>
<tr>
<td><strong>SECOND SEMESTER</strong></td>
<td></td>
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<tr>
<td>Aesthetic Dimensions and Written Communication</td>
<td>ECE*H103 Creative Experiences for Children</td>
<td>3</td>
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<tr>
<td>Written Communication</td>
<td>Any written communication course, ENG<em>H102 Literature and Composition or ENG</em>H200 Advanced Composition recommended</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H231 Early Language &amp; Literacy Development</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H106 Music &amp; Movement Education</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H141 Infant/Toddler Growth &amp; Development</td>
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<tr>
<td>Program Requirement</td>
<td>PSY*H203 Child Development</td>
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<tr>
<td><strong>THIRD SEMESTER</strong></td>
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<tr>
<td>Quantitative Reasoning◊◊</td>
<td>MAT*H135 Topics in Contemporary Mathematics or higher (except 136 or 137)</td>
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<td>Program Requirement</td>
<td>SOC*H101 Principles of Sociology</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H176 Health, Safety &amp; Nutrition</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H210 Observation &amp; Participation</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>ECE*H290 Student Teaching I (Full only)</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H215 The Exceptional Learner</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H222 Methods &amp; Techniques in ECE</td>
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<tr>
<td>Program Requirement</td>
<td>ECE 291 Student Teaching II (Spring only)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. Compare and contrast various child development theories.
2. Demonstrate a basic knowledge of Early Childhood Education and the skills required to make objective observations of young children in the classroom setting.
3. Use effective classroom management techniques.
4. Plan, implement and reflect upon a wide variety of music, visual and performing arts experiences.
5. Describe and facilitate high quality literacy, math, science and social studies learning environments and effective teacher interactions.
6. Describe various differences or delays in, set developmentally appropriate goals for and effectively support young children in their language development.
7. Construct motivating, inviting and aesthetic learning environments and demonstrate an understanding of the concept of creativity through planning and implementing creative experiences.
8. Discuss and use techniques and skills that are specific to the developing needs of infants and toddlers.
9. Describe how learning theories can be applied to understanding children’s behaviors.
10. Use effective communication skills in relation to families, colleagues and children.
11. Identify and describe identifiable special needs of young children and plan and implement general curricula accommodations and guidelines to meet those needs.
12. Create motivating, inviting and aesthetic learning environments and experiences.
14. Effectively plan, organize, implement and reflect upon classroom experiences.

◊◊ MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

◊◊◊ At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

**Total Credits:** 64

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.
ELECTRONIC ENGINEERING TECHNOLOGY

This program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org.

Today’s electronics engineering technician must always be ready to serve our dynamic society. The expanding domain of electronics technology has reached into and overlapped many other disciplines. Electronic technicians of today are different from those of only a few years ago. The Electronic Engineering Technology Program at Naugatuck Valley Community College offers a curriculum that is designed to prepare students for these new career opportunities. The program emphasizes the fundamentals of electric and electronic circuit theory and analysis, but also stresses the role of computers, computer software, CAD systems, microprocessors, robotics, digital systems, programmable logic controllers (PLCs), various laboratory instruments, data acquisition and control systems. Students gain practical “hands-on” experience by using electronic instruments, microprocessors, and computers. Also, a thorough knowledge of CAD systems, microprocessors, robotics, digital systems, programmable logic controllers (PLCs), various laboratory instruments, data acquisition and control hardware and software is acquired, along with experience in electronic fabrication techniques and the design of printed circuit boards. As a result of the training and preparation provided by our program, the Electronic Engineering Technology graduate is an important and much sought after contributor to the engineering team in Connecticut’s ever-changing high technology industries. Typical job entry titles include: Engineering Technician, Research Technician, Customer Engineer, Field Service Technician, Test/Service Manager, Repair Technician, Assistant Engineer and Electronics Technician.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

### First Semester

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing Learning/Information Literacy</td>
<td>EET*H104 Electrical CAD and Fabrication</td>
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<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Ethical Dimensions</td>
<td>EET*H110 Electric Circuits I</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>PHY*H121 General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H186 Precalculus</td>
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### Second Semester

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
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</thead>
<tbody>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
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<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomenon listed</td>
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<td>Program Requirement</td>
<td>EET*H114 Electric Circuits II</td>
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<td>Program Requirement</td>
<td>EET*H136 Electronics I</td>
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<td>Program Requirement</td>
<td>EET*H126 Labview</td>
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### Third Semester

<table>
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<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
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<td>Program Requirement</td>
<td>MAT<em>H254 Calculus I OR EET</em>H208 Applied Circuit Analysis</td>
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<tr>
<td>Program Requirement</td>
<td>EET*H251 Electronic Instrumentation</td>
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### Fourth Semester

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<td>EET*H294 Projects</td>
<td>2</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG<em>H102 Literature and Composition OR ENG</em>H200 Advanced Composition OR ENG*H202 Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed Technical Elective</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed Technical Elective</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>EET*H256 Microprocessors</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits: 61-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1. MAT*H172 College Algebra and MAT*H185 Trigonometric functions can be substituted for MAT*H186.
2. Directed Technical Elective: Choose from EET*H253 Advanced Digital, EET*H268 Control Systems, or EET*H208 Applied Circuit Analysis if MAT*H254 Calculus is also taken.

### Program Educational Objectives (PEOs)

Upon successful completion of all program requirements, graduates will be able to:

1. Apply mathematical principles and scientific laws and theorems to electrical circuit applications.
2. Use equipment to test and measure circuit characteristics.
3. Be proficient in the use of state-of-the-art software as applicable tools in the development process of new circuit or system designs.
4. Effectively communicate findings of research or laboratory experiments using written, oral and computer skills.
5. Work as a member of a team to accomplish assigned tasks on time in a laboratory setting.
6. Be expected to act consistent with accepted standards of ethical and professional conduct of an electronic engineering technician.
7. Possess the educational background and technical skills needed to: a. obtain employment as an electronic technician, and b. continue studies toward a B.S. degree in electrical engineering as well as other engineering disciplines.

### Student Outcomes (SOs)

Upon successful completion of the program requirements, the graduates will be able to:

1. Use mathematical formulas based on scientific laws and theorems as they relate to electricity, to analyze circuit problems, formulate solutions, and predict circuit behavior of both analog and digital circuits.
2. Possess the knowledge and skills to create a digital logic circuit design as a solution to a given problem statement. Build, troubleshoot, and verify designed circuit operation. Provide full documentation on design.
3. Build analog or digital circuits from a schematic drawing. Verify operation using test equipment such as ohmmeters, digital and analog voltmeters, ammeters, oscilloscopes, power supplies, function generators, and logic probes.
4. Use PSPICE modeling circuit simulation software as a design tool to draw, simulate and test behavior of both analog and digital circuits.
5. Create an electronic project using an Electronic Design Automation software to design printed circuit board(s), build the project, and ensure its proper operation.
6. Use a high level programming language to program a microcontroller or solve a technical problem.
7. Design a LabVIEW program to serve as a system including virtual instruments to display/store/evaluate or plot data. Create a LabVIEW program as a solution to a problem, recognize the need for continuous improvement, and demonstrate the ability to apply to design.
8. Communicate lab experiment findings in the form of laboratory reports in a professional manner using appropriate word processor, spreadsheet, and schematic drawing software.
9. Present experiment results or research orally to a group.
10. Demonstrate a respect for diversity and actively participate on multicultural teams in a laboratory setting to achieve final solutions to a given task within the time allotted.
11. Realize the responsibility of the individual technician to work in a safe and ethical manner as it relates to the electronic technician profession and demonstrate the ability to recognize ethical issues and utilize the IEEE code of ethics as a guide to determine appropriate course of action in response to these issues.
The Engineering Science associate degree program prepares students for transfer to baccalaureate college and university programs in mechanical engineering, civil engineering, chemical engineering, electrical engineering and biomedical engineering. The program also offers students currently employed in technical positions in high technology industries the opportunity to retrain and upgrade their technical skills.

The Engineering Science program, through the Connecticut College of Technology Pathways program, provides for direct entry into baccalaureate engineering programs at the University of Connecticut, Central Connecticut State University, the University of Hartford, the University of New Haven or Fairfield University. Upon successful completion of the program, students earn junior status in a baccalaureate engineering program. Note: Individual universities have different grade requirements. Consultation with a faculty advisor is strongly recommended.

Additional courses may be required. The suggested sequence for full-time students is shown below: Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>COM*H173 Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H254 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Knowledge and Understanding</td>
<td>CHE*H121 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>EGR*H111 Introduction to Engineering</td>
<td>3</td>
</tr>
<tr>
<td><strong>SECOND SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>PHY*H221 Calculus-Based Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG*H102 Literature and Composition</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MAT*H256 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>PHL<em>H101 Intro to Philosophy OR PHL</em>H111 Ethics OR ENG*Lit 200 level OR a foreign language excluding ASL and ESL courses</td>
<td>3</td>
</tr>
<tr>
<td><strong>THIRD SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MAT*H268 Calculus III: Multivariable (fall only)</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>PHY*H222 Calculus-Based Physics II</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>EGR*H211 Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed elective</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic Dimensions/Written Communication</td>
<td>ART<em>H101 Art History I OR ART</em>H102 Art History II OR MUS<em>H101 Music History and Appreciation OR THR</em>H101 Introduction to Theater</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning/Information Literacy and Ethical Dimensions</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MAT*H285 Differential Equations (spring only)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>EGR<em>H212 Engineering Dynamics OR EGR</em>H230 C++ for Engineerings</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>EGR<em>H214 Engineering Thermodynamics OR EGR</em>H215 Engineering Thermodynamics OR CHE<em>H122 General Chemistry II (spring only) OR any EGR</em>course</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Total Credits: 63-65

1Not currently offered at NVCC; Tunxis, Gateway, Housatonic, Norwalk and CCSU offer the courses.
2Choose from ANT*H101, BIO*H121, CHE*H122, any EGR* course, ENG*H202, GEO*H111, or POL*H10; or a foreign language (excluding ASL and ESL courses) after consultation with an advisor because different Bachelor degree programs have different requirements.
3Choose course after consultation with an advisor because different Bachelor degree programs have different requirements.

Upon successful completion of all program requirements, graduates will be able to:

1. Complete an Associate of Science degree in Engineering Science.
2. Transition seamlessly into a Bachelor of Science Degree Program in Engineering with junior level status in the receiving institution as part of the College of Technology Engineering Pathway Program.

1. Apply engineering, mathematical, scientific and technological principles and concepts to identify and formulate solutions to engineering problems.
2. Apply critical thinking and problem-solving skills to solve engineering problems.
3. Demonstrate the ability to function on teams.
4. Recognize the need to engage in life-long learning.
The Engineering Technology Program leads to an associate in science degree. It was developed to meet the need for educational opportunities that will lead to employment in jobs using electro-mechanical skills, computer knowledge and application skills. The need for Engineering Technology graduates who have a strong math/science background and who are well grounded in the application of technology to workplace problems, has been the focus of much attention by the state’s employers.

Connecticut’s business and industry needs technical people who have knowledge in several areas of engineering technology. The increasing application of two or more technologies to achieve desired results in such areas as robotics and computer numerical control has focused our attention on the value of an engineering technology generalist.

The engineering technician is versed in several disciplines including electrical, automated manufacturing, mechanical, and chemical, and also has a good working knowledge of computer systems. The Engineering Technology Program prepares students to be engineering technicians who are able to respond to the changing demands of “high tech” industries, who are able to communicate with both the production worker and the engineer, and who can “wear many hats.”

The Engineering Technology Program is attractive to those with specific career and educational goals that require diversity and to those who are unsure of their interests and/or abilities. Students may tailor a special program to meet specific educational and/or career goals which may include a unique career, job objectives, or a technology-oriented transfer program. While providing a quality education that prepares graduates for immediate employment, the program also enables graduates to transfer to baccalaureate programs at senior institutions. It is also attractive to those presently employed seeking skills enhancement and/or upward mobility.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below.

Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Apply appropriate mathematical and scientific principles to engineering technologies.
2. Use state-of-the-art software and hardware.
3. Design and prepare CAD drawings.
4. Perform individually or as a member of a team to complete projects in an industrial environment.
5. Conduct experiments, analyze data, and interpret results from controlled laboratory experimentation in industrial applications.
6. Effectively and efficiently plan, organize, implement, and control projects.
7. Act consistently with the ethical standards and conduct of a professional in engineering technology.
8. Communicate effectively with individuals and groups using written, oral, and computer skills.
9. Possess the educational background needed to:
   a. obtain employment as a technician, and
   b. continue studies toward a B.S. degree in Engineering Technology.

**Course List**

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning/Information</td>
<td>TCN*H101 Introduction to</td>
<td>3</td>
</tr>
<tr>
<td>Literacy and Ethics</td>
<td>Engineering Technology</td>
<td></td>
</tr>
<tr>
<td>Critical Analysis and Logical</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Thinking/Written Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H172 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>PHY*H121 General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>CAD*H150 CAD 2D</td>
<td>3</td>
</tr>
<tr>
<td><strong>SECOND SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>CHE<em>H111 Concepts of Chemistry OR CHE</em>H121 General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG*H104 Manufacturing Processes</td>
<td>4</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG<em>H102 Literature and Composition OR ENG</em>H200 Advanced Composition OR ENG*H202 Technical Writing (recommended)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MAT*H185 Trigonometric Functions</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed Elective (200 level)²</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>THIRD SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Oral Communication course COM*H173 (recommended)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MEC*H114 Statics (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG*H106 Computer-Aided Manufacturing I (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>EET*H102 Electrical Applications</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed Elective (200 level)²</td>
<td>3</td>
</tr>
<tr>
<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena course</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG<em>H275 Mechanics of Materials OR MEC</em>H251 Materials Strength (spring only)</td>
<td>3-4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed Elective (200 level)²</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed Elective (200 level)²</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed Elective (200 level)²</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 63-65**

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.*

1 Choose if planning to transfer to a Bachelor’s degree program
2 Choose any 200-level CAD*, EET*, MAT*, MEC*, MFG*, PHY* course
ENVIRONMENTAL SCIENCE

The environmental field is a broad based area of study. It is truly interdisciplinary in nature. The subjects of biology, chemistry and geology are interwoven to provide a full picture of our environment and man’s impact upon this system.

The Environmental Science degree provides students with a foundation in the basic sciences and highlights the field’s interdisciplinary nature. The goal of the Environmental Science Program is to prepare students to transfer into a biological environmental science program at a four-year institution.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning/Information Literacy listed (CSA<em>H105 or CSC</em>H101 recommended)</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H172 College Algebra or higher</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Reasoning¹</td>
<td>BIO<em>H121 General Biology I OR BIO</em>H155 General Botany</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>GLG*H121 Physical Geology (fall only)</td>
<td>4</td>
</tr>
<tr>
<td><strong>SECOND SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG<em>H102 Literature &amp; Composition OR ENG</em>H200 Advanced Composition OR ENG*H202 Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement¹</td>
<td>BIO<em>H122 General Biology II (spring only) OR BIO</em>H145 General Zoology (spring only)¹</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MAT*H167 Principles of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>ENV*H110 Environmental Regulations (spring only)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>BIO*H181 Environmental Science with Lab (spring only)</td>
<td>4</td>
</tr>
<tr>
<td><strong>THIRD SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical Knowledge and Understanding</td>
<td>Choose any Historical Knowledge and Understanding listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>CHE*H121 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>BIO*H171 Field Biology (fall only)</td>
<td>4</td>
</tr>
<tr>
<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic Dimensions/Written Communication</td>
<td>Choose any Aesthetic Dimensions listed (except HRT*H202)</td>
<td>3</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed (GEO*H102 is recommended)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>CHE*H122 General Chemistry II (spring only)</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>BIO*H235 Microbiology</td>
<td>4</td>
</tr>
</tbody>
</table>

**Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. Research and assess the accuracy of information from print, online and media sources and be able to distinguish between scientific fact and media sensationalism.
2. Apply the scientific method to environmental problems using both laboratory and field skills to gather, analyze and interpret scientific data.
3. Scientifically analyze and critically evaluate local/regional/global environmental problems in terms of ecological principles and development of sustainable solutions.
4. Demonstrate knowledge of the interdisciplinary nature of environmental science with the fundamental principles of biology, chemistry, geology, law and public policy.
5. Describe the relationship between biotic organisms and the abiotic factors within an ecosystem.
6. Demonstrate knowledge gained from scientific investigation by appropriate written, oral and mathematical means as these skills are vital to success as an environmental profession.
7. Examine environmental problems and issues as well as establish personal positions on such issues and problems collaboratively.

Total Credits: 62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

¹ Enroll in either BIO*H121 and BIO*H122 sequence OR BIO*H155 and BIO*H145 sequence (BIO*H155 and BIO*H145 for SCSU transfer only).
**FIRE TECHNOLOGY AND ADMINISTRATION**

The program in Fire Technology and Administration is designed to provide advanced training and education that develops competent leaders in fire protection, prevention, and administration. It also provides training and education for personnel of insurance companies and of industries involved in fire prevention and protection practices.

Working in career and volunteer fire departments, local, state and federal government agencies, industry, architectural and construction firms, insurance organizations, and related groups, the fire technologist knows the need for fire prevention activities, the necessity to educate both children and adults in fire safety, and the importance of enforcing fire prevention codes. Because of the broad spectrum of problems encountered and the need for extensive familiarity with many subjects, the work of the fire technologist is seldom routine or boring. There is always something new to learn. However, the greatest satisfaction may come from knowing that the effective fire technologist continually improves the world in which we live by making it a safer place.

The program of study which leads to the associate in science degree in Fire Technology and Administration is planned to help students meet the professional standards established by the National Fire Protection Association, the Connecticut Commission on Fire Prevention and Control, and the Connecticut Fire Marshal’s Training Council.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Waived</td>
<td>0</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>ECN<em>101 Principles of Macroeconomics or CSA</em>H105 Introduction to Software Applications or CSC*H101 Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT<em>H167 Principles of Statistics or MAT</em>H172 College Algebra or higher</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>CHE*H111 Concepts of Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>BIO<em>H105 or BIO</em>H115 or PHY<em>H110 or PHY</em>H121</td>
<td>4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>FTA*H112 Introduction to Fire Technology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FTA*H116 Building Construction</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FTA*H118 Fire Prevention and Inspection</td>
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<tr>
<td></td>
<td>Choose 2 of the 4 courses: FTA*H222 Fire Behavior and Combustion</td>
<td>6</td>
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<tr>
<td></td>
<td>FTA*H216 Municipal Fire Administration</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FTA*H218 Sprinklers and Fixed Extinguishing Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FTA*H219 Fire Investigation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EMT*H100 Emergency Medical Technician (or FTA electives)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>General Electives (FY1 - MAT 137 and/or IDS 101 are General Electives)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Credits: 61**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊ At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Fire Technology Program Director is available over the summer for advising sessions and assistance. Call (203) 575-8797 for appointment.

**Program Objectives**

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate the ability to communicate verbally and in writing, prepare reports, presentations, investigations that support the administration and management of fire/emergency service agency in emergency or non-emergency situations.
2. Apply social and behavioral sciences, mathematical and scientific principles, and technical knowledge to develop and create solutions to address community problems and issues in the emergency management field they have not encountered previously.
3. Demonstrate knowledge of the organizational structure, both operational and administrative, of various types of emergency service providers, both public and private, career and volunteer, which impact the life safety of a community.
4. Understand human resource policies and procedures in order to assist members of an emergency service agency who are in need of assistance and intervention.
5. Apply basics of supervision and human resource management to set priorities so as to respond to community needs as determined in a community hazard assessment.
6. Develop a pre-incident plan of a specific facility, applying pre-planning policies, procedures and forms, so that all required elements are identified and catalogued.
7. Develop an initial action plan for an emergency operation to make maximum use of resources to control and mitigate the incident.
8. Demonstrate knowledge of safety policies, regulations and procedures as they apply to emergency and non-emergency operations of a community’s emergency response agencies.
9. Demonstrate the basic knowledge necessary to conduct an inspection to identify hazards and address code violations in an Assembly, Educational, Health Care, Detention and Correctional, Residential, Mercantile, Business, Industrial, Storage, Unusual Structures, and Mixed Occupancy, so that all hazards, including hazardous materials are identified, appropriate forms are completed and appropriate action is initiated.
10. Demonstrate an in depth knowledge of who issues various protocols, standards and guides on a local, state, and national level that provide guidance to and regulation of life safety organizations.
11. Describe the methods of heat transfer and chemical processes that govern the development and spread of fire and how to apply that to various types of structures and situations in order to control and extinguish the fire by altering and improving the structure.
The General Studies Program encourages students to explore, examine, and analyze a wide range of human knowledge. The program sets the foundation for lifelong learning.

The following are the requirements of the General Studies Program. The student must:

A. COMPLETE coursework totaling not less than sixty (60) credit hours.
B. COMPLETE the following thirty to thirty-two (30-32) credits from the College’s General Education Core listing. The student is urged to take these courses before those in section “C” because they are a foundation upon which to build the program.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG 101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>Choose any Quantitative Reasoning listed</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge◊</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Reasoning◊◊</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed other than ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement:</td>
<td>General Elective&lt;sup&gt;1&lt;/sup&gt;</td>
<td>30</td>
</tr>
</tbody>
</table>

In close consultation with a counselor or faculty advisor, a student must choose 30 additional credits from at least three of the following academic areas: Allied Health or Physical Education (ALH), Behavioral Social Science (BSS), Business (BUS), Liberal Arts (LA), or Science Technology, Engineering, Math (STEM).

**Total Credits: 60-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

<sup>1</sup>MAT 136/137 may be used as a General Elective but will not fulfill a Quantitative Reasoning requirement.

<sup>◊◊</sup>At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

<sup>1</sup>Students planning to transfer to a Bachelor program who have not completed three years of a modern language should be advised to use six credits of General Electives to complete language requirements.
### COMPETENCY OR PROGRAM REQUIREMENT

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST SEMESTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking or Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning ²</td>
<td>MAT<em>H121 Applications for Business and Other Careers, OR MAT</em>H135 Topics in Contemporary Math, OR higher than MAT*H137 Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge and Understanding</td>
<td>HRT*H102 Woody Plants</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>HRT*H101 Landscape Construction</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>HRT<em>H104 Soil Systems OR CHE</em>H111 Concepts of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>SECOND SEMESTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic Dimensions</td>
<td>HRT*H202 Landscape Design I</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>HRT*H222 Greenhouse Management &amp; Operations</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>HRT*H103 Herbaceous Plants</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>BIO*H155 General Botany</td>
<td>4</td>
</tr>
<tr>
<td>SUMMER SEMESTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Requirement</td>
<td>HRT*H290 CWE/Co-Op²</td>
<td>3</td>
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<tr>
<td>THIRD SEMESTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication Competency listed</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>HRT*H215 Pest Control in Oramentals and Turf</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed elective³</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>HRT*H207 Landscape Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG*H102 Literature and Composition</td>
<td>3</td>
</tr>
<tr>
<td>FOURTH SEMESTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning/Information Literacy and Ethical Dimensions</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge and Understanding</td>
<td>Exempt</td>
<td>0</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>HRT*H208 Landscape Contract Administration</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed elective³</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed elective³</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 60**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

¹ ENV*H240 Principles of Soil and Water Resources is only offered in the Fall semester
² HRT*H290 Placement is required for this course. Students need to contact the program coordinator early in the semester prior to taking the course.
³ Directed electives: HRT*H105, HRT*H106, HRT*H107, HRT*H110, HRT*H115, HRT*H124, HRT*H125, HRT*H203, HRT*H204, HRT*H206, HRT*H219, HRT*H224, HRT*H240, HRT*H250, ART*H111
⁴ HRT*124 Floral Design I and HRT*125 Floral Design II have not been offered recently.
⁵ MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

**Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate proficiency in the construction of hardscape landscape components, including pavers, concrete and wood structures.
2. Identify common ornamental trees and shrubs, ground covers by botanical and common names, and describe characteristics of each.
3. Review and discuss the characteristics of soil, structure, soil erosion, and soil restoration.
4. Identify common herbaceous perennials and annuals by botanical and common names, and describe characteristics of each.
5. Analyze and design landscapes for both residential and commercial properties utilizing a variety of sustainable horticulture techniques and procedures and meet the needs of a diverse clientele.
6. Select the proper procedures, define the physiological basis, and describe practical applications of the reproduction of plants by asexual and sexual methods.
7. Describe proper design and operation of greenhouse environmental systems, and evaluate their advantages and disadvantages in commercial production.
8. Summarize and assess plant growth requirements for commercial production of greenhouse crops, and economically produce a crop from seed or cutting to harvest and sales.
9. Relate basic knowledge of botany to plant growth and culture.
10. Demonstrate a responsible attitude in relationships with employers, fellow employees, and toward the world of work in the horticulture field.
11. Solve problems related to the use of soil amendments, fertilizers, and plant growth control chemicals, and apply effective cost estimating, pricing, and record keeping techniques.
12. Create, manage, and gain profit from running a landscape maintenance business.
13. Identify, analyze, and troubleshoot common landscape and greenhouse pests and diseases within the landscape utilizing integrated pest management practices.
14. Practice specialized techniques within the horticulture field such as advanced design, food production, arboriculture, or turf management.
HOSPITALITY MANAGEMENT

Foodservice Management

Foodservice is the second largest retail industry in the nation, employing more people in more businesses than any other retail industry. The demand for qualified personnel is much greater than the supply. Career opportunities abound in restaurants, hotels, resorts, clubs, conference centers, air and cruise lines, schools and colleges, and health care. The general objective of the Foodservice Management program is to prepare students for employment or self-employment in entry to mid-level supervisory and management careers in any of several types of foodservice operations and related positions in production, planning, sales and marketing. In addition, successful completion of the program provides graduates with the opportunity to transfer to Bachelor of Science degree programs in Hospitality Management/Administration in top universities. The program received the V.I.P. Award from Connecticut’s Department of Education and the Governor’s Connecticut Tourism Award.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required. The suggested sequence for full-time students is shown below.

Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSA<em>H105 Introduction to Software Applications or CSC</em>H101 Introduction to Computers &lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>BBG*H231 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>COM<em>H100 Introduction to Communications, COM</em>H173 Public Speaking, ESL*H157 Oral Communications &lt;sup&gt;5&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning&lt;sup&gt;6&lt;/sup&gt;</td>
<td>Choose any Quantitative Reasoning listed &lt;sup&gt;2&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>BIO*H111 Introduction to Nutrition&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>Waived</td>
<td>0</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Requirements

<table>
<thead>
<tr>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC*H113 Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H100 Introduction to Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H101 Principles of Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H135 Service Management</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H202 Catering and Events Management</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H108 Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H102 Food Production and Purchasing</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H237 Hospitality Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BMG*H202 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H211 Food and Beverage Cost Control</td>
<td>3</td>
</tr>
<tr>
<td>Any Business or Hospitality Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 60

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

<sup>1</sup> MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

<sup>2</sup>CSC*H101 recommended for students intending to transfer.

<sup>3</sup>Mat*H167 has prerequisite of MAT*H137, and is recommended for students intending to transfer.

<sup>4</sup>Transfer students may want to consider taking a four-credit science course with lab.

Note: Course substitutions may be granted with written approval of HSP Program Coordinator or Business Division Director. See course description (HSP) for baking courses.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:
1. Identify, organize, plan and allocate resources in foodservice operations.
2. Demonstrate a working knowledge of food preparation theories and techniques.
3. Effectively work with others as a member of a team, serving clients and customers, and teaching others new skills. Exercise leadership behaviors, negotiate, and work with others from diverse backgrounds.
4. Obtain nationally recognized professional certification in food sanitation (as required by State Statute.) Demonstrate appropriate personal hygiene.
5. Organize and evaluate information and communicate the results to others using oral, written, graphic or multimedia methods.
6. Apply concepts of procurement and inventory to purchase, receive, store, issue, and distribute food and related items in a foodservice operation.
7. Identify current trends in the foodservice industry.
8. Demonstrate behavior and self-management reflective of personal and professional ethical conduct.
9. Perform basic mathematical computations accurately and appropriately, especially with regard to food and beverage production, purchasing and cost controls.
10. Identify and apply basic concepts of human nutrition and health in the preparation and service of food.
11. Describe and apply basic marketing, sales and merchandising methods in hospitality operations.
12. Demonstrate work readiness through resume preparation, appropriate business dress and behavior, and assertive communication skills.
HOSPITALITY MANAGEMENT

Hotel Management

The nation’s dynamic lodging industry generates over $100 billion in yearly sales, employs over 2 million people and creates 100,000 new jobs each year. A wide variety of career opportunities exist in convention, resort, luxury and motor hotels as well as in new lodging concepts such as all-suite hotels, bed-and-breakfast inns and geriatric care facilities. Graduates pursue management careers in rooms division, front office, food and beverage, conference services, banquets, marketing and sales, financial control, recreation, security, housekeeping and concierge among others. The program was honored with the Governor’s Connecticut Tourism Award in Hospitality Education Training.

The general objective of the Hotel Management program is to prepare students for employment or self-employment in entry to mid-level supervisory and management careers, in any of several types of lodging operations and related positions in operations, planning, tourism, sales and marketing. In addition, successful completion of the program provides graduates with the opportunity to transfer to Bachelor of Science degree programs in Hospitality Management/Administration in top universities.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSA<em>H105 Introduction to Software Applications or CSC</em>H101 Introduction to Computers 1</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>BBG*H231 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>COM<em>H100 Introduction to Communications or COM</em>H173 Public Speaking or ESL*H157 Oral Communications V</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning 2</td>
<td>Choose any Quantitative Reasoning listed 2</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge 20</td>
<td>BIO*H111 Introduction to Nutrition or any listed lab science 3</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Reasoning 20</td>
<td>Waived</td>
<td>0</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Requirements

<table>
<thead>
<tr>
<th>Course Number and Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ACC*H113 Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H100 Introduction to Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H101 Principles of Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H135 Service Management</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H242 Hotel Management</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H108 Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H241 Principles of Tourism and Travel</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H237 Hospitality Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BMG*H202 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H211 Food and Beverage Cost Control</td>
<td>3</td>
</tr>
<tr>
<td>Hospitality or Business Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 60-61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1 CSC*H101 recommended for students intending to transfer.
2 Mat*H167 has prerequisite of Mat*H137, and is recommended for students intending to transfer.
3 Transfer students may want to consider taking a four-credit science course with lab.

Note: Course substitutions may be granted with written approval of HSP Program Coordinator or Business Division Director. See course description (HSP) for baking courses.

8 Mat*H137 and courses numbered lower than Mat*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify, organize, plan and allocate resources in hotel operations.
2. Describe functional relationships among hotel divisions and departments.
3. Perform night audit procedures.
4. Demonstrate a working knowledge of food preparation theories and techniques, and utilize food production knowledge (quantity and quality standards) to meet production requirements of a foodservice operation.
5. List and describe the steps in planning destination development, and discuss the social, cultural and economic impact of this development upon the local environment.
6. Identify major geographical areas in terms of tourism generators.
7. Work with others as a member of a team, serving clients and customers, and teaching others new skills. Exercise leadership behaviors, negotiate, and work with others from diverse backgrounds.
8. Obtain nationally recognized professional certification in foodservice sanitation.
9. Identify current trends in the lodging industry such as delivery systems and functions, and operate effectively within them.
10. Demonstrate behavior and self-management reflective of personal and professional ethical conduct.
11. Perform basic mathematical computations accurately and appropriately, especially with regard to hotel and guest accounting, night audit, and cost controls.
12. Describe and apply basic marketing, sales and merchandising methods in hospitality operations.
13. Demonstrate work readiness through resume preparation, appropriate business dress and behavior, and assertive communication skills.
HUMAN SERVICES/PRE-SOCIAL WORK

The field of Human Services is a dynamic and growing profession. Human Services provide assistance for people in all walks of life and in all stages of human development. Services focus on the individual as a whole and stress care in relation to the individual’s circumstances and social environment. The Program at NVCC offers an Associate Degree that allows students the opportunity, through directed electives, to focus on the areas of child and family services, disability & mental health, or gerontology. In addition, Certificate Programs are offered in these three areas of focus. The degree program curriculum prepares students for entry level, generalist Human Services practice. Examples of employment opportunities for graduates include case aide, case worker, youth worker, home visitor, shelter worker, parent advocate, residential counselor, and community educator. The program is also designed to provide ease of transfer for students continuing their education at a four-year institution in human services and social work.

ADMISSION TO THE PROGRAM AND SPECIAL INFORMATION
A student may enter the Human Services major by either declaring it upon admission to the College or transferring from another program within the College. As a professional preparation / pre-social work program, successful progress in the major necessitates that the student achieve a minimum grade of “C” in each of the three core Human Services courses before proceeding to the next one (HSE*H101, HSE*H202, HSE*H281). Among the special characteristics of the Program is the coordination of supervised field work experience with academic studies. In the field work experience, students, under professional supervision, engage in hands-on training in the area of their interest at community agencies.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required. Students are encouraged to meet with a Human Services academic advisor to select the appropriate elective courses based on their career and transfer goals.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>POL*H111 - American Government</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning◊◊</td>
<td>MAT<em>H135 Topics in Contemporary Math or MAT</em>H167 Principles of Statistics◊</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge◊◊</td>
<td>BIO<em>H105 – Introduction to Biology or BIO</em>H115 – Human Biology w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Reasoning◊◊</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>PSY*H111 – General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG<em>H112 Literature &amp; Composition or ENG</em>H200 – Advanced Composition</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>HSE*H101 - Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HSE*H202 - Introduction to Counseling &amp; Interviewing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Human Services Elective (HSE*H115, 133, 170, or 171)</td>
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</tr>
<tr>
<td></td>
<td>HSE*H281 - Human Services Field Work◊</td>
<td>3</td>
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<tr>
<td></td>
<td>SOC*H101 - Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC*H210 - Sociology of the Family</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC<em>H201 - Contemporary Social Issues or SOC</em>H221 Social Inequality</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PSY* H258 - Behavior Modification</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Gen Ed Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Any Psychology, Sociology, History or Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊◊ At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

◊ MAT*H167 has prerequisite of MAT*H137.

◊ Placement is required. Students need to contact the program coordinator or the LABSS division office early, prior to the semester they plan to take the course.

◊◊ MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.
The Legal Assistant/Paralegal Program is a member of the American Association for Paralegal Education whose focus is to train paralegals for private and public placement. It is not a pre-law program intended for those students who plan to enroll in law school after they have completed a baccalaureate program. Students who are planning to eventually enter law school should obtain a four-year degree as soon as possible.

The Legal Assistant/Paralegal curriculum prepares qualified people to handle, in a professional manner, many of the complex tasks involved in rendering skilled assistance to lawyers. Legal Assistants are prepared to do specialized work for banks, insurance companies, real estate firms, corporate offices, and public and semi-public agencies. The Legal Assistant/Paralegal Program offers a new career opportunity in a rapidly expanding field for people who have had no previous experience with legal work. For people already employed in legal work, the program will upgrade their skills. The topic of ethics and the paralegal's role in the legal profession are emphasized throughout the courses in the program.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required. Students are encouraged to meet with a Legal Assistant/Paralegal academic advisor each semester to select the appropriate courses.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSA*H105 Introduction to Software Applications</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>BBG*H231 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>COM*H100 Introduction to Communications</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT<em>H135 or higher than MAT</em>H137</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG*102 Literature and Composition</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>BBG*H232 Business Law II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LGL*H101 Introduction to Paralegalism</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LGL*H104 Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LGL*H102 Legal Research &amp; Writing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LGL*H208 Litigation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LGL*H209 Probate Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Legal Electives¹</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Business Elective²</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 61-62

Upon successful completion of all program requirements, graduates will be able to:

1. Interview client(s) and condense fact patterns into a concise legal analysis.
2. Explain the structure of the State and Federal Court system, including Trial Court function(s) and Appellate Court functions.
3. Identify historical, sociological and political trends that have changed, and continue to change, the American legal system.
4. Explain the role of forensic science in evidentiary matters pertaining to civil and criminal litigation.
5. Research a particular fact pattern to identify all legal issues, and describe the competing arguments that can be advanced by parties to a controversy.
6. Explain the role of the judiciary in providing a balance to the legislative and executive functions of government.
7. Differentiate between liability issues and damage issues in legal controversies.
8. Identify inherent restrictions in the civil and criminal legal process that inhibit the ability of the legal system to function as a tool of social justice.
9. Identify and present a logical plan for a client, taking into account the strengths and weaknesses of adopting various legal positions.
10. Maintain organized financial data concerning a client’s case file.
11. Foster good relations between the law firm, department, or public entity, and the clients served.
12. Demonstrate organization in handling multiple client case files, and maintain strict docket control for timely case file review.
13. Understand conflict resolution as viewed from the theoretical perspective and the pragmatic perspective.
14. Apply common law principles and statutory principles where appropriate.
15. Recognize fundamental tort and contract principles that are found in different areas of the law.

¹ Choose 3 of the following:
LGL*H210 Family Law
LGL*H204 Criminal Procedure
LGL*H230 Advanced Legal Issues Seminar
LGL*H206 Bankruptcy Law
² Choose 1 course from the following disciplines:
Management, Finance, Accounting, Computer Science, Marketing, Economics

²MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.
²At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
**Liberal Arts and Behavioral/Social Sciences Division**

**LIBERAL ARTS AND SCIENCES**

Liberal education is intended to sharpen intelligence and to foster growth of personal values. The suggested liberal arts and sciences sequences outlined below provide the broad foundation for those students who plan to transfer for a bachelor's degree. The program may also be used as a basis in professional studies such as education, medicine and health, dentistry, pharmacy, law, or business administration. For graduation, students must complete coursework totaling not less than sixty-one (61) credit hours.

Because students need to be aware of specific requirements of those colleges to which they hope to transfer, the Liberal Arts and Sciences Program requires that students seek the advice of a college counselor and faculty advisor, and they must obtain a current catalog from the four-year institution of their choice. *General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.*

### Competency or Program Requirement

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning³</td>
<td>Choose any Quantitative Reasoning listed</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge⁰</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Reasoning⁰</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG<em>102 Literature and Composition or ENG</em>200 Advanced Composition</td>
<td>3</td>
</tr>
<tr>
<td>Additional Critical Analysis and Logical Thinking course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Any Philosophy course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 2XX Literature course (excludes 202, 281, 282)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Modern Language¹</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Liberal Arts Elective</td>
<td>3 from any course in the General Education Core (See pages 55-57.)</td>
<td></td>
</tr>
<tr>
<td>General Electives</td>
<td>12 from any credit bearing courses</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits: 61-62**

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.*

¹ Student may substitute general education elective credits for 3 years of Modern Language in high school. Some four-year colleges may require a language proficiency exam. ESL students may use up to six credits of Intermediate and Advanced levels of ESL courses to fulfill the Modern Language and/or Arts/Humanities elective requirements. However, transfer of ESL credits from NVCC to other institutions or from institutions to NVCC is governed by the policies of the receiving institution.

³ MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

⁰ At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Liberal Arts graduates may successfully continue their studies at colleges and universities with majors such as:

Anthropology  
Biology  
Chemistry  
Communications  
Economics  
Education  
English  
Fine Arts  
Geography  
History  
Languages  
Mathematics  
Philosophy  
Political Science  
Psychology  
Physics  
Sociology

With good planning, students may transfer into many other majors as well. Students will work primarily on Core Requirements of transfer colleges, and may also begin to fulfill course requirements in a major, by choosing liberal arts and general electives in their chosen discipline. As a first step, students should refer to the Liberal Arts and Sciences definitions, "General Education Core," and then to the appropriate course descriptions. It is very important to work closely with an advisor when selecting these courses. The concentration may serve your immediate interest or needs, but the college to which you are transferring makes the final determination as to which courses it will accept.
MANUFACTURING (AUTOMATED) ENGINEERING TECHNOLOGY

The ultimate goal of the Automated Manufacturing Engineering Technology Program is to develop a highly skilled, hands-on, manufacturing technologist for the 21st century. Students are engaged in learning a full range of practical industrial skills that occur throughout a product's assembly or production process. Students are exposed to specific subject areas such as Lean Manufacturing, CNC programming, CAD/CAM operations, Additive Manufacturing, and Materials Production. In addition, traditional first year and second year engineering courses such as (Statics & Strength of Materials) are incorporated to provide a foundation for continuing on to four year Bachelor of Science programs in Manufacturing Engineering Technology, Mechanical Engineering Technology, and Technology Management.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning/Information Literacy and Ethics</td>
<td>TCN*H101 Introduction to Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H172 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>PHY*H121 General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>CAD*H150 CAD 2D</td>
<td>3</td>
</tr>
<tr>
<td><strong>SECOND SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>CHE<em>H111 Concepts of Chemistry OR CHE</em>H121 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG<em>H102 Literature and Composition OR ENG</em>H200 Advanced Composition OR ENG*H202 Technical Writing (recommended)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG*H104 Manufacturing Processes</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MAT*H185 Trigonometric Functions</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>CAD<em>H200 3D CAD Modeling OR MAT</em>H254 Calculus²</td>
<td>4</td>
</tr>
<tr>
<td><strong>THIRD SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena course listed</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MEC*H114 Statics (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG*H106 Computer-Aided Manufacturing I (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG*H171 Intro to Lean Manufacturing (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>EET*H102 Electrical Applications</td>
<td>3</td>
</tr>
<tr>
<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed, COM*H173 (recommended)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG<em>H275 Mechanics of Materials OR MEC</em>H251 Materials Strength (spring only)</td>
<td>3-4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG<em>H239 Geometric Dimension &amp; Tolerance OR MFG</em>H230 Statistical Process Control</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG*H210 Materials of Engineering</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG*H201 Computer-Aided Manufacturing II (spring only)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 65-66

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1 Choose CHE*H121 if planning to transfer to a Bachelor's degree program.
2 Choose MAT*H254 if transferring to a Bachelor's degree program. Take MAT*H254 in semester 3 and EET*H102 in semester 2.

Program Educational Objectives (PEOs)

Upon successful completion of the program requirements, the graduates will be able to:

1. Graduates will use the knowledge of fundamental technical sciences integrated with applied technical specialties such as manufacturing processes, engineering materials, and manufacturing management and will successfully apply analytical techniques and problem solving skills necessary to adapt to technological changes and for a career in Automated Manufacturing Engineering Technology.
2. Graduates will use the academic experience from projects, laboratory experimentation, classroom lectures, and demonstrations and will apply the in-depth technical knowledge attained in areas such as applied mechanics, computer-aided engineering graphics and manufacturing, design, and CNC machining.
3. Graduates will effectively use their communication skills in oral, written, visual, and graphic modes within interpersonal, team, and group environments.
4. Graduates will demonstrate professionalism and ethics, including commitment to utmost performance quality and timeliness, respect for diversity, and awareness of international issues; and will initiate continuing professional development that demonstrates their commitment to the responsibilities of a contemporary engineering technologist throughout their careers.

Student Outcomes (SOs)

Upon successful completion of the program requirements, the graduates will demonstrate the:

1. Ability to apply basic knowledge of mathematics, science and engineering principles to solve technical problems.
2. Ability to identify, formulate, and solve technical problems.
3. Ability to use modern technical and computer based tools in engineering practice.
4. Ability to conduct experiments and to analyze and interpret data.
5. Ability to develop a system or process to meet desired needs.
6. Ability to function effectively on teams and within a diverse environment.
7. Ability to communicate effectively in oral, written, visual, and graphic modes.
8. Recognition of the need for self-improvement through continuing education and the ability to engage in lifelong learning.
9. Understanding of professionalism and ethics and associated responsibilities.
10. Knowledge of contemporary issues and understanding of the impact of engineering/technical solutions within a global perspective.
The Marketing Program is designed to provide the most appropriate education and skills for those who are currently working or who plan to work, after receipt of their degree. At the same time, it provides flexibility to fit into a bachelor's degree in Marketing for students who plan to immediately transfer to a four-year college.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSA<em>H105 Introduction to Software Applications or CSC</em>H101 Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>BBG*H231 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H167 Principles of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge ¹</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Reasoning ²</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>ECN*H101 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG<em>102 Literature and Composition or ENG</em>200 Advanced Composition</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>ACC*H113 Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC*H117 Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BMK*H201 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECN*H102 Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BBG*H232 Business Law II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BBG*H210 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BMK*H207 Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSA*H207 Computer Applications in Management and Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Elective¹</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Business Program Elective²</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

¹Prefer BMG*H202 Principles of Management
²Selection in Consultation with Business Division Faculty Advisor

◊ At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
Science, Technology, Engineering & Mathematics Division

MATHEMATICS/SCIENCE
(This program is ending in 2021 and is no longer accepting students for this major.)

The Mathematics/Science Program provides the fundamentals in mathematics and the sciences, enabling students to continue their education in mathematics, the physical sciences, the biological sciences and computer science. Students may enter the areas of science and technology, or should use the program for pre-engineering, pre-medicine, or transfer to a four-year institution, etc. Students should consult with the STEM Division early to determine specific electives.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning/Information Literacy and Ethics</td>
<td>Choose any Continuing Learning/Information Literacy and Ethics listed</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H172 College Algebra or higher</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Knowledge and Understanding</td>
<td>See footnote◊</td>
<td>4</td>
</tr>
<tr>
<td>General Elective</td>
<td>Choose any credit-bearing course</td>
<td>3</td>
</tr>
<tr>
<td><strong>SECOND SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>See footnote◊</td>
<td>4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG<em>H102 Literature &amp; Composition OR ENG</em>H200 Advanced Composition OR ENG*H202 Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Choose any Directed Elective (choose from list below). If a pre-requisite for Calculus I is needed, choose MAT<em>H185 Trigonometric Functions or MAT</em>H186 Pre-Calculus</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>THIRD SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic Dimensions/Written Communication</td>
<td>Choose any Aesthetic Dimensions/ Written Communication listed (except HRT*H202)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MAT*H254 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Choose any Directed Elective (choose from list below)</td>
<td>4</td>
</tr>
<tr>
<td>General Elective</td>
<td>Choose any credit-bearing course</td>
<td>3</td>
</tr>
<tr>
<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical Knowledge and Understanding</td>
<td>Choose any Historical Knowledge and Understanding listed</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Choose any Directed Elective (choose from list below)</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Choose any Directed Elective (choose from list below)</td>
<td>4</td>
</tr>
<tr>
<td>General Elective</td>
<td>Choose any credit-bearing course</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 61-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1Directed electives: AST*H101 or H111
BIO*H121 or above
CHE*H121 or above
GLG*H121
MAT*H167 or above
MET*H101
PHY*H121 or above
RES H200

◊For Scientific Knowledge and Understanding and Scientific Reasoning, students must pick one of the following course sequences:
BIO*H121 General Botany and BIO*H125 General Zoology (spring only) (SCSU transfer only) OR
CHE*H121 General Chemistry I and CHE*H122 General Chemistry II (spring only) OR
PHY*H221 Calculus-Based Physics I and PHY*H222 Calculus-Based Physics II
MECHANICAL ENGINEERING TECHNOLOGY

This program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org.

Mechanical engineering deals with POWER, and with the machinery used to convert power to useful work. The mechanical engineering technician is a practically-oriented member of an engineering team which applies existing technology to the solution of engineering problems. The mechanical engineering technician designs machines and processes used to generate and apply power to useful purposes. For example, a mechanical engineering technician may assist in the design of a power plant, testing of a space shuttle, manufacturing of a nuclear submarine, or building of an aircraft carrier.

Naugatuck Valley Community College’s Mechanical Engineering Technology Program combines theory with laboratory experience. Subjects such as mathematics, physics, engineering mechanics, fluid mechanics, materials of engineering, thermodynamics, and mechanical design are included within the curriculum. After the theory is taught, it is applied to practical situations in the laboratories, which are supervised by professional engineers. Students learn how to set up and conduct an experiment, to extract and analyze engineering data, and to solve problems which require the application of engineering principles.

As a result of the training and preparation provided by our program, the Mechanical Engineering Technology student is ready to be employed by industry upon graduation. The blend of ‘hands-on’ experience with theoretical background, the applications to current technology, and the individual initiative that the student develops, make our graduates very marketable in the workforce. Graduates of the Mechanical Engineering Technology Program are successfully employed in many different industries in such positions as: laboratory technicians, field service technicians, design engineering technicians, application engineering technicians, and plant engineering technicians.

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. Note: The Mechanical Engineering Technology (MET) program is highly sequenced. To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning/Information Literacy and Ethics</td>
<td>TCM*H101 Introduction to Engineering Technology</td>
<td>3</td>
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<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H186 Precalculus¹</td>
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</tr>
<tr>
<td>Scientific Reasoning</td>
<td>PHY<em>H121 General Physics I OR PHY</em>H221 Calculus-based Physics I¹</td>
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<tr>
<td>Program Requirement</td>
<td>CAD*H150 CAD 2D</td>
<td>3</td>
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<tr>
<td><strong>SECOND SEMESTER</strong></td>
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<td></td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>CHE*H121 General Chemistry I</td>
<td>4</td>
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<tr>
<td>Program Requirement</td>
<td>MAT*H254 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>CAD*H200 3D CAD Modeling</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MFG*H114 Manufacturing Processes</td>
<td>4</td>
</tr>
<tr>
<td><strong>THIRD SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written Communication</td>
<td>ENG<em>H102 OR ENG</em>H200 OR ENG*H202</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>MEC*H114 Statics (fall only)</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>EET*H102 Electrical Applications</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MEC<em>H21 Fluid Mechanics (fall only) OR MEC</em>H240 Fundamentals of Heat and Thermodynamics (fall only)²</td>
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<tr>
<td>Program Requirement</td>
<td>Directed Elective³</td>
<td>3</td>
</tr>
<tr>
<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed⁴</td>
<td>3</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
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<tr>
<td>Program Requirement</td>
<td>MEC*H251 Materials Strength (spring only)</td>
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<tr>
<td>Program Requirement</td>
<td>MEC*H238 Dynamics (spring only)</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Directed Elective³</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 66

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

¹ MAT*H172 College Algebra and MAT*H185 Trigonometric Functions can be used together as a substitute.
² Course only offered in Summer. Offered during the Fall or Spring at Tunxis, Gateway, Housatonic, Norwalk, CCSU, SCSU, and WCSU.
³ ENG*H202 Technical Writing and COM*H173 Public Speaking recommended for transfer to CCSU.
⁴ MEC*H240 and MEC*H271 are offered alternating fall semesters. Enroll in whichever is offered.
⁵ Choose from any 200-level CAD* 200-level EET*, 200-level MAT*, 200-level MEC*, 200-level MFG*; PHY*H222

Program Educational Objectives (PEOs)

Upon successful completion of all program requirements, graduates will:

1. Possess the educational background to do one or both of the following:
   a. Obtain employment in Mechanical Engineering Technology or other related field.
   b. Continue studies toward a Bachelor’s Degree in Mechanical Engineering Technology or other related field.
2. Perform effectively individually or as a member of a team working on Mechanical Engineering projects in industry or academia.
3. Act with the high professional, moral and ethical standards expected of a Mechanical Engineering Technician.

Student Outcomes (SOs)

Upon successful completion of all program requirements, graduates will possess:

1. An ability to apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.
2. An ability to apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge.
3. An ability to conduct standard tests and measurements, and to conduct, analyze, and interpret experiments.
4. An ability to function effectively as a member of a technical team.
5. An ability to identify, analyze, and solve narrowly defined engineering technology problems.
6. An ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature.
7. An ability to understand the need for and engage in self-directed continuing professional development.
8. An ability to understand and commit to address professional and ethical responsibilities, including a respect for diversity.
9. An ability to commit to quality, timeliness, and continuous improvement.
10. An ability to specify, calibrate and set-up instrumentation for mechanical components.
11. Familiarity with industry codes and standards.

NURSING

CONNECTICUT COMMUNITY COLLEGE NURSING PROGRAM

The Naugatuck Valley Community College nursing program is one of six community college nursing programs in Connecticut that have formed a collaborative called the Connecticut Community College Nursing Program (CT-CCNP) (http://www.ct.edu/academics/nursing/). This collaborative shares a common nursing curriculum which offers an Associate of Science Degree in Nursing and prepares graduates for entry into practice as a Registered Nurse. Courses in social and biological sciences, liberal arts and nursing provide the foundation for the practice of nursing. Graduates are prepared to work as entry-level practitioners in health care settings that provide acute care, extended care, rehabilitative care, outpatient care and more. The CT-CCNP is approved collaboratively by the Connecticut State Board of Examiners for Nursing with the consent of the Commissioner of the Connecticut Department of Public Health. The program offered at Naugatuck Valley Community College is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; telephone (404) 975-5000; email: info@acenursing.org; website: www.acenursing.org

Nursing Program Mission, Vision, and Philosophy

The Mission of the CT-CCNP is to support students’ aspirations to become a registered nurse, to advance their education, and to improve health within the communities served.

The Vision of the CT-CCNP is to be a personally and professionally rewarding academic program of choice. The CT-CCNP fosters diversity, innovation, quality, and excellence. As lifelong learners, CT-CCNP graduates impact the lives of those they care for, their communities of practice, and the profession of nursing.

The CT-CCNP Philosophy:

The philosophy of the CT-CCNP Curriculum is grounded in the metaparadigm of nursing, and a belief in dynamic, professional relationships between students and faculty. The metaparadigm or focus for the nursing discipline describes the roles of the nurse and directs professional practice. The metaparadigm includes four concepts, the Person*, the Environment, the Nurse, and Health. The Person is considered within Environments of care where the Nurse promotes Health and manages illness in partnership with the Person and the interprofessional health care team.

The Person as the recipient of health care is distinctive, holistic, and worthy of respect. Their values, beliefs and goals must be honored and supported, regardless of the nurse’s own values, beliefs and goals. The person is the central focus of the professional nurse. Sensitive and caring nursing practice demands an awareness of and respect for infinite types of relationships and perceptions of the world.

Environment is a literal or relative term. The environment of care is a healthcare setting or place where the human experience occurs and where nurses are a component of the interaction. Nurses interact with patients in a variety of settings within healthcare systems.

Health has multiple definitions; it is a dynamic state of the person/individual, family, group, community or population as they interact with the environment. Nurses assess and intervene in human responses to actual and potential health problems along a continuum from wellness to acute conditions, chronic illness, and end of life. Nurses assess patient’s definition of health and collaboratively plan for patient-centered care.

The Nurse provides a unique interpersonal, professional service, cognizant of legal and ethical principles and grounded in caring. Nurses recognize the need for integrity, accountability, advocacy, and systems-based thinking as they provide safe, effective patient-centered care. A commitment to continuous quality improvement, leadership development, and lifelong learning is essential for nursing practice. The Nurse possesses the knowledge, skills and attitudes (KSAs) to apply the nursing process using evidence, reflection, and caring. Nurses also consider patient preferences when making clinical judgments to reach positive patient outcomes.

The CT-CCNP Concept-Based Curriculum (CBC) is organized by Concepts within the categories of Nursing Profession, Health and Illness, Health Care Systems and Patient Attributes. The curriculum is guided by local, regional and national standards and trends within healthcare, higher education, and the nursing discipline. The delivery of the curriculum is accomplished through a dynamic educational experience, which involves active and diverse learning processes. CT-CCNP graduates possess the capacity for sound clinical judgment that enables the achievement of optimum patient outcomes along the health-illness continuum across the lifespan.
NURSING

ADMISSION PROCESS

The nursing program at NVCC admits one class each year in the fall semester. Current and prospective nursing students can find information about applying to the program, information sessions, the program of study, student handbook, scholarships, educational advancement opportunities, and much more at www.ct.edu/nursing. The application period for the nursing program is November 1 - February 1 each year. All applicants must complete the online CT-CCNP nursing program application and submit all related documentation to the Admissions Office at NVCC by the February 1st deadline. Late applications and transcripts will not be accepted.

Advisors/Counselors are available at each college to guide applicants through the application process. All initial communication with students will be done through email.

Students are required to submit the following by the February 1 deadline:

- Applicants without a community college net ID must first submit a general college application to NVCC (separate from the nursing program application) with application fee of $20.00. Select General Studies as the major. Students must have a Banner ID number and a college e-mail address to proceed to the online nursing application. After submitting the general application to NVCC, go to the "Selective Programs" tab in Banner Self-Service to complete the nursing application.
- Go to www.ct.edu/academics/nursing and complete the Connecticut Community College Nursing Program (CT-CCNP) common application. The application is only available online.
- Proof of high school completion. If the student is using high school chemistry to satisfy the admission requirement; official high school transcripts are required.
- Official SAT I and/or ACT score reports, if applicable.
- Official transcripts from ALL colleges / universities ever attended (including all CT Community Colleges), regardless of the age of the transcripts and applicability to the nursing program. This includes any college credits earned while in high school. All transcripts must be final transcripts. Students taking courses in the fall or winter semester during the application period must submit transcripts that include fall and winter grades. Transcripts must be submitted regardless of the age of the transcripts and applicability to the nursing program. No deadline extensions will be given to applicants who fail to submit required transcripts from the CT Community Colleges by the application deadline. All application materials must be sent to the NVCC Admissions office and postmarked by the February 1 deadline.
- Official transcript of the TEAS results, if not taken at a CT Community College.
- Proof of immunizations. Consult with NVCC for current immunization requirements.

All communication, including admissions decisions, will be sent to your community college student email address. Questions regarding the admissions process can be directed to ctcnpadmissions@ct.edu.

ADMISSION REQUIREMENTS

- High School graduate or equivalent.
- A score of 40 or higher on the College Level Math portion of the Accuplacer; OR SAT I Math Section/New SATscore of 550/570 or higher; OR a score of 22 or higher on the ACT Math Section; OR Connecticut Community College MAT*136 or 137, or equivalent or higher, with a grade of C or higher, completed prior to application deadline of February 1.
- One year of high school Chemistry with a lab or Connecticut Community College CHE*111 or equivalent with a grade of C or higher, completed within five years prior to application deadline of February 1.
- Connecticut Community College ENG*101: English Composition, or equivalent, with a grade of C or higher, completed prior to application deadline of February 1.
- Connecticut Community College BIO*211: Anatomy and Physiology I, or equivalent, with a grade of C+ or higher, completed within five years prior to application deadline of February 1.
- Connecticut Community College BIO*212: Anatomy and Physiology II, or equivalent, with a grade of C+ or higher, completed or in progress within five years prior to application deadline of February 1. BIO*212 in progress at time of application must be completed successfully by June 1.
NURSING

ADMISSION PROCESS (continued)

- **Minimum 2.70 Nursing GPA** which is based only on the college courses with grades that meet the nursing admission and nursing program curriculum requirements. The Nursing GPA is a calculation specific to nursing program applicants and may differ from your college GPA. If an applicant is using a course from a Fresh Start semester to meet a nursing admission or program curriculum requirement, that course will count in the calculation of the applicant's Nursing GPA.

- **ATI-TEAS score.** Applicants must have an **adjusted individual total score of 53.3% or higher**, and must be submitted by February 1.

*“Five years prior” is defined as having completed the course between December 2014 and February 1, 2020.*

There may be prerequisite courses that must be successfully completed prior to taking the admission requirements. Challenge exams may exist for certain admission requirements. Please consult with the Advisement Office for additional information. Students should complete the required Accuplacer computerized placement test. The placement test may be waived for students who have prior college English and/or mathematics credits.

ADVANCED PLACEMENT

**Applicants with an LPN License.** The Connecticut Community College Nursing Program (CT-CCNP) participates in the Connecticut League for Nursing Articulation Model for Nursing Education Mobility for LPN's. To be considered for advanced placement, the LPN must:

- Hold an unencumbered current license to practice as an LPN in Connecticut.
- Satisfy all the CT-CCNP admission requirements.
- Submit a CT-CCNP application and be admitted to the program. The application process does not vary for LPN candidates.

Clinical Sites

Clinical learning experiences are planned as an integral part of nursing courses and held at a variety of healthcare settings, such as: hospitals, extended care facilities, and selected community health centers. Students are responsible for arranging their own transportation to and from assigned clinical sites. Clinical experiences may be assigned during daytime, evening, or weekend hours. Assignment of clinical sites is at the discretion of the nursing faculty.

Waiver of Licensure Guarantee

Upon successful completion of the Associate of Science degree with a major in Nursing, the graduate is eligible to apply to sit for the National Council of State Boards of Nursing’s Licensure Examination for Registered Nurses (NCLEX-RN). Graduation from the CT-CCNP does not guarantee licensure to practice nursing. Licensure requirements and procedures are established by the State Board for Nursing. Permission to take the NCLEX-RN examination is established by law and granted by the State Board for Nursing.
## NURSING

### CONNNECTICUT COMMUNITY COLLEGE NURSING PROGRAM  
CT - CCNP Curriculum

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADMISSION REQUIREMENTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge *</td>
<td>BIO*H211 Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>BIO*H212 Anatomy and Physiology II</td>
<td>4</td>
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<tr>
<td><strong>FIRST SEMESTER (fall)</strong></td>
<td></td>
<td></td>
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<tr>
<td>Program Requirement</td>
<td>NUR*H120 Nursing in Health &amp; Illness</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>BIO*H235 Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>PSY*H111 General Psychology</td>
<td>3</td>
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<tr>
<td><strong>SECOND SEMESTER (spring)</strong></td>
<td></td>
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<tr>
<td>Social Phenomena</td>
<td>SOC*H101 Principles of Sociology</td>
<td>3</td>
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<tr>
<td>Program Requirement</td>
<td>NUR*H125 Family in Health &amp; Illness</td>
<td>8</td>
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<tr>
<td>Program Requirement</td>
<td>PSY*H201 Life Span Development</td>
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<td><strong>THIRD SEMESTER (fall)</strong></td>
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<tr>
<td>Aesthetic Dimensions/Written Communication</td>
<td>ENG*H102 Literature and Composition or 200 level English per college specific requirement</td>
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<tr>
<td>Program Requirement</td>
<td>NUR*H220 Nursing in Health &amp; Illness III</td>
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<tr>
<td>Directed Elective</td>
<td>Choose any NVCC oral communication competency course</td>
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<tr>
<td>Program Requirement</td>
<td>NUR*H225 Nursing in Health &amp; Illness IV</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>NUR*H226 Transition to Professional Nursing</td>
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</table>

**Total Credits: 65**  
Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

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* There may be a prerequisite course that must be successfully completed prior to taking the course.

*NVCC requires all students to complete a Continuing Learning & Information Literacy/Ethical Dimensions competency course prior to graduation.

Nursing Credits:
- Classroom - one contact hour = 1 credit
- Clinical - three contact hours = 1 credit

Non-Nursing courses may be taken in the semester indicated above or they may be taken earlier. All non-nursing courses listed above require a minimum grade of C with the exception of BIO*H211 and BIO*H212 for which a C+ is required. Nursing courses must be taken in the stated sequence.

* At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component. Admission and program requirements subject to change for subsequent academic years.

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## Learning Outcomes

Upon successful completion of all program requirements, graduates of the Associate Degree Nursing Program will:

1. Demonstrate competency with verbal and nonverbal communication strategies that promote accurate exchange of information, prevent and manage conflict, and establish and maintain therapeutic relationships while caring for individuals, families, groups, communities, and populations within the health care system.

2. Demonstrate the integration of best practices and current evidence into clinical decision making in the provision of patient-centered care for individuals, families, communities, and populations within the health care system.

3. Use information and patient care technology to communicate, differentiate, and manage patient information to mitigate error, and support clinical decision-making in the management and coordination of evidence-based care for individuals, families, groups, communities, and populations within the health care system.

4. Integrate leadership and priority-setting skills into the management and coordination of safe, quality patient-centered care for individuals, families, groups, communities, and populations within the health care system.

5. Identify, deliver, evaluate, and adapt nursing care to ensure that it is based upon the patient's physiological, psychological, and sociological preferences, values, and needs and is compassionate, age, and culturally appropriate for individuals, families, groups, communities, and populations.

6. Integrate integrity and accountability that upholds established regulatory, legal, and ethical principles into the management and coordination of cost effective, standard-based nursing care for individuals, families, groups, communities, and populations within the health care system.

7. Use quality improvement processes to promote the delivery of patient-centered care that supports optimum patient outcomes for the care of individuals, families, groups, communities, and populations within the health care system.

8. Demonstrate effective utilization of strategies to identify and mitigate near misses and errors to minimize the risk of harm and hazards, provide a safe environment, and promote a safe culture for patients, self, and others at the work unit and health care system levels within the health care system.

9. Analyze the impact of the health care system on the provision of safe, quality patient-centered care at the level of the work unit.

10. Collaborate with members of the interprofessional health care team to manage and coordinate the provision of safe, quality, patient-centered care of individuals, families groups, communities, and populations within the health care system.
PHYSICAL THERAPIST ASSISTANT

The Physical Therapist Assistant (PTA) Program at Naugatuck Valley Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 111North Fairfax Street, Alexandria, VA 22314. Phone: 703-706-3245; Email: accreditation@apta.org Website: www.capteonline.org.

The PTA works under the direction and supervision of a physical therapist and is a valued member of the healthcare team. Career opportunities are in hospitals, school systems, private offices, home health agencies, industry, rehabilitation hospitals and nursing homes. This is a two year, full-time curriculum for an Associate in Science degree. More than 90 physical therapy clinics from around the state collaborate with this program to provide clinical education experiences / internships. The course of study begins in January and includes a minimum of 63 credits.

In reading this section candidates must note the special requirements of this program. Additional information may be found on the PTA webpage, www.nv.edu/pta.

Selective Admission Requirements
1. Submit a PTA program application, in addition to the college application for admission, and an official final high school transcript indicating date of graduation, General Education Development (GED) Diploma, or State High School Equivalency Diploma. Submit all application materials, including college transcripts from all previous colleges attended, by the posted deadline for consideration for the upcoming spring semester.

2. Courses which must be completed by the application deadline of June 1 to meet these requirements are:
   - BIO*211 Anatomy & Physiology I (minimum grade of C+)
   - ENG*101 Composition
   - MAT*Elective (Any Quantitative Reasoning course higher than MAT*H136/H137 and minimum grade of C+)
   - PST*H111 General Psychology I

3. All Math elective and BIO*211 and BIO*212 courses must be completed within five (5) years prior to entering the PTA Program.

4. Earn a minimum PTA GPA of 2.7 for coursework required for the degree. A minimum of “C+” for Math elective and BIO*211 and BIO*212 and minimum grade of “C” is required for all other courses for the degree.

5. Documented volunteer/observational experience totaling a minimum of 10 hours in each of an out-patient and an in-patient physical therapy setting (minimum 20 hours total) completed prior to application deadline.

6. Complete the ATI TEAS with a score equivalent to AITS of 60% or higher. Test scores will be valid for the three (3) years prior to the application deadline. For testing schedules, registration information, and study manual information go to www.atitesting.com. Applicants that have not taken the exam at a CT Community College must arrange to have their scores sent to NVCC.

7. All applicants should attend a PTA Program Information Session. Students are highly recommended to observe a laboratory class. Please refer to the website for additional information.

8. Students must be able to perform common physical therapy functions as defined in the program's Technical Standards. Please go to www.nv.edu/pta under "Application Requirements" for a copy of this document.

9. In addition to tuition and fees, students in the PTA Program must pay for books, APTA membership, appropriate attire for clinical experiences, licensure review courses, and transportation. Students must complete and verify all required immunizations and provide certification by the American Heart Association or American Red Cross in Basic Life Support (BLS) for the Health Care Provider and First Aid before the start of clinical activities.

10. Clinical Education Experiences: The NVCC PTA Program offers clinical education experiences throughout Connecticut. Students may be required to travel more than 75 minutes to their assigned clinical site. Students are required to provide their own transportation, living expenses (as necessary), health insurance, and any other expenses while on clinical education experiences.

11. Students will be required by the program to undergo a background check with fingerprinting for felony convictions and to undergo a drug/substance screening. Students who do not pass the background check may be excluded from the clinical site and may not be able to meet the competencies required for graduation from the program, may not be eligible to take the licensure exam and/or may not be eligible for PTA licensure. Students who have a positive toxicology screen are not eligible to enroll in the program and will forfeit their admission seat.

Learning is planned as a progression of increasing complexity. The general education courses are supportive of the PTA courses. Therefore, all courses must be taken in sequence and/or no later than scheduled in the PTA curriculum. General education core classes and electives may be taken prior to entering the PTA program or completed earlier. Applicants are encouraged to complete the general education core classes and electives prior to entering the PTA Program. A minimum grade of “C” is required for all degree requirements, a minimum grade “C+” in BIO*211, BIO*212 and mathematics elective (higher than MAT*H136/H137), and an evaluation of “Pass” indicating satisfactory completion must be attained in clinical internship courses in order to progress. The faculty reserves the right to withdraw a student whose clinical performance is unsatisfactory. Attendance for class, lab, and clinical experiences is required. Sixty-three (63) semester hours are required for graduation from the PTA Program.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required. The suggested sequence for full-time students is shown below. Refer to page 53 for a listing of courses that will satisfy elective requirements.
PHYSICAL THERAPIST ASSISTANT

Program Outcomes

The design of the PTA curriculum, along with the mission of the PTA program, and the activities undertaken by the faculty and staff of the NVCC PTA Program should achieve the following program outcomes:

1. Produce safe, competent, caring graduates with the entry-level skills of a physical therapist assistant.
2. The average two-year passing rate of the graduates who choose to take the Physical Therapist Assistant national licensure examination will be at least 95%.
3. The average two-year employment rate for the graduates who seek employment as a Physical Therapist Assistant and will attain a position within one-year of graduation will be 100%.
4. 90% or more of students entering the program will complete the program within 1 1/2 times the length of the program (6 semesters or 3 years) as reported using CAPTE standards.

ADMISSION REQUIREMENTS

Social Phenomena

Critical Analysis and Logical Thinking

Quantitative Reasoning

Scientific Knowledge

FIRST SEMESTER (spring)

Continuing Learning and Information Literacy/Ethics - Program Requirement

Continuing Learning and Information Literacy/Ethics - Program Requirement

Scientific Reasoning

Program Requirement

SECOND SEMESTER (fall)

Written Communication

Program Requirement

Program Requirement

Program Requirement

THIRD SEMESTER (spring)

Aesthetic Dimensions/Written Communications

Program Requirement

Program Requirement

Program Requirement

FOURTH SEMESTER (fall)

Program Requirement

Program Requirement

Program Requirement

Total Credits: 63 (General education credits: 23 credits / PTA credits: 40)

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one. Oral Communication and Historical Knowledge competency courses are waived.

1 There may be a prerequisite course that must be successfully completed prior to taking the course.

0 MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

0 At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
The radiologic technologist is the technical assistant to the radiologist, (a physician who specializes in the use of x-rays and radioactive isotopes). Since x-rays are an important tool for the diagnosis of disease, radiologic technologists are valued members of the health team.

**Admission Requirements**

The applicant must meet the following requirements in addition to the general admission policies:

1. High school diploma or equivalency and submission of all application materials including high school transcripts, immunization records, and college transcripts, if applicable, no later than the application deadline.

2. Prerequisites:
   - Minimum of having completed, within the last 5 years, high school algebra II with a grade of "C" or better AND a placement or SAT/ACT score above intermediate algebra; MAT*H136 OR MAT*H137 or college level equivalent with a grade of "C" or better.
   - Minimum of having completed high school or college level Biology with a lab, or equivalent, within the last five years with a grade of "C" or better. Completion of an additional high school or college level science course within the last five years with a grade of "C" or better.
   - (NVCC A & P I requires BIO*H105 or BIO 115. The BIO*H105 requirement may be achieved by successful completion of CLEP or examination administered by the Math/Science Division.)

3. Qualified achievement on College Placement Tests. Remedial courses must be completed before acceptance into the program.

4. Application deadline is January 15 of each year. All application and program deadlines are strictly enforced. Failure to adhere to deadlines will disqualify a candidate for consideration for admission.

5. Consideration for admission requires all minimally qualified applicants to attend a mandatory program information session. Applicants will be contacted to schedule attendance at a session. The deadline to register for an information session is strictly enforced.

6. Medical examination report by a physician (within three months of the start of the program) which describes the physical and emotional health of the applicant. Completion and verification of all required immunizations before beginning classes.

7. Demonstrated ability to perform the skills needed to be a radiographer as outlined in the program's Technical Standards.

8. Submission of all application materials including high school transcripts, college records and radiology program records when applicable.

9. Admitted students must provide proof of a Health Care Provider course in Basic Life Support (BLS) from the American Heart Association prior to beginning class. The Division of Continuing Education offers BLS courses throughout the summer.

10. Selection of candidates for admission is based upon academic history of the applicant. Overall high school and/or college GPA, Math GPA, Science GPA, and successfully completed general education courses in the radiology curriculum are used to rank candidates. A minimum GPA of 2.50 is required by all applicants seeking admission into the Radiologic Technology Program.

11. The American Registry of Radiologic Technologists (ARRT) requirements concerning individuals with a previous criminal conviction may eliminate a student from sitting for the certification examination. A previous criminal record includes but may not be restricted to misdemeanor drug possession charges, DUI, felony convictions, military court martial, and proceedings where a plea of no lo contendere was entered. Individuals may contact the ARRT at (615) 687-0048 privately for clarification of their eligibility status. ARRT certification is required to obtain a radiographer’s license in Connecticut and many other states. Additional information may be found at www.arrt.org.

Additionally, all accepted students will be required to undergo a criminal background check prior to the start of the first-year fall semester. The student is responsible for the cost of the background check. Students who do not pass a criminal background check may be excluded from the clinical site and may not be able to meet the competencies required for the program. If you feel that this may apply to you, please consider your acceptance into the NVCC Radiologic Technology Program carefully. If you have any questions, please contact the program director at 203-575-8266.

Academic classes are scheduled during the day. Clinical experience is scheduled during the day and evening. This is based upon instructor availability and funding.

Due to the extensive time requirements for classes, clinical, and studying, program faculty strongly recommend that radiology students work no more than 20 hours a week. Faculty strongly advise applicants to consider the time requirements for studying, attending class, attending clinical, as well as their personal obligations before accepting admission.

In order to meet the educational objectives of the program as well as ensure the safety of the patient and student, attendance policies are strictly enforced.

**Readmission and Transfer**

Candidates seeking readmission to the program must apply to the Program Director. Readmission requests are based on a total faculty review and vote. Students withdrawn for poor academic or clinical performance are not eligible to be readmitted. Consideration for readmission or transfer into the program can only be granted if there are available openings. Transfer students are required to submit official transcripts. Transfer admission is based on a minimum GPA of 2.50. Seat availability and completed course work and sequencing of the previously completed coursework with the NVCC Radiologic Technology Program's curriculum.

**The Curriculum**

The Radiologic Technology Program is approved by the Board of Governors for Higher Education and the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, Il. 60606. (312) 704-5300. www.jrcert.org.

The curriculum is designed as a progression of increasing complexity. Therefore, all prescribed courses must be taken in sequence. Electives and core courses can be taken prior to the semester scheduled with the exception of the radiology courses. Clinical practicum is conducted in hospitals, offices, and imaging centers. It is necessary for the student to have adequate transportation. Students are required to purchase uniforms.

A minimum grade of "C" is required in all courses related to radiology and science courses. The faculty in the Radiologic Technology Program reserves the right to require withdrawal of a student from the Radiologic Technology Program whose clinical performance is unsatisfactory. Upon successful completion of all program requirements, students are eligible to take the American Registry of Radiologic Technologist Registry Examination. A minimum of sixty-eight (68) semester hours is required for graduation. Courses may be taken in the sequence on the opposite page. General education courses may be taken before the assigned scheduled semester but cannot be taken afterwards.
RADIOLOGIC TECHNOLOGY

The Radiologic Technology Program prepares students to enter the imaging sciences as an educated and skilled radiographer. The program, founded on close alliances with the professional community and the use of educational technology, creates a learning environment that prepares radiographers who:

• Combine efficiency and compassion when imaging patients.
• Practice in accordance with theoretical knowledge and essential skills.
• Maintain high ethical standards.
• Strive for continued development as a professional.
• Commit to clinical excellence.

The following goals further support the mission statement of the Radiologic Technology Program:

1. Students will demonstrate effective communication skills.
2. Students will demonstrate clinical competence when performing entry level imaging procedures.
3. Students will exhibit professional growth and development.
4. Students will combine critical thinking & problem solving skills during the performance of imaging procedures.
5. The program will graduate students with entry level skills.

Student Learning Outcomes:

• Students will demonstrate appropriate oral communication skills.
• Students will demonstrate written communication skills.
• Students will demonstrate appropriate personal and patient radiation protection.
• Students will accurately position patients.
• Students will demonstrate professional and ethical behavior.
• Students will value the importance of continued professional development.
• Students will select technical factors when performing non-routine radiographic procedures.
• Students will choose appropriate positioning when performing non-routine radiographic procedures.

Clinical Affiliates:
- Bristol Hospital
- Charlotte Hungerford Hospital - A Hartford Healthcare Partner
- Danbury Hospital - Western Connecticut Health Network
- Diagnostic Imaging of Southington, Greater Waterbury Imaging Center
- Naugatuck Valley Radiological Associates:
  - West Main Street and Prospect locations
  - Orthopedics of New England
- Trinity Health of New England - St. Mary’s Hospital
- Waterbury Hospital

General Education Core course listings and definitions appear on pages 54-57. Additional courses may be required. The suggested sequence for full-time students is shown below.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong> (fall/1st yr.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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<tr>
<td>Scientific Knowledge</td>
<td>BIO*H211 Anatomy and Physiology I</td>
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<tr>
<td>Program Requirement</td>
<td>RAD*H112 Orientation to Radiologic Technology</td>
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</tr>
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<td>Program Requirement</td>
<td>RAD*H197 Clinical Practice</td>
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<td><strong>SECOND SEMESTER</strong> (spring/1st yr.)</td>
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<tr>
<td>Scientific Reasoning</td>
<td>PHY*H110 Introduction to Physics</td>
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<td>Social Phenomena</td>
<td>PSY*H111 General Psychology I</td>
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<td>Program Requirement</td>
<td>RAD*H113 Radiologic Physics and Radiographic Quality I</td>
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<td>RAD*H198 Clinical Practice</td>
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<td>Program Requirement</td>
<td>BIO*H212 Anatomy and Physiology II</td>
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<td><strong>THIRD SEMESTER</strong> (summer/1st yr.)</td>
<td></td>
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<tr>
<td>Program Requirement</td>
<td>RAD*H114 Contrast Media Procedures and Radiographic Quality II</td>
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<td>Program Requirement</td>
<td>RAD*H199 Clinical Practice</td>
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<td><strong>FOURTH SEMESTER</strong> (fall/2nd yr.)</td>
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<td>Oral Communication</td>
<td>COM*H100 Introduction to Communications</td>
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<tr>
<td>Program Requirement</td>
<td>RAD*H200 Radiologic Physics &amp; Diagnostic Imaging Modalities</td>
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<td>Program Requirement</td>
<td>RAD*H222 Radiobiology and Protection</td>
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<td>Program Requirement</td>
<td>RAD*H297 Clinical Practice</td>
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<tr>
<td>Program Requirement</td>
<td>PSY*H201 Lifespan Development</td>
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<td><strong>FIFTH SEMESTER</strong> (spring/2nd yr.)</td>
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<td>Continuing Learning and Information Literacy/Ethics</td>
<td>CSA*H105 Introduction to Software Applications</td>
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<td>Written Communication</td>
<td>ENG*H102 Literature and Composition</td>
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<td>Program Requirement</td>
<td>RAD*H215 Radiographic Pathology</td>
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<td>Program Requirement</td>
<td>RAD*H298 Clinical Practice</td>
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<td><strong>SIXTH SEMESTER</strong> (summer/2nd yr.)</td>
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<td>Program Requirement</td>
<td>RAD*H217 Seminar in Radiology</td>
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<td>Program Requirement</td>
<td>RAD*H299 Clinical Practice</td>
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</tbody>
</table>

Total Credits: 68

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one. At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
RESPIRATORY CARE

The Respiratory Care Program prepares students to enter a dynamic and progressive health care profession. Respiratory Therapists work with advanced technology making it possible to help patients with respiratory and cardiac disorders in ways that were impossible years ago. The Respiratory Care program provides hands-on education in diverse clinical settings such as adult and neonatal critical care, emergency care, long-term care, pulmonary rehabilitation and diagnostic services. Respiratory Therapists are vital members of the health care team who work closely with physicians providing education and support to patients with acute and chronic lung conditions.

Admissions Requirements:
The Respiratory Care Program has a selective admissions process. The applicant must meet the following requirements in addition to the general admission policies:

1. High school diploma or equivalency and submission of all application materials including high school transcripts, immunization records, and college transcripts, if applicable, no later than the January 15 deadline.
2. Prerequisites: Proof of having met or exceeded the following prerequisites prior to the application deadline of January 15, 2019. Applicants who are enrolled in and plan to complete the prerequisites during the winter term may apply. If applicable, a copy of a high school transcript and/or official college transcript for credits earned outside of NVCC must be provided by January 15, 2019.
   • Minimum of having completed, within the last 5 years, high school algebra II with a grade of “C” or better AND an Accuplacer or SAT/ACT score above intermediate algebra; OR MAT*H136, OR MAT*H137 or college level equivalent with a grade of “C” or better.
   • BIO*H105 or BIO*H115 or BIO*H121 or equivalent within the last 5 years with a grade of “C” or better.
   • Minimum of having completed with a “C” or better developmental English (ENG *H063, ENG*H096 or equivalent); OR Accuplacer placement test results recommending ENG *H101; OR SAT/ACT results for either Reading or Writing at or above the score for placement into ENG*H101 English Composition.
3. Minimum GPA of 2.5 based only on the college courses with grades that meet the Respiratory Care Admission and program curriculum requirements.
4. Complete a program application by the January 15, 2018 deadline.
5. Information session: Consideration for admission requires all qualified applicants to attend a mandatory program information session. In late February/early March, qualified applicants will be contacted via their college email address to schedule attendance at a session. The deadline to register for, and attendance at the information session is strictly enforced.
6. Chemistry, Anatomy and Physiology I and II taken prior to admission into the program must have been taken within the following timeframe and the student must have achieved a grade of “C” or better for each of the courses:
   • Anatomy and Physiology I and II within the last 5 years
   • Chemistry within the last 8 years
7. Algebra, Chemistry, and Biology (including Anatomy and Physiology I and II) taken at other colleges must be equivalent to NVCC courses in order to fulfill the program science and math prerequisites and program science requirements.
8. Once your application is received, all communication regarding that application status will be sent to your college assigned email account issued at the time of your acceptance to NVCC.
9. Once admitted to the program, students are required to undergo a criminal background check and/or drug screen. Students that do not pass the background check may be excluded from clinical practice and may not meet the competencies required for the program.

Due to the extensive time requirements for classes, clinical, and studying, the program faculty strongly recommends that respiratory care students work no more than 20 hours a week. Faculty strongly advises applicants to consider this before applying and/or before accepting an offer of admission.

Special Admission Requirements for Certified Respiratory Therapist (CRTs)
Graduates of a one year certificate program who seek admission to the program and have successfully completed the Certification Exam for Respiratory Therapists by the National Board for Respiratory Care (NBRC) will be admitted into the program as a second year student. All CRTs seeking admission into the program must provide proof of certification in order to receive credit for the following technician level courses:

- RSP*H112 Fundamentals of Respiratory Care
- RSP*H131 Applied Pharmacology
- RSP*H121 Cardiopulmonary Anatomy and Physiology
- RSP*H141 Principles of Respiratory Care
- RSP*H151 Cardiopulmonary Pathophysiology
- RSP*H180 Clinical Practicum
- RSP*H181 Clinical Practicum II
- RSP*H281 Advanced Clinical Practicum (transfer credit requires approval from the Director of Clinical Education).

Students entering the program as a CRT must complete all of the general education courses prior to graduation. All applicants will be required to take a self-assessment exam by the NBRC prior to admission to the program. This test is not used for admission into the program, but for internal purposes only.

Readmission into the Respiratory Care Program
Students seeking readmission into the respiratory care program must apply directly to the program director within 6 months of severance from the program. Please see the Respiratory Care Student Handbook for additional information regarding readmission.

Transfer Requirements:
1. Students seeking transfer into the program must apply to the Program Director by the program application deadline (January 15).
2. Official transcripts must be provided with the application.
3. Consideration for transfer into the Respiratory Care Program depends on whether there are available openings at the time of the request.
4. Transfer admission is based on GPA and previous completed course work.
5. A minimum GPA of 2.5.
6. Students who were previously or are currently enrolled in another Respiratory Care program must have successfully completed their Respiratory Care and science requirements with a grade of “C” or better.
7. The Program Director and the Director of Clinical Education will evaluate previous respiratory care course work for equivalency with NVCC respiratory care courses.

Please contact the program director for details or questions.
RESPIRATORY CARE

Learning is planned as a progression of increasing complexity. Therefore, in order for a student to progress to the next semester, a minimum grade of “C” is required in all respiratory courses. BIO*H211 and BIO*H212 must be completed with a grade of “C” or better before a student can progress to the second year of the program. Electives and other core courses may be taken prior to the designated semester. Students must achieve a “C” or better in all required courses including respiratory, science and general education courses. Graduates of the program are eligible to take the Therapist Multiple Choice and Clinical Simulation examinations administered by the National Board for Respiratory Care.

The Naugatuck Valley Community College Respiratory Care Associate Degree Program is located on the Waterbury Campus and is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com). The CoARC number is 200460.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required. The suggested sequence for full-time students is shown below.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER (fall)</strong></td>
<td></td>
<td></td>
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<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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<td>Historical Knowledge</td>
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<td>Scientific Knowledge</td>
<td>BIO*H211 Anatomy and Physiology I</td>
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<td>Program Requirement</td>
<td>RSP*H112 Fundamentals of Respiratory Care</td>
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<tr>
<td>Program Requirement</td>
<td>RSP*H121 Cardiopulmonary Anatomy and Physiology</td>
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<td><strong>SECOND SEMESTER (spring)</strong></td>
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<td>Oral Communication</td>
<td>COM*H100 Introduction to Communication</td>
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<td>Program Requirement</td>
<td>RSP*H131 Applied Pharmacology</td>
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<td>RSP*H141 Principles of Respiratory Care</td>
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<td>RSP*H180 Clinical Practicum</td>
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<td>Program Requirement</td>
<td>BIO*H212 Anatomy and Physiology II</td>
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<td><strong>THIRD SEMESTER (summer)</strong></td>
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<td>Written Communication</td>
<td>ENG<em>H102 English Composition and Literature or ENG</em>H200 Advanced Composition</td>
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<td>Program Requirement</td>
<td>RSP*H151 Cardiopulmonary Anatomy and Physiology</td>
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<tr>
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<td>RSP*H181 Clinical Practicum II</td>
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<td><strong>FOURTH SEMESTER (fall)</strong></td>
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<td>Continuing Learning and Information Literacy/Ethics</td>
<td>RSP*H281 Advanced Clinical Practicum</td>
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<td>CHE*H111 Concepts of Chemistry</td>
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<td>Social Phenomena</td>
<td>PSY* H111 General Psychology I</td>
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<td>Program Requirement</td>
<td>RSP*H270 Hemodynamic and Critical Care Monitoring</td>
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<tr>
<td>Program Requirement</td>
<td>RSP*H 262 Advanced Principles of Respiratory Care</td>
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<td><strong>FIFTH SEMESTER (spring)</strong></td>
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<td>Aesthetic Dimensions/Written Communication</td>
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<td>Continuing Learning and Information Literacy/Ethics</td>
<td>RSP*H282 Advanced Clinical Practicum II</td>
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<tr>
<td>Program Requirement</td>
<td>RSP*H271 Pulmonary and Cardiovascular Diagnostics</td>
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<tr>
<td>Program Requirement</td>
<td>RSP*H291 Perinatal and Pediatric Respiratory Care</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>RSP*H201 Future Trends</td>
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</tr>
</tbody>
</table>

**Total Credits: 67**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1 ENG*H200 is recommended for those students who plan on pursing a Bachelor of Science Degree

2 At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

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**Program Mission**

The Respiratory Care Program at Naugatuck Valley Community College is designed to prepare students to enter the field of Respiratory Care with the skills necessary to practice as proficient and competent Respiratory Therapists. Our program is designed to meet the evolving health care needs of our diverse community and our faculty are committed to a student-centered approach to teaching and learning that focuses on the development of evidence-based, ethical, and collaborative practice among our students and graduates.

**Program Outcomes**

Upon graduation from the program, the graduate must be competent in the following areas: Psychomotor skills, Affective skills and Cognitive skills. Each area will be evaluated while enrolled in the program on a semester by semester basis. Learning is planned as progression of increasing complexity. The goal of the Respiratory Care program is to prepare graduates to function as competent respiratory care practitioners. Upon successful completion of the program the graduate will:

1. Assist physicians/licensed independent practitioners in the diagnosis, management, and treatment of patients affected by cardiopulmonary disorders.

2. Collect and evaluate clinical information relevant to their role as a respiratory therapist.

3. Participate in the inter-disciplinary plan of care.


5. Demonstrate proficiency in all skills and competencies required of a respiratory therapist as described by the Commission on Accreditation for Respiratory Care (CoARC).

6. Promote evidence-based practice by using established clinical practice guidelines and evaluating published research for its relevance to patient care.

7. Collaborate and communicate effectively with all members of the health care team to enhance patient care.

8. Adhere to AARC statement of ethics and professional conduct.

9. Apply principles and practices of patient safety and process improvement in all aspects of respiratory care.

Clinical experiences are provided at the following facilities:

- Connecticut Children’s Medical Center
- Danbury Hospital - Western Connecticut Health Network
- Charlotte Hungerford Hospital - A Hartford HealthCare Partner
- Gaylord Specialty Healthcare
- Hospital for Special Care
- Trinity Health of New England - St. Mary’s Hospital
- Waterbury Pulmonary Associates
- Waterbury Hospital
- Yale-New Haven Health - Bridgeport Hospital
- Yale-New Haven Health - Yale New Haven Hospital
The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies and continue on to complete a bachelor of science degree in Industrial Technology with a focus in Technology Management at Central Connecticut State University’s School of Engineering Science and Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), computer-aided manufacturing (CAM), electronic engineering technologies, mechanical engineering technologies, machine technologies, and other courses in special areas of technology. The program also includes a solid core of courses in general education. Successful completion of the program allows students to enter their junior year at Central Connecticut State University. Consultation with a faculty advisor is strongly recommended.

Additional courses may be required. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

Upon successful completion of all program requirements, graduates will be able to:

1. Complete an Associate of Science degree in Technology Studies.
2. Transition seamlessly into a Bachelor of Science Degree Program with junior level status in the receiving institution as part of the College of Technology Pathway Program.

Upon successful completion of all program requirements, graduates will be able to:

1. Apply mathematical, scientific and technological principles and concepts to identify and formulate solutions to technical problems.
2. Apply critical thinking and problem-solving skills to solve technical problems.
3. Demonstrate the ability to function on teams.
4. Recognize the need to engage in life-long learning.

### Competency or Program Requirement

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
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<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
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<tr>
<td>Continuing Learning/Information Literacy and Ethical Dimensions</td>
<td>ECN*H101 Principles of Macroeconomics</td>
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<td>Critical Analysis and Logical Thinking/ Written Communication</td>
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<td>Quantitative Reasoning</td>
<td>MAT<em>H185 Trigonometric Functions¹ OR higher level MAT</em>course</td>
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<td>Scientific Reasoning</td>
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<td><strong>THIRD SEMESTER</strong></td>
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<td>Historical Knowledge and Understanding</td>
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<td>Oral Communication</td>
<td>COM*H173 Public Speaking</td>
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<td>Scientific Knowledge and Understanding</td>
<td>CHE<em>H111 Concepts of Chemistry OR CHE</em>H121 General Chemistry I</td>
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<td>Aesthetic Dimensions/Written Communication</td>
<td>Fine arts course³</td>
<td>3</td>
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<tr>
<td>Social Phenomena</td>
<td>PSY<em>H111 General Psychology I OR SOC</em>H101 Principles of Sociology</td>
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<td>Program Requirement</td>
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<tr>
<td>Program Requirement</td>
<td>MAT*H167 Principles of Statistics</td>
<td>3</td>
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</tbody>
</table>

### Program Objectives

**Total Credits: 65-66**

¹If a student is not MAT*H185 or H186 ready, the student should take MAT* prerequisite courses, e.g. MAT*H137 or H172

²27 credits total: Choose from BIO*H121, H122 or H235; BMG*H202; BMK*201; any CAD*;any CHE*; ECN*H102; any EET*; any EGR*; MAT*H172 or higher, any MEC*; any MFG*; PHL*H101 or H111 (only one PHL* course can be taken for the program); any PHY*; any TCN*

³Choose from ART*H101 or H102; DAN*H101; MUS*H101; THR*H101

**Student Learning Outcomes**
TECHNOLOGY STUDIES - College of Technology Pathway Program

Engineering Technology Option

The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies and continue on to complete a bachelor of science degree in Mechanical Engineering Technology or Manufacturing Engineering Technology at Central Connecticut State University’s School of Engineering Science and Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), mechanical engineering technologies, and manufacturing engineering technologies. The program also includes a solid core of courses in general education. Successful completion of the program allows students to enter their junior year at Central Connecticut State University. Consultation with a faculty advisor is strongly recommended.

Additional courses may be required. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
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<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
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<td>Scientific Reasoning</td>
<td>PHY<em>H121 General Physics I OR PHY</em>H221 Calculus-based Physics I</td>
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<td>MAT<em>H185 Trigonometric Functions OR MAT</em>H186 Precalculus</td>
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<td>Program Requirement</td>
<td>TCN*H101 Introduction to Engineering Technology</td>
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<td>ENG*H202 Technical Writing</td>
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<td>MAT*H254 Calculus I</td>
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<td>PHY<em>H122 General Physics II OR PHY</em>H222 Calculus-based Physics II</td>
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<td>COM*H173 Public Speaking</td>
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<td>MEC*H114 Statics (fall only)</td>
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<td>MAT*H256 Calculus II</td>
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<td>ECN*H101 Principles of Macroeconomics</td>
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<td>PSY<em>H111 OR SOC</em>H101</td>
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<td>Program Requirement</td>
<td>MEC*H238 Dynamics (spring only)</td>
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</table>

Total Credits: 66-67

¹Summer only at NVCC. Course is offered in the fall and spring at Housatonic, Gateway, Tunxis, Norwalk, WCSU, CCSU, and SCSU.

²Choose from any CAD*; any EGR*; any MEC*; any MFG*; any 200-level English Literature course.

³Choose from: ART*H101 OR ART*H102, DAN*H101, MUS*H101, THR*H101

Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Complete an Associate of Science degree in Technology Studies.
2. Transition seamlessly into a Bachelor of Science Degree Program with junior level status in the receiving institution as part of the College of Technology Pathway Program.

Student Learning Outcomes

1. Apply mathematical, scientific and technological principles and concepts to identify and formulate solutions to technical problems.
2. Apply critical thinking and problem-solving skills to solve technical problems.
3. Demonstrate the ability to function on teams.
4. Recognize the need to engage in life-long learning.
5. Demonstrate the ability to conduct standard tests and measurements, and to conduct, analyze and interpret experiments.
6. Demonstrate an understanding of and a commitment to address professional and ethical responsibilities, including a respect for diversity.
TECHNOLOGY STUDIES - College of Technology Pathway Program

Lean Manufacturing and Supply Chain Management Option

The Connecticut College of Technology Pathways program allows students to complete an associate in science degree program in Technology Studies and continue on to complete a bachelor of science degree in Industrial Technology with a focus in Technology Management at Central Connecticut State University’s School of Engineering Science and Technology. The curriculum offers a broad range of studies and topics in: mathematics, physics, chemistry, engineering drawing and computer-aided design (CAD), computer-aided manufacturing (CAM), electronic engineering technologies, mechanical engineering technologies, and other courses in special areas of technology. The program also includes a solid core of courses in general education. Successful completion of the program allows students to enter their junior year at Central Connecticut State University.

The Lean Manufacturing and Supply Chain Management Option, Technology Studies associate degree program prepares students to work in the 21st century world of Lean Manufacturing and supply chain management. Companies are now employing these techniques to reduce waste, cut costs and compete globally. Consultation with a faculty advisor is strongly recommended. Placement testing will determine the sequencing of courses. Additional courses may be required. Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
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<tr>
<td><strong>FIRST SEMESTER</strong></td>
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<td>ECN*H101 Principles of Macroeconomics</td>
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<td>Program Requirement</td>
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<td>Program Requirement</td>
<td>Directed Elective¹</td>
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<td>Program Requirement</td>
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<td>Oral Communication</td>
<td>COM*H173 Public Speaking</td>
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<td>HIS<em>H101 Western Civilization I OR HIS</em>H102 Western Civilization II OR HIS<em>H201 U.S. History I OR HIS</em>H202 U.S. History II</td>
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<td>Scientific Knowledge and Understanding</td>
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<td>Program Requirement</td>
<td>MFG<em>H171 Introduction to Lean Manufacturing¹ OR MFG</em>H172 Introduction to Lean Supply Chain Management⁴</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<td>PSY<em>H111 or SOC</em>H101</td>
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<td>Program Requirement</td>
<td>MAT*H167 Principles of Statistics</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>MFG<em>H271 Advanced Lean Manufacturing¹ OR MFG</em>H272 Implementing Lean Supply Chain Management⁴</td>
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<td>Program Requirement</td>
<td>Directed Elective¹</td>
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<tr>
<td>Program Requirement</td>
<td>Directed Elective¹</td>
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</tr>
</tbody>
</table>

Total Credits: 65-66

Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Complete an Associate of Science degree in Technology Studies.
2. Transition seamlessly into a Bachelor of Science Degree Program with junior level status in the receiving institution as part of the College of Technology Pathway Program.

Student Learning Outcomes

1. Apply mathematical, scientific and technological principles and concepts to identify and formulate solutions to technical problems.
2. Apply critical thinking and problem-solving skills to solve technical problems.
3. Demonstrate the ability to function on teams.
4. Recognize the need to engage in life-long learning.
5. Apply principles in lean manufacturing and supply chain management to eliminate waste in processes and protocols.

¹ MFG*H171-H271 and MFG*H172-H272 are offered in alternating years. Enroll in whichever sequence is offered.
² If a student is not MAT*H185 or H186 ready, the student should take MAT*prerequisite courses, e.g. MAT*H137 or H172.
³ 15 credits total: Choose from BIO*H121, H122 or H235; BMG*H202; BMK*H201; any CAD*; any CHE*; ECN*H102; any EET*; any EGR*; MAT*H172 or higher; any MEC*; any MFG*; PHL*H101 or H111 (only one PHL* course can be taken for the program); any PHY*; any TCN*.
⁴ Choose from ART*H101 or H102; DAN*H101; MUS*H101; THR*H101.
The **Visual Arts Option** provides training in art history, traditional two-dimensional methodologies (painting, drawing, design), three-dimensional formats (sculpture and pottery), and computerized graphic design. Students will be qualified to seek positions in galleries, museums, and theater productions.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

### Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Execute skills and techniques necessary for studio art, and demonstrate manipulative skills including dexterity with tools and equipment specific to various media.
2. Compile a portfolio of work reflecting the breadth of his/her study.
3. Demonstrate desirable attitudes and work habits — creative thinking, the ability to solve problems, good artistic judgment, industriousness, cooperation, responsibility, and self-reliance.
4. Describe a knowledge of the relationship among various components of art including design, drawing and painting, and understand the contributions that each makes to the final product.
5. Demonstrate an understanding of the process of mounting an exhibition of work and presenting it to the public.
6. Communicate clearly using specific art vocabulary.

### Competency or Program Requirement

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
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<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed (Prefer COM*H100)</td>
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<td>Program Requirement</td>
<td>ART*H121 Two Dimensional Design</td>
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<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>ART*H101 Art History I</td>
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<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/ Ethics (Prefer DAT*H101)</td>
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<td>Written Communication</td>
<td>Choose any Written Communication (Prefer ENG*H102)</td>
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<td>Program Requirement</td>
<td>ART*H112 Drawing II</td>
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<td>Program Requirement</td>
<td>ART*H122 Three Dimensional Design</td>
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<td>Historical Knowledge</td>
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<td>Scientific Reasoning(^{5})</td>
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<td>ART*H102 Art History II</td>
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<td>ART*H131 Sculpture</td>
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<td>Program Requirement</td>
<td>ART*H151 Painting I</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<tr>
<td>Scientific Knowledge(^{5})</td>
<td>Choose any Scientific Knowledge listed (Prefer BIO*H105)</td>
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<tr>
<td>Social Phenomena</td>
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<td>Program Requirement</td>
<td>ART*H161 Ceramics I</td>
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<td>Program Requirement</td>
<td>ART*H167 Printmaking I</td>
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<tr>
<td>Program Requirement</td>
<td>Visual Art Elective(^{6})</td>
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</tbody>
</table>

**Total Credits: 60-62**

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.*

\(^{3}\)MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

\(^{5}\)At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

VISUAL AND Performing Arts

Dance Option

The Dance Option provides students with a broad base of cultural and historical knowledge as well as technique, pedagogy and repertoire in the various dance genres. The creative process is fostered by inclusion of production skills, the art of choreography, and performance opportunities. This foundation will prepare students to further their study, teach, choreograph, and/or perform. Graduates may seek employment in dance education, dance studios, community service organizations, and as production assistants, choreographers, teacher assistants, dance therapy assistants, and as dancers in the arts and entertainment industry. Students must be physically able to participate in studio courses. As of 2006, CT’s State Board of Education requires public school K-12 dance certification for dance teachers. The Dance Option provides the required dance courses for this education certification. The Transfer Program articulated with Central Connecticut State University guarantees acceptance of major dance credits.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
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<td>FIRST SEMESTER</td>
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<td>DAN*H101 History &amp;</td>
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<td>Communications</td>
<td>Appreciation of World</td>
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<td>Critical Analysis and Logical</td>
<td>ENG*H101 Composition</td>
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<td>Thinking/Written Communication</td>
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<td>Historical Knowledge</td>
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<td>Renaissance to Romantic</td>
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<td>Pioneers of America</td>
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<tr>
<td>Program Requirement</td>
<td>DAN*H112 Jazz II:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Broadway and Film</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dance</td>
<td></td>
</tr>
<tr>
<td>Program Requirement</td>
<td>DAN*H222 Choreographic</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Principles/Ensemble</td>
<td></td>
</tr>
<tr>
<td>Program Requirement</td>
<td>DAN*H232 Ballet III OR</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DAN*H234 Modern Dance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>III Postmodern to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contemporary</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 60-62

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate and execute warm-up exercises specific to all dance forms (ballet, modern, ethnic, jazz).
2. Execute desirable physical activity, preparation, and training for the dancer, actor, or musician so that she/he may intelligently choose a further course of action in the arts.
3. Execute a variety of choreographic styles to enhance and broaden movement and choreographic vocabulary utilizing time, space and energy.
4. Demonstrate kinesthetic awareness, mental and physical coordination, rhythmic sensitivity, and musicality.
5. Identify dancers and choreographers and their particular contributions to the field of dance and their processes in creating dance.
6. Choreograph and perform movement and demonstrate performance skills of concentration, projection, characterization, expression and ensemble work.
7. Demonstrate wherewithal for scheduling and conducting rehearsals and producing a performance that includes staging, lighting, costing, decor, and publicity.

¹MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.
²At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
³In addition to DAN 118, students should take a total of two credits from DAN 119, 120, 232, or 233 in their 4th semester.
⁴Students should choose 3 credits from DAN 109 & 209 (1 cr each), 140 (1 cr), 225, 224, or 231
The **Digital Design Option** provides students with an in-depth understanding of two-dimensional digital design, three-dimensional object modeling and animation, and sound design. Required courses focus on the detailed study of 3D modeling and animation, digital photography and video production, digital audio and sound design, and Web design and development. Topics are explored from both a theoretical and applications perspective. The program mission is to prepare digital designers for jobs in marketing, video production, music and sound production, graphic art production, and electronic publishing.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

Upon successful completion of all program requirements graduates will be able to:

1. Design and edit digital graphic and image files.
2. Utilize techniques for 3D character modeling and the design of 3D virtual space.
3. Analyze and evaluate the properties of sound, human hearing, psychoacoustics, electro-acoustic and digital sound reproduction systems.
4. Design state-of-the-art special effect techniques for film and video.
6. Plan, produce, script, edit, and complete original video projects.

### Program Objectives

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Course Number &amp; Title</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Communications</td>
<td>COM*H100 Introduction to Communications</td>
<td>3</td>
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<tr>
<td>Core Communications</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Core Humanities</td>
<td>ENG<em>H102 Literature and Composition or ENG</em>H200 Advanced Composition</td>
<td>3</td>
</tr>
<tr>
<td>Core Mathematics</td>
<td>MAT<em>H135 Topics in Contemporary Mathematics or any Mathematics course higher than MAT</em>H137(^1)</td>
<td>3</td>
</tr>
<tr>
<td>Core Science</td>
<td>Any Science (AST, BIO, CHE, GLG, MET or PHY) course (except BIO*H111)</td>
<td>3-4</td>
</tr>
<tr>
<td>Core Behavioral Science</td>
<td>ANT<em>H101 Introduction to Anthropology or PSY</em>H111 General Psychology I or SOC*H101 Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Core Social Science</td>
<td>HIS<em>H101 Western Civilization I or HIS</em>H102 Western Civilization II or HIS<em>H201 U.S. History I or HIS</em>H202 U.S. History II</td>
<td>3</td>
</tr>
<tr>
<td>Core Liberal Arts and Behavioral/Social Sciences</td>
<td>ART<em>H101 Art History or ART</em>H102 Art History II</td>
<td>3</td>
</tr>
<tr>
<td>Program Arts</td>
<td>DAN*H101 History and Appreciation of World Dance</td>
<td>3</td>
</tr>
<tr>
<td>Program Arts</td>
<td>DAT*H101 Introduction to Digital Arts</td>
<td>3</td>
</tr>
<tr>
<td>Program Arts</td>
<td>MUS*H101 History &amp; Appreciation of Music</td>
<td>3</td>
</tr>
<tr>
<td>Program Arts</td>
<td>THR*H101 Introduction to Theater</td>
<td>3</td>
</tr>
<tr>
<td>Program Arts</td>
<td>Visual and Performing Arts Electives (students should choose 9 credits from courses listed on this page)</td>
<td>9</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>DAT*H106 Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>DAT*H108 Digital Imaging I</td>
<td>3</td>
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<tr>
<td>Program Requirement</td>
<td>DAT*H110 Digital Video Production I</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>DAT*H212 3D Graphics &amp; Animation</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>DAT*H220 Acoustics &amp; Sound Design</td>
<td>3</td>
</tr>
<tr>
<td>Program Business</td>
<td>CSA*H105 Introduction to Software Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 63-64**

\(^1\)Students intending to transfer are encouraged to take MAT 146, 167, or 172.

### Visual and Performing Arts Electives

- ART*H101 Art History I
- ART*H102 Art History II
- ART*H122 Three-Dimensional Design
- ART*H131 Sculpture I
- ART*H132 Sculpture II
- ART*H141 Photography I
- ART*H142 Photography II
- ART*H160 Crafts
- ART*H161 Ceramics I
- ART*H162 Ceramics II
- ART*H167 Printmaking I
- COM*H175 Voice and Diction
- DAN*H102 Ballet I: Renaissance to Romantic
- DAN*H111 Jazz Dance I: Afro-Caribbean/ American
- DAN*H112 Jazz Dance II: Broadway & Film
- DAN*H113 Modern Dance I: Pioneers of America
- DAT*H116 Digital Design
- DAT*H116 Interactive Media Design
- DAT*H212 3D Graphics and Animation I
- DAT*H290 Digital Arts Project
- GRA*H150 Introduction to Graphic Design
- MUS*H103 History of American Music
- MUS*H104 World Music
- MUS*H111 Fundamentals of Music I
- MUS*H153 Class Instruction Piano
- MUS*H158 Chamber Music/Jazz Ensemble
- MUS*H163 Ear Training I
- MUS*H164 Ear Training II
- MUS*H176 Gospel Choir
- MUS*H179 Opera Performance Ensemble
- MUS*H184 Applied Private Music Lessons
- MUS*H206 Introduction to Music Education
- MUS*H208 Introduction to Music Therapy
- MUS*H213 Music Theory III
- MUS*H214 Music Theory IV
- MUS*H254 Concert Band
- MUS*H218 Electronic Music Composition/Audio Technology I
- THR*H110 Acting I
- THR*H120 Stagecraft
- THR*H190 Theater Practicum I
The Music Option, through a rigorous program of academic and performance courses, provides a comprehensive foundation in which students receive individual attention within their private lessons and interact with other performers in classroom and large ensemble settings. The music program emphasizes ensemble and solo performance with additional study of music theory and history. Musicians of all capabilities and experience can prepare for their particular musical goals including seasoned musicians as well as the talented beginner exploring music for the first time. Music majors pursue careers in performance, education, composition, audio recording, concert sound reinforcement, commercial production, church music, musical instrument service and sales, or arts management. The Transfer Program is designed for students wishing to complete their degree at a 4-year college or university; requirements vary and students should seek assistance from the Music Advisor. The Transfer Program articulated with Western CT State University guarantees admission with complete transfer of NVCC courses. See the Music Advisor for details.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

### Competency or Program Requirement

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>MUS*H101 Music History &amp; Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed (Prefer COM*H100)</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>MUS*H115 Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MUS*H163 Ear Training I</td>
<td>1</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MUS*H183 Applied Private Music Lessons (one credit per semester)</td>
<td>1</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Choose one from MUS<em>H161, MUS</em>H254, or MUS*H158 Ensemble (two credits per semester)</td>
<td>2</td>
</tr>
<tr>
<td><strong>SECOND SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Reasoning&lt;sup&gt;1&lt;/sup&gt;</td>
<td>MAT*H135 or higher than 137</td>
<td>3</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed (Prefer ANT<em>H101, PSY</em>H111, or SOC*H101)</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication (Prefer ENG*H102)</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>MUS*H116 Music Theory II</td>
<td>3</td>
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<tr>
<td>Program Requirement</td>
<td>MUS*H164 Ear Training II</td>
<td>1</td>
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<tr>
<td>Program Requirement</td>
<td>MUS*H183 Applied Private Music Lessons (one credit per semester)</td>
<td>1</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Choose one from MUS<em>H161, MUS</em>H254, or MUS*H158 Ensemble (two credits per semester)</td>
<td>2</td>
</tr>
<tr>
<td><strong>THIRD SEMESTER</strong></td>
<td></td>
<td></td>
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<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Reasoning&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Choose any Scientific Reasoning listed (Prefer DAN*H175)</td>
<td>3-4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MUS*H184 Applied Private Music Lessons (two credits per semester)</td>
<td>2</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Choose one from MUS<em>H161, MUS</em>H254, or MUS*H158 Ensemble (two credits per semester)</td>
<td>2</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MUS*H213 Music Theory III</td>
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<tr>
<td>Program Requirement</td>
<td>MUS*H263 Ear Training III</td>
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<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
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<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed (Prefer DAT*H101)</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Choose any Scientific Knowledge listed (Prefer BIO*H105)</td>
<td>3-4</td>
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<tr>
<td>Program Requirement</td>
<td>MUS*H184 Applied Private Music Lessons (two credits per semester)</td>
<td>2</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Choose one from MUS<em>H161, MUS</em>H254, or MUS*H158 Ensemble (two credits per semester)</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>MUS*H214 Music Theory IV</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>MUS*H264 Ear Training IV</td>
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</tbody>
</table>

### Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Relate basic musical forms and theoretical principles to performance.
2. Demonstrate technical skills in singing and/or in playing an instrument or instruments.
3. Demonstrate historical knowledge of musical events, styles, forms and concepts.
4. Demonstrate a knowledge of musical literature in the area of the student’s major.
5. Demonstrate performance skills via ensemble experience.
6. Develop an appreciation of world culture through the beauty and discipline of the Art of music.

<sup>1</sup>MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

<sup>2</sup>At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

**Total Credits: 60-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.
## Theater Arts Option

The **Theater Arts Option** offers a challenging course of study for both the novice student and experienced theater artist. Through a combination of classroom training, production experience opportunities, and community service outreach, NVCC theater students develop a definite set of skills, knowledge, and values that lead to growth as individuals, artists, and future theater professionals. Ultimately, the NVCC theater program strives to develop the creative and intellectual potential in both arts and non-arts majors at the college. Graduate employment may include assistantships as directors, stage managers, theater technicians, box office managers, marketing coordinators, sound engineers, lighting assistants, or acting interns.

General Education Core course listings and definitions appear on pages 54-57. Placement testing will determine the sequencing of courses. Additional courses may be required.

### Program Objectives

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate knowledge of historical events in film and theater.
2. Demonstrate the art of stage technology, costuming, set construction, and lighting.
3. Demonstrate specific performance skills in acting, including character analysis, blocking, interpretation, voice and diction.
4. Master the art of theatrical auditioning.
5. Develop a repertory of theatrical roles through participation in plays and theater events.
6. Develop an appreciation of world culture through the beauty and discipline of the art of theater.

### Visual and Performing Arts Electives

- **ART*H101 History I**
- **ART*H102 History II**
- **ART*H112 Two-Dimensional Design**
- **ART*H122 Three-Dimensional Design**
- **ART*H131 Sculpture I**
- **ART*H132 Sculpture II**
- **ART*H141 Photography I**
- **ART*H142 Photography II**
- **ART*H160 Crafts**
- **ART*H161 Ceramics I**
- **ART*H162 Ceramics II**
- **ART*H167 Printmaking I**
- **COM*H175 Voice and Diction**
- **DAN*H101, *H102, *H111, or *H121 Dance Elective** (Choose one from)
- **DAN*H113 Modern Dance I: Pioneers of America**
- **DAN*H112 Jazz Dance II: Broadway & Film**
- **DAN*H111 Jazz Dance I: Afro-Caribbean/ American**
- **DAT*H106 Digital Design**
- **DAT*H116 Interactive Media Design**
- **DAT*H212 3D Graphics and Animation I**
- **DAT*H290 Digital Arts Project**
- **GRA*H150 Introduction to Graphic Design**
- **GRA*H151 I Introduction to Graphic Design**
- **GRA*H152 II Introduction to Graphic Design**
- **MUS*H101 History and Appreciation of Music**
- **MUS*H103 History of American Music**
- **MUS*H104 World Music**
- **MUS*H120 Voice and Diction**
- **MUS*H176 Gospel Choir**
- **MUS*H184 Applied Private Music Lessons**
- **MUS*H183 Applied Private Music Lessons**
- **MUS*H190 Vocal Class Voice**
- **MUS*H206 Ear Training I**
- **MUS*H214 Music Theory I**
- **MUS*H215 Music Theory IV**
- **MUS*H218 Electronic Music Composition/Audio Technology I**
- **MUS*H225 Directing**
- **MUS*H226 Musical Theater Production**
- **MUS*H231 Dramatic Literature**
- **MUS*H295 Theater Practicum III**

### Competency or Program Requirement

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>THR*H101 Introduction to Theater</td>
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<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H135 or higher than 137</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>THR*H110 Acting I</td>
<td>3</td>
</tr>
<tr>
<td><strong>SECOND SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>THR*H120 Acting II</td>
<td>3</td>
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<td>Program Requirement</td>
<td>THR*H120 Stagecraft</td>
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<tr>
<td>Program Requirement</td>
<td>Visual Arts Elective (choose one from ART *H101, *H102, *H111, or *H121)</td>
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<td><strong>THIRD SEMESTER</strong></td>
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<td>Scientific Reasoning◊◊</td>
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<tr>
<td>Program Requirement</td>
<td>THR*H190 Theatre Practicum I</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<td></td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed (Prefer DAT*H101)</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Knowledge◊◊</td>
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<td>3-4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>THR*H290 Theatre Practicum II</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Dance Elective, (Choose one from: MUS *H101, *H102, *H111, or *H113)</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>Visual and Performing Arts Elective 1</td>
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</tr>
</tbody>
</table>

**Total Credits: 60-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊◊MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

◊◊At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

Choose 6 credits from Visual and Performing Arts Electives listed in the right column and College catalog.
For students who wish to start a bachelor degree at NVCC, we offer Transfer Ticket Programs in the following degrees:

<table>
<thead>
<tr>
<th>Degree</th>
<th>NVCC Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting (Business)</td>
<td>Early Childhood (Teacher Credential)</td>
</tr>
<tr>
<td>Art</td>
<td>English</td>
</tr>
<tr>
<td>Biology</td>
<td>Finance (Business)</td>
</tr>
<tr>
<td>Business Administration</td>
<td>History</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Italian</td>
</tr>
<tr>
<td>Communication</td>
<td>Marketing (Business)</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Management</td>
</tr>
<tr>
<td>Criminology</td>
<td></td>
</tr>
</tbody>
</table>

Transfer Ticket Degrees allow NVCC students to complete associate degree programs that transfer without hassle to all Connecticut State Universities and Charter Oak State College offering their major. Upon transfer, students are guaranteed full junior status and can complete a bachelor degree in their major without losing any credits or being required to take any extra credits.¹

Although all requirements for most of these majors may be completed at NVCC, the following program courses are not currently offered at the college and may need to be taken at an alternative community college or state university.

**Art Studies**

- ART 250 Digital Photography*
  *NVCC offers DAT 102 Photography

**Biology Studies**

- CHE 211 Organic Chemistry I

**Chemistry Studies**

- CHE 211 Organic Chemistry I
- CHE 212 Organic Chemistry II

**Computer Science**

- MAT 210 Discrete Math

**Italian**

- ITA 201 Intermediate Italian I
- ITA 202 Intermediate Italian II

**Theater Studies**

- THR 102 Theater History I
- THR 112 Voice and Diction

For additional information regarding these programs, please see an NVCC advisor and review information at the CSCU Transfer Ticket Website at [http://www.ct.edu/transfer/tickets](http://www.ct.edu/transfer/tickets)

¹Note: Transfer Tickets do not include seamless transfer to the University of Connecticut.
## ART STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
<td>3</td>
</tr>
<tr>
<td>Creativity</td>
<td>ART*H111 Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Unrestricted Electives(^5) - See advisor</td>
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<td><strong>SECOND SEMESTER</strong></td>
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<td></td>
</tr>
<tr>
<td>Quantitative Reasoning(^3)</td>
<td>Choose any Quantitative Reasoning listed</td>
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<td>Scientific Reasoning(^6)</td>
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<td>Written Communication</td>
<td>ENG<em>H102 Literature and Composition or ENG</em>H200 Advanced Composition</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>ART*H101 Art History I</td>
<td>3</td>
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<tr>
<td>Program Requirement</td>
<td>ART*H121 2-D Design</td>
<td>3</td>
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<tr>
<td><strong>THIRD SEMESTER</strong></td>
<td></td>
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<tr>
<td>Scientific Knowledge(^2)</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>ART*H102 Art History II</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>ART<em>H122 3-D Design or ART</em>H131 Sculpture I</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Unrestricted Electives(^1) - See advisor</td>
<td>3</td>
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<tr>
<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td><strong>Program Requirement</strong></td>
<td>Select 3 courses, with no more than one course from each group 1-6: 1. ART<em>H112 Drawing II 2. ART</em>H151 Painting I 3. ART<em>H167 Printmaking 4. ART</em>H131 Sculpture I or ART<em>H161 Ceramics 5. GRA</em>H111 Computer Graphics or GRA<em>H150 Introduction to Computer Graphics 6. DAT</em>H102 Intro to Photography</td>
<td>6-9</td>
</tr>
<tr>
<td><strong>Program Requirement</strong></td>
<td>Unrestricted Electives(^7) - See advisor</td>
<td>0-3</td>
</tr>
</tbody>
</table>

**Total Credits: 61-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

\(^3\)MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

\(^5\)At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

\(^7\)Students should consider beginning or completing work on foreign language requirements for CCSU, WCSU, ECSU & Charter Oak.
General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT<em>H185 Trigonometric Functions or MAT</em>H186 Precalculus</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>CHE*H121 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>BIO*H121 General Biology I</td>
<td>4</td>
</tr>
<tr>
<td><strong>SECOND SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>BIO*H122 General Biology II (spring only)</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>CHE*H122 General Chemistry II (spring only)</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MAT*H254 Calculus I</td>
<td>4</td>
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<tr>
<td><strong>THIRD SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Any 200 level BIO laboratory course</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>PHY<em>H121 General Physics I or CHE</em>H211 Organic Chemistry I¹</td>
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<tr>
<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
<td>3</td>
</tr>
<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Any 200 level BIO laboratory course</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>PHY<em>H122 General Physics II or CHE</em>H212 Organic Chemistry II¹</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits: 60-61**

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.*

¹Not currently offered at NVCC. This course is offered at Tunxis, Gateway, WCSU, CCSU and SCSU.
Business Division
CSCU Pathway Transfer A.A./A.S. Degree

BUSINESS STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H167 Principles of Statistics†</td>
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<tr>
<td>Social Phenomena</td>
<td>ECN*H101 Macroeconomics‡</td>
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<tr>
<td>Program Requirement</td>
<td>ACC*H113 Principles of Financial Accounting‡</td>
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<tr>
<td><strong>SECOND SEMESTER</strong></td>
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<tr>
<td>Global Knowledge</td>
<td>ECN*H102 Microeconomics</td>
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<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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<tr>
<td>Scientific Reasoning‡</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
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<tr>
<td>Program Requirement</td>
<td>ACC*H117 Principles of Managerial Accounting‡</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>MAT<em>H158 Functions, Graphs and Matrices, MAT</em>H232 Applied Calculus, OR MAT*H254 Calculus I</td>
<td>4</td>
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<tr>
<td><strong>THIRD SEMESTER</strong></td>
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<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
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<tr>
<td>Scientific Knowledge‡</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
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<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
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<tr>
<td>Program Requirement</td>
<td>BBG*H210 Business Communication</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>BMK*H201 Principles of Marketing‡</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
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<tr>
<td>Continuing Learning/Information Literacy/Ethics</td>
<td>Choose any Continuing Learning/ Information Literacy/Ethics listed</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>BBG*H231 Business Law F†</td>
<td>3</td>
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<tr>
<td>Program Requirement</td>
<td>BMG*H202 Principles of Management‡</td>
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<tr>
<td>Program Requirement</td>
<td>BFN*H201 Principles of Finance‡</td>
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<tr>
<td>Program Requirement</td>
<td>General Elective (any 100 level or above)</td>
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</table>

Total Credits: 60-61

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

†At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

‡Must earn a C- or above in these courses.

§Must earn a C or above in these courses.

Must earn a cumulative 2.5 or above in these 6 courses. Guaranteed admission into a State University or Charter Oak requires an overall 2.0 GPA (2.5 for Central CT State University)
General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H254 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Knowledge</td>
<td>CHE*H121 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>Choose any credit-bearing course&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
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<tr>
<td><strong>SECOND SEMESTER</strong></td>
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<td></td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
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<tr>
<td>Scientific Reasoning</td>
<td>CHE*H122 General Chemistry II</td>
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<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
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<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>MAT*H256 Calculus II</td>
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<td><strong>THIRD SEMESTER</strong></td>
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<td></td>
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<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/Written Communications listed</td>
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<tr>
<td>Program Requirement</td>
<td>CHE*H211 Organic Chemistry I&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td>Program Requirement</td>
<td>PHY*H221 Calculus Based Physics I&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>Program Requirement</td>
<td>Choose any credit-bearing course&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
<td><strong>FOURTH SEMESTER</strong></td>
<td></td>
<td></td>
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<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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<tr>
<td>Program Requirement</td>
<td>CHE*H212 Organic Chemistry II&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td>Program Requirement</td>
<td>PHY*H222 Calculus Based Physics II&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>Program Requirement</td>
<td>Choose any credit-bearing course&lt;sup&gt;1&lt;/sup&gt;</td>
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</tbody>
</table>

**Total Credits: 62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

<sup>1</sup>If student is not MAT*H254 Calculus I-ready, use general electives for courses such as MAT*H137 Intermediate Algebra, MAT*H172 College Algebra and MAT*H185 Trigonometric Functions, or MAT*H186 Precalculus.

<sup>2</sup>Not currently offered at NVCC. This course is offered at Tunxis, Gateway, WCSU, CCSU and SCSU.

<sup>3</sup>Summer only at NVCC. This course is offered in the fall and spring semesters at Housatonic, Gateway, Tunxis, Norwalk, WCSU, CCSU, and SCSU. PHY*H221 and H222 Calculus-Based Physics I&II must be taken for the American Chemical Society approved Bachelor’s degree.
General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/Written Communications listed</td>
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</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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</tr>
<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed (COM*H173 preferred)</td>
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<tr>
<td>Quantitative Reasoning◊</td>
<td>Choose any Quantitative Reasoning listed</td>
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<tr>
<td>Scientific Knowledge◊◊</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
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<tr>
<td>Scientific Reasoning◊◊</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
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<tr>
<td>Program Requirements</td>
<td>General Education Elective - Creativity</td>
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<tr>
<td></td>
<td>General Education Elective - Global Knowledge</td>
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<tr>
<td></td>
<td>COM*H173 Public Speaking or Free Elective if taken</td>
<td>3</td>
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<td></td>
<td>COM*H101 Introduction to Mass Communication</td>
<td>3</td>
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<tr>
<td></td>
<td>COM<em>H172 Interpersonal Communication or COM</em>H226 Journalism I</td>
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<tr>
<td></td>
<td>COM Elective (excluding COM*H100)</td>
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<td>COM Elective (excluding COM*H100)</td>
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<td>Free Elective1</td>
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<td></td>
<td>Free Elective1</td>
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</table>

**Total Credits: 61-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

◊◊At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

1Students completing 3 years of modern language in high school may substitute 6 credits of General Electives.

Note: Some 4-year colleges may require a language proficiency exam. Students should consider beginning or completing work on foreign language requirements for CCSU, WCSU, ECSU & Charter Oak.
General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.

### Competency or Program Requirement

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<th>Course Number and Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Continuing Learning/Information Literacy/Ethics</td>
<td>Choose any Continuing Learning/Information Literacy/Ethics listed</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
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</tr>
<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H186 Pre-Calculus</td>
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</tr>
<tr>
<td>Scientific Knowledge(^1)</td>
<td>BIO<em>H122, CHE</em>H122, or PHY*H222</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Reasoning(^2)</td>
<td>BIO<em>H121, CHE</em>H121, or PHY*H221</td>
<td>4</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
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</tr>
<tr>
<td>Program Requirements</td>
<td>CSC*H113 Programming I(^2)</td>
<td>3</td>
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<td></td>
<td>CSC*H229 Programming II(^2)</td>
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<tr>
<td></td>
<td>MAT*H254 Calculus I(^1)</td>
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<tr>
<td></td>
<td>Choose any Social Phenomena listed</td>
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<tr>
<td></td>
<td>CSC*H231 Database Design I(^1)</td>
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<td>MAT*H256 Calculus II(^1)</td>
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<td>CSC*H227 Web Programming with Java</td>
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<td>EET*H252 Digital Electronics(^2)</td>
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<tr>
<td></td>
<td>MAT*H210 Discrete Math(^1)</td>
<td>3</td>
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</tbody>
</table>

**Total Credits: 60**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

1. You must choose the second course in the sequence you began in the first semester; choose from:
   - BIO*H121 ➔ BIO*H122 General Biology II
   - CHE*H121 ➔ CHE*H122 General Chemistry II
   - PHY*H221 ➔ PHY*H222 Calculus-based Physics II

2. Must earn a C or above on these courses.

See Engineering Department to discuss waive of prerequisites for EET*H252 Digital Electronics agreement on this for Pathway Transfer students.

3. Must earn a C- or above on these courses.
### Liberal Arts and Behavioral/Social Sciences Division

**CSCU Pathway Transfer A.A./A.S. Degree**

**CRIMINOLOGY STUDIES**

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.

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<tr>
<th>Competency or Program Requirement</th>
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<th>Required Credits</th>
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<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/Written Communications listed</td>
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</tr>
<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
<td>3</td>
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<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H167 Principles of Statistics</td>
<td>3</td>
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<tr>
<td>Scientific Knowledge◊</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Reasoning◊</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>SOC*H101 Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
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</table>

<table>
<thead>
<tr>
<th>Program Requirements</th>
<th>Course Number and Title</th>
<th>Required Credits</th>
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<td>CJS*H101 Introduction to Criminal Justice</td>
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<td>CJS*H102 Introduction to Corrections</td>
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<tr>
<td>CJS*H105 Introduction to Law Enforcement</td>
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<tr>
<td>SOC*H240 Criminology</td>
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</tr>
<tr>
<td>CJS*H210 Constitutional Law</td>
<td>3</td>
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<tr>
<td>General Elective - PSY*H111 General Psychology I</td>
<td>3</td>
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<tr>
<td>Choose any Creativity or Global Knowledge course</td>
<td>3</td>
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<tr>
<td>Choose one of the following:</td>
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<td>CJS*H211 Criminal Law I</td>
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<td>CJS*H220 Criminal Investigation</td>
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<td>CJS*H225 Forensic Science</td>
<td>3</td>
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<td>CJS*H280 Victimology</td>
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<table>
<thead>
<tr>
<th>Unrestricted Electives◊</th>
<th></th>
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</thead>
</table>

**Total Credits: 61-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

◊Students should consider beginning or completing work on foreign language requirements not already met in high school and beginning work on minor requirements of some CSUs. They may also complete other General Education requirements for CCSU, WCSU, SCSU and Charter Oak (not ECSU).
General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.

## EARLY CHILDHOOD TEACHER CREDENTIAL STUDIES

Liberal Arts and Behavioral/Social Sciences Division

**CSCU Pathway Transfer A.A./A.S. Degree**

### Competency or Program Requirement

<table>
<thead>
<tr>
<th>Competency or Program Requirement</th>
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<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
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<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/Written Communications listed</td>
<td>3</td>
</tr>
<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 - Composition</td>
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<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
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<tr>
<td>Social Phenomena</td>
<td>PSY*H11 General Psychology I</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H101 Introduction to Early Childhood Education</td>
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<td><strong>SECOND SEMESTER</strong></td>
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<tr>
<td>Quantitative Reasoning</td>
<td>Choose any Quantitative Reasoning listed</td>
<td>3</td>
</tr>
<tr>
<td>Program Requirement</td>
<td>ECE*H103 Creative Experiences for Children</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H106 Music and Movement for Children</td>
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<td>Program Requirement</td>
<td>ECE*H176 Health, Safety and Nutrition</td>
<td>3</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H231 Early Language and Literacy Development</td>
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<tr>
<td>Scientific Knowledge</td>
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<td>Written Communication</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H210 Observation, Participation and Seminar</td>
<td>3</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H290 Student Teaching I</td>
<td>3</td>
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<td>Program Requirement</td>
<td>PSY<em>H203 Child Development (Must be completed before ECE</em>H215)</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<tr>
<td>Continuing Learning/Information Literacy/Ethics</td>
<td>Choose any Continuing Learning/Information Literacy/Ethics listed</td>
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<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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</tr>
<tr>
<td>Scientific Reasoning</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H215 The Exceptional Learner</td>
<td>3</td>
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<tr>
<td>Program Requirement</td>
<td>ECE*H291 Student Teaching II</td>
<td>3</td>
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</tbody>
</table>

**Total Credits: 61-62**

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

\(^{9}\)MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

\(^{10}\)At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

\(^{1}\)Must be completed before ECE*H290 and ECE*H291
CSCU Pathway Transfer A.A./A.S. Degree

ENGLISH STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. **In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.**

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<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/Written Communications listed</td>
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<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
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<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
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<tr>
<td>Quantitative Reasoning◊</td>
<td>Choose any Quantitative Reasoning listed</td>
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<td>Scientific Knowledge◊◊</td>
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<tr>
<td>Scientific Reasoning◊◊</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
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<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
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<tr>
<td>Written Communication</td>
<td>ENG<em>H102 Literature and Composition OR ENG</em>H200 Advanced Composition</td>
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<td>Program Requirements</td>
<td>ENG<em>H241 World Literature I OR ENG</em>H242 World Literature II</td>
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<td>ENG<em>H221 American Literature I OR ENG</em>H231 British Literature I¹</td>
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<td>ENG<em>H222 American Literature II OR ENG</em>H232 British Literature II¹</td>
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<td>Choose any Creativity course listed</td>
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<td>Choose any Global Knowledge course listed</td>
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<td>Free Elective²</td>
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◊◊At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

¹ Must complete one American and one British Literature course.

² Students should consider beginning or completing work on foreign language requirements for CCSU, WCSU, ECSU & Charter Oak.
General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.

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<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
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<tr>
<td>Continuing Learning/Information Literacy/Ethics</td>
<td>Choose any Continuing Learning/ Information Literacy/Ethics listed</td>
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<tr>
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<td>FRE*H101 Elementary French I</td>
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<td>Program Requirement</td>
<td>Unrestricted Electives - See advisor</td>
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<tr>
<td><strong>SECOND SEMESTER</strong></td>
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<td>Quantitative Reasoning◊</td>
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<td>Scientific Reasoning◊◊</td>
<td>Choose any Scientific Reasoning listed</td>
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<td>Program Requirement</td>
<td>FRE*H102 Elementary French II</td>
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<td>Unrestricted Electives - See advisor</td>
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<td><strong>THIRD SEMESTER</strong></td>
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<td>Program Requirement</td>
<td>FRE*H201 Intermediate French I</td>
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<td>Program Requirement</td>
<td>Unrestricted Electives - See advisor</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<tr>
<td>Global Knowledge</td>
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<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
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<tr>
<td>Program Requirement</td>
<td>FRE*H202 Intermediate French II</td>
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<td>Unrestricted Electives - See advisor</td>
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## HISTORY STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. **In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.**

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<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
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<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed except HIS<em>H201 or HIS</em>H202</td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
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<tr>
<td>Quantitative Reasoning◊</td>
<td>Choose any Quantitative Reasoning listed</td>
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<tr>
<td>Scientific Knowledge◊◊</td>
<td>Choose any Scientific Knowledge listed (prefer BIO*H105)</td>
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<tr>
<td>Scientific Reasoning◊◊</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
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<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
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<tr>
<td>Written Communication</td>
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<td>Program Requirements</td>
<td>HIS*H201 U.S. History I</td>
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<td>HIS*H202 U.S. History II</td>
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<td>Choose any Creativity course listed</td>
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<td>Choose any Global Knowledge course listed</td>
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<td>Continuing Learning/Information Literacy/Ethics</td>
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<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
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<td>Program Requirement</td>
<td>ITA*H101 Elementary Italian I</td>
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<tr>
<td>Program Requirement</td>
<td>General Elective</td>
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</table>

| **SECOND SEMESTER**              |                         |                 |
| Quantitative Reasoning◊       | Choose any Quantitative Reasoning listed | 3 |
| Scientific Reasoning◊◊        | Choose any Scientific Reasoning listed | 3-4 |
| Written Communication         | Choose any Written Communication listed | 3 |
| Program Requirement | ITA*H102 Elementary Italian II | 3 |
| Program Requirement | General Elective | 3 |

| **THIRD SEMESTER**              |                         |                 |
| Creativity                      | Choose any Creativity listed | 3 |
| Scientific Knowledge◊◊         | Choose any Scientific Knowledge listed | 3-4 |
| Social Phenomena                | Choose any Social Phenomena listed | 3 |
| Program Requirement | ITA*H201 Intermediate Italian I | 3 |
| Program Requirement | General Elective | 3 |

| **FOURTH SEMESTER**             |                         |                 |
| Global Knowledge                | Choose any Global Knowledge listed | 3 |
| Historical Knowledge            | Choose any Historical Knowledge listed | 3 |
| Oral Communication              | Choose any Oral Communication listed | 3 |
| Program Requirement | ITA*H202 Intermediate Italian II | 3 |
| Program Requirement | General Elective | 3 |

**Total Credits: 61-62**

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<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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<tr>
<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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<tr>
<td>Quantitative Reasoning</td>
<td>MAT<em>H185 Trigonometric Functions¹ OR MAT</em>H186 Precalculus¹</td>
<td>3-4</td>
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<tr>
<td>Program Requirement</td>
<td>Choose any unrestricted elective any credit bearing course²</td>
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<tr>
<td><strong>SECOND SEMESTER</strong></td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
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<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
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<tr>
<td>Program Requirement</td>
<td>MAT*H254 Calculus I¹</td>
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<tr>
<td>Program Requirement</td>
<td>CSC<em>H113 Programming I OR CSC</em>H205 Visual Basic I</td>
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<td><strong>SUMMER SEMESTER</strong></td>
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<tr>
<td>Program Requirement</td>
<td>MAT*H256 Calculus II¹</td>
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<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/ Written Communications listed</td>
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<tr>
<td>Scientific Knowledge</td>
<td>Introductory Science Course Sequence¹</td>
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<td>Program Requirement</td>
<td>MAT*H268 Calculus III: Multivariable (fall only)³</td>
<td>4</td>
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<td>Program Requirement</td>
<td>Choose any unrestricted elective any credit bearing course²</td>
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<tr>
<td><strong>FOURTH SEMESTER</strong></td>
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<tr>
<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Scientific Reasoning</td>
<td>Introductory Science Course Sequence¹</td>
<td>4</td>
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<td>Math Elective⁴</td>
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</tr>
<tr>
<td>Program Requirement</td>
<td>Choose any unrestricted elective - any credit bearing course²</td>
<td>3-4</td>
</tr>
</tbody>
</table>

**Total Credits: 60**

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

¹ If student is MAT*H254 Calculus I-ready, student should enroll in MAT*H254 Calculus in 1st semester and MAT*H256 Calculus II in 2nd semester. If student is not MAT*H185 or H186-ready, use unrestricted electives to take MAT* prerequisite courses, e.g. MAT*H137 or MAT*H172.

² 8-10 credits to reach 60 total program credits. Amount needed depends on choice of MAT*H185 or H186 and Math Elective.

³ Choose from BIO*H121 & BIO*H122 OR BIO *H155 & BIO *H145 (SCSU transfer only) OR CHE*H121 and CHE*H122 OR PHY*H121 and PHY*H122 OR PHYH221 & PHY*H222

Science, Technology, Engineering & Mathematics Division

CSCU Pathway Transfer A.A./A.S. Degree

PHYSICS STUDIES

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<tbody>
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<td><strong>FIRST SEMESTER</strong></td>
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<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H254 Calculus I</td>
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<td>Scientific Reasoning</td>
<td>CHE*H121 General Chemistry I</td>
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<td>CHE*H122 General Chemistry II</td>
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<td>MAT*H256 Calculus II</td>
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<td>Program Requirement</td>
<td>PHY*H221 Calculus Based Physics I²</td>
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<td>Aesthetic Dimensions/Written Communications</td>
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<td>Continuing Learning/Information Literacy/Ethics</td>
<td>Choose any Continuing Learning/ Information Literacy/Ethics listed</td>
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<tr>
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<td>Choose any Social Phenomena listed</td>
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<td>Program Requirement</td>
<td>MAT*H268 Calculus III: Multivariable</td>
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<tr>
<td>Program Requirement</td>
<td>PHY*H222 Calculus Based Physics II²</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<tr>
<td>Creativity</td>
<td>Choose any Creativity listed</td>
<td>3</td>
</tr>
<tr>
<td>Global Knowledge</td>
<td>Choose any Global Knowledge listed</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication listed</td>
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<td>Written Communication</td>
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<tr>
<td>Program Requirement</td>
<td>MAT*H285 Differential Equations</td>
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</tbody>
</table>

**Total Credits: 61**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

¹ If you have not taken Physics in high School, you should use this elective to take PHY*H110 Introductory Physics.
² Course only offered in the summer. Offered during the fall or spring at Tunxis, Gateway, Housatonic, Norwalk, CCSU, SCSU, and WCSU.
### POLITICAL SCIENCE STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. **In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.**

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<tbody>
<tr>
<td><strong>Aesthetic Dimensions/Written Communications</strong></td>
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<td><strong>Continuing Learning and Information Literacy/Ethics</strong></td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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<tr>
<td><strong>Critical Analysis and Logical Thinking/Written Communication</strong></td>
<td>ENG*H101 Composition</td>
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<tr>
<td><strong>Oral Communication</strong></td>
<td>Choose any Oral Communication course listed</td>
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<tr>
<td><strong>Quantitative Reasoning◊</strong></td>
<td>Choose any Quantitative Reasoning listed</td>
<td>3</td>
</tr>
<tr>
<td><strong>Scientific Knowledge◊◊</strong></td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
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<tr>
<td><strong>Scientific Reasoning◊◊</strong></td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
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<td><strong>Social Phenomena</strong></td>
<td>Choose any Social Phenomena listed</td>
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<tr>
<td><strong>Written Communication</strong></td>
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<td><strong>POL*H111 American Government</strong></td>
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<td><strong>Choose any Political Science listed</strong></td>
<td>3</td>
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<td><strong>Choose any Political Science listed</strong></td>
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<tr>
<td><strong>General Education Elective - Creativity</strong></td>
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<tr>
<td><strong>General Education Elective - Global Knowledge</strong></td>
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<tr>
<td><strong>Free Elective¹</strong></td>
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<td><strong>Free Elective¹</strong></td>
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<td><strong>Free Elective¹</strong></td>
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<tr>
<td><strong>Free Elective¹</strong></td>
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</table>

**Total Credits: 61-62**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

◊MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

◊◊At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

¹Students who have taken MAT*H185 should take 9 credits, and students taking MAT*H186 should take 8 credits. Students should consider beginning or completing work on foreign language requirements not already met in high school and beginning work on minor requirements of some CSUs. They may also complete other State University General Education requirements.
### PSYCHOLOGY STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. **In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.**

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<th>Competency or Program Requirement</th>
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<th>Required Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic Dimensions/Written Communications</td>
<td>Choose any Aesthetic Dimensions/Written Communications listed</td>
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<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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<tr>
<td>Critical Analysis and Logical Thinking/Written Communication</td>
<td>ENG*H101 Composition</td>
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<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
<td>3</td>
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<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H167 Principles of Statistics</td>
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<tr>
<td>Scientific Knowledge◊</td>
<td>Choose any Scientific Knowledge listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Scientific Reasoning◊</td>
<td>Choose any Scientific Reasoning listed</td>
<td>3-4</td>
</tr>
<tr>
<td>Social Phenomena</td>
<td>Choose any Social Phenomena listed</td>
<td>3</td>
</tr>
<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PSY*H111 General Psychology I (may be used to fulfill Social Phenomena above, thereby adding 3 credits of unrestricted electives)</td>
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<tr>
<td></td>
<td>PSY*H245 Abnormal Psychology</td>
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<td>General Education Elective - Creativity</td>
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<td></td>
<td>General Education Elective - Global Knowledge</td>
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<td></td>
<td>Free Electives¹</td>
<td>9-12</td>
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<tr>
<td></td>
<td>Choose two of the following: PSY<em>H240 Social Psychology PSY</em>H243 Theories of Personality PSY*H247 Industrial and Organizational Psychology</td>
<td>3 or 6</td>
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<tr>
<td></td>
<td>Choose one of the following: PSY<em>H201 Lifespan Development PSY</em>H203 Child Psychology PSY<em>H204 Child &amp; Adolescent Development PSY</em>H206 Adolescent and Adult Development</td>
<td>3</td>
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</tbody>
</table>

**Total Credits: 61-62**

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.*

◊At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

¹ Students who have taken MAT*H185 should take 9 credits, and students taking MAT*H186 should take 8 credits. Students should consider beginning or completing work on foreign language requirements not already met in high school and beginning work on minor requirements of some CSUs. They may also complete other State University General Education requirements.
SOCIAL WORK STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. **In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.**

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<tr>
<td>Continuing Learning and Information Literacy/Ethics</td>
<td>Choose any Continuing Learning and Information Literacy/Ethics listed</td>
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<td>Critical Analysis and Logical Thinking/ Written Communication</td>
<td>ENG*H101 Composition</td>
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<td>Historical Knowledge</td>
<td>Choose any Historical Knowledge listed</td>
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<tr>
<td>Oral Communication</td>
<td>Choose any Oral Communication course listed</td>
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<tr>
<td>Quantitative Reasoning</td>
<td>MAT*H167 Principles of Statistics</td>
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<td>Scientific Knowledge</td>
<td>BIO*H115 Human Biology</td>
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<td>Scientific Reasoning</td>
<td>Choose any Scientific Reasoning listed</td>
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<tr>
<td>Social Phenomena</td>
<td>SOC*H101 Principles of Sociology</td>
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<tr>
<td>Written Communication</td>
<td>Choose any Written Communication listed</td>
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</table>

**Program Requirements**

- HSE*H101 Introduction to Human Services 3
- POL*H111 American Government 3
- PSY*H111 General Psychology I 3
- SOC*H201 Contemporary Social Issues at NVCC 3
- ANT*H105 Cultural Anthropology 3
- General Education Elective - Creativity 3
- General Education Elective - Global Knowledge 3
- Choose one or two of the following: HSE*H202 Introduction to Counseling and Interviewing or HSE*H281 Human Services Field Work I 3 or 6
- Unrestricted Electives 1 3-6

**Total Credits: 61**

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1 Students should consider beginning or completing work on foreign language requirements not already met in high school and beginning work on minor requirements of some CSUs. They may also complete other State University General Education requirements.
General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. **In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.**

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<td>Quantitative Reasoning</td>
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<td>Scientific Reasoning</td>
<td>Choose any Scientific Reasoning listed</td>
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<td>Social Phenomena</td>
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<tr>
<td>Written Communication</td>
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<td>Program Requirements</td>
<td>SOC*H101 Principles of Sociology</td>
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<td>Any sociology course (except SOC*H101)</td>
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<td>Any 200 level sociology course</td>
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<td>General Education Elective - Creativity</td>
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SPANISH STUDIES

General education core course listings and definitions appear on pages 53 and 54. Placement testing will determine the sequencing of courses. Additional courses may be required. In order to graduate and be guaranteed admission to a CT State University or to Charter Oak State College, you must earn an overall 2.0 GPA.

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<td>SPA*H101 Elementary Spanish I</td>
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<td>Program Requirement</td>
<td>SPA*H201 Intermediate Spanish I</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<td>Global Knowledge</td>
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<td>Program Requirement</td>
<td>SPA*H202 Intermediate Spanish II</td>
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◊MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

◊◊At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.
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<td><strong>FIRST SEMESTER</strong></td>
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<td>Critical Analysis and Logical Thinking/Written Communication</td>
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<td>Social Phenomena</td>
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<td>Program Requirement</td>
<td>THR*H102 Theater History I</td>
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<td>Historical Knowledge</td>
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<tr>
<td>Quantitative Reasoning(^*)</td>
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<td>Written Communication</td>
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<td>Program Requirement</td>
<td>THR*H120 Stagecraft</td>
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<td>General Elective(^1) - See Advisor</td>
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<td><strong>THIRD SEMESTER</strong></td>
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<td>Aesthetic Dimensions/Written Communications</td>
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<td>Scientific Knowledge(^#)</td>
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<td>Program Requirement</td>
<td>THR*H112 Voice and Diction</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<td>Global Knowledge</td>
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<td>Program Requirement</td>
<td>THR*H210 Acting II</td>
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<td>General Elective(^1) - See Advisor</td>
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<td>Program Requirement</td>
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</tbody>
</table>

**Total Credits: 61**

Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.

\(^*\)MAT*H137 and courses numbered lower than MAT*H137 will not transfer to Connecticut State Universities as Quantitative Reasoning courses.

\(^\#\)At least one Scientific Knowledge and Understanding OR Scientific Reasoning course must have a lab component.

\(^1\)Students should consider beginning or completing work on foreign language requirements for CCSU, WCSU, ECSU, & Charter Oak.
CERTIFICATES, CREDIT PROGRAMS

The certificate programs are designed primarily to assist students in securing employment and to emphasize skills required for that employment. The courses, comprising a sequence of semester hours in a specialty area, are made available to persons who do not seek a degree but who may wish to upgrade their particular skills. Some courses are not offered every semester. Please consult with the Division Director offering the certificate.

Courses may require prerequisites. Refer to the course descriptions located in the back of the catalog.

Accounting Business Division

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC*H113</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC*H117</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC*H123</td>
<td>Accounting Software Applications</td>
<td>3</td>
</tr>
<tr>
<td>ACC*H271</td>
<td>Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACC*H272</td>
<td>Intermediate Accounting II</td>
<td>3</td>
</tr>
</tbody>
</table>

Elect three of the following: (9 credit hours)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC*H241</td>
<td>Federal Taxes I</td>
<td>3</td>
</tr>
<tr>
<td>BBG*H101</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BBG*H231</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BMG*H220</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>BBG*H210</td>
<td>Business Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 24

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate the use of the concepts and techniques of generally accepted accounting principles in the recording and reporting of financial information.
2. Describe accounting system procedures and techniques.
3. Analyze and use financial reports for decision making.
4. Explain the use of financial information in controlling and evaluating performance.
5. Use the vocabulary of financial and managerial accounting and economics for communicating.
6. Explain how budgeting, activity based costing and strategic cost management foster the effective use of resources and help an organization accomplish its goals.
7. Use computerized spreadsheets and accounting software.

Administrative Support Business Division

The Administrative Support Certificate offers students a broad range of computer skills, competent management skills and a keen understanding of the business environment. By choosing an area of focus in Accounting, Legal, Technology or General Business studies, students are prepared for career-oriented positions such as entry-level accounting and bookkeeping, information technology specialists, human resource generalists, legal assistants, legal secretaries, and administrative assistants. Concentrations offer an easy transition into the Business Management Associate Degree program. It also may transition to Associate Degree programs in Business Administration, Business Finance, Legal Assistant/Paralegal, and Marketing. Students are encouraged to complete this Certificate Program as a first step towards earning the Associate Degree. The program may be pursued on a full or part-time basis. Students requiring basic skills development courses in reading, English or math as determined by placement testing are advised to begin their program with these basic skills courses to ensure success in the required business courses. For further information, please contact the Business Division Director.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBG*H105</td>
<td>Intro to Software Applications or</td>
<td>3</td>
</tr>
<tr>
<td>CSC *H101</td>
<td>Introduction to Computers</td>
<td></td>
</tr>
<tr>
<td>BMG*H202</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>CSA*H205</td>
<td>Advanced Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

FOCUS AREAS: (6 credits)

<table>
<thead>
<tr>
<th>Area</th>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>ACC*H113</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC*H117</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Legal</td>
<td>BBG*H231</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BBG*H232</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>Technology</td>
<td>CSC*H231</td>
<td>Database Design I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSA*135</td>
<td>Spreadsheet Applications</td>
<td>3</td>
</tr>
<tr>
<td>General</td>
<td>BMG*H220</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BMG*H105</td>
<td>Supervision and Organizational Behavior</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 15

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate basic knowledge of the components of the business environment and environmental factors affecting business today.
2. Demonstrate understanding of the functions of management: planning, leading, organization and controlling.
3. Demonstrate the skills needed to organize thoughts and ideas and the skills needed to communicate them, verbally and in writing, in a manner that can be easily understood in the business environment.

Advanced English Proficiency Liberal Arts and Behavioral/Social Sciences Division

The English as a Second Language Certificate of Advanced English Proficiency provides non-native speakers of English with personal and professional development opportunities, encourages lifelong learning, and provides employers with measurable proof of proficiency in English. Each of the courses in the program addresses English language skills and abilities necessary for success in academic studies or in careers. Both full and part-time students whose native language is not English are eligible for this program. (Students need to take a minimum of 9 credits of ESL courses to be eligible for this certificate.)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL*H152</td>
<td>ESL Reading &amp; Writing V</td>
<td>6</td>
</tr>
<tr>
<td>ESL*H169</td>
<td>ESL Writing VI or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ESL*H162</td>
<td>6</td>
</tr>
<tr>
<td>Elective</td>
<td>† Directed Elective (Communication)</td>
<td>3</td>
</tr>
<tr>
<td>ENG*H101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>‡ Directed Elective (Reading/ Writing)</td>
<td>3</td>
</tr>
<tr>
<td>COM*H100</td>
<td>Introduction to Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 21
CERTIFICATES, CREDIT PROGRAMS

† Directed Electives (Communication)

ESL*H139 Pronunciation III
ESL*H157 Oral Communications V
COM*H172 Interpersonal Communication
COM*H173 Public Speaking
BBG*H210 Business Communication

‡‡Directed Electives (Reading/Writing)

ENG*H102 Literature & Composition
ENG*H200 Advanced Composition
ENG*H202 Technical Writing
COM*H157 American Film
COM*H226 Journalism I or COM*H227 Journalism II
HIS*H201 U.S. History I or HIS*H202 U.S. History II

*Note: Students who take ESL*H169 instead of ESL*H162 course will need to take three credits in the Directed Electives for Reading/Writing. Students who take the ESL 162 course will NOT need to take three credits in the Directed Electives for Reading / Writing.

**Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate competence in handling a variety of writing assignments.
2. Comprehend diverse texts which are conceptually abstract and linguistically complex.
3. Understand extended discourse on contextualized and abstract topics such as in lectures, speeches, and reports.
4. Show fluency and comfort in the use of English to express their own ideas.
5. Write with precision and detail.
6. Use spoken English with sufficient accuracy to participate effectively in formal and informal conversations on practical, social and professional topics.

**Students who take the ESL 162 course will NOT need to take three credits in the Directed Electives for Reading/Writing.

Advanced Manufacturing Machine Technology

Science, Technology, Engineering & Mathematics Division

The objective of the certificate program is to provide essential skills and knowledge to individuals seeking a position in Advanced Manufacturing. A prerequisite for entry into this certificate program is placement into or above MAT*H095 and ENG*H096 or consent of the program director.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>FIRST SEMESTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MFG*H124</td>
<td>Blueprint Reading I</td>
<td>2</td>
</tr>
<tr>
<td>MFG*H151</td>
<td>Mfg Machinery – Drill Press</td>
<td>1</td>
</tr>
<tr>
<td>MFG*H152</td>
<td>Mfg Machinery – Grinding</td>
<td>2</td>
</tr>
<tr>
<td>MFG*H153</td>
<td>Mfg Machinery – Bench Work</td>
<td>2</td>
</tr>
<tr>
<td>MFG*H154</td>
<td>Mfg Machinery – Lathe I</td>
<td>2</td>
</tr>
<tr>
<td>MFG*H155</td>
<td>Mfg Machinery – Milling I</td>
<td>2</td>
</tr>
<tr>
<td>MFG*H156</td>
<td>Mfg Machinery – CNC I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Directed Elective†</td>
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</tr>
<tr>
<td>MFT*H5234</td>
<td>Metrology (non-credit course)</td>
<td>3</td>
</tr>
<tr>
<td>MFT*H5235</td>
<td>Manufacturing Math I (non-credit course)</td>
<td></td>
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<tr>
<td>MFT*H5236</td>
<td>Career Awareness/Development/ Computer Application (non-credit course)</td>
<td></td>
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<td></td>
<td>Total Credit Hours</td>
<td>16</td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG*H105</td>
<td>Manufacturing Math II</td>
<td>3</td>
</tr>
<tr>
<td>MFG*H125</td>
<td>Blueprint Reading II</td>
<td>3</td>
</tr>
<tr>
<td>MFG*H254</td>
<td>Mfg Machinery – Lathe II</td>
<td>3</td>
</tr>
<tr>
<td>MFG*H255</td>
<td>Mfg Machinery – Milling II</td>
<td>3</td>
</tr>
<tr>
<td>MFG*H256</td>
<td>Mfg Machinery – CNC II</td>
<td>3</td>
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<tr>
<td></td>
<td>Directed Elective†</td>
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</tr>
<tr>
<td>MFT*H5238</td>
<td>Career Development (non-credit course)</td>
<td>3</td>
</tr>
<tr>
<td>MFT*H5239</td>
<td>CNC Projects (non-credit course)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>18</td>
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<tr>
<td>CAD*H110</td>
<td>Introduction to CAD</td>
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<tr>
<td>CAD*H150</td>
<td>CAD 2D</td>
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<tr>
<td>QUA*H114</td>
<td>Principles of Quality Control</td>
<td></td>
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<tr>
<td></td>
<td>Total Credit Hours</td>
<td>34</td>
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</table>

Applied Behavior Analysis

Liberal Arts and Behavioral/Social Sciences Division

Applied Behavior Analysis (ABA) is a well-developed discipline among the helping professions, with an extensive body of scientific knowledge, established standards for evidence-based practice, specific interventions, recognized experience, and educational requirements for practice. Professionals in applied behavior analysis engage in the specific and comprehensive use of principles of learning, including operant and respondent learning, in order to address behavioral needs of widely varying individuals in diverse settings. Examples of these applications include: building the skills and achievements of children in school settings; enhancing the development, abilities, education, and choices of children and adults with different kinds of disabilities including Pervasive Developmental Disorders, most notably Autism Spectrum Disorders; and augmenting the performance and satisfaction of employees in organizations and businesses.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE*H101</td>
<td>Intro to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSE*H115</td>
<td>Child Advocacy in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSE*H202</td>
<td>Intro to Counseling &amp; Interviewing</td>
<td>3</td>
</tr>
<tr>
<td>HSE*H281</td>
<td>Human Services Field Work</td>
<td>3</td>
</tr>
<tr>
<td>SOC*H101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H111</td>
<td>General Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H258</td>
<td>Behavior Modification</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H259</td>
<td>Laboratory in Behavior Modification</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H261</td>
<td>Introduction to the Autism Spectrum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>PSY*H260</td>
<td>Psychology of the Exceptional Child</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H262</td>
<td>Applied Behavior Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>30</td>
</tr>
</tbody>
</table>

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify the major problem areas and client populations in which behavior analysts can intervene.
2. Demonstrate a beginning understanding of a range of diagnoses that relate to people in need of behavior analytic services and be aware of the necessity of a collaborative working relationship with other professional service providers.
3. Utilize the skills necessary to read and analyze current and future trends as presented in literature related to the field of Applied Behavior Analysis (ABA).
Audio/Video Production
Liberal Arts and Behavioral/Social Sciences Division

The Audio/Video Production Certificate program focuses on the detailed study of audio production, sound design, audio engineering, acoustics, visual composition, lighting design, non-linear video editing, and motion graphics design. A primary function of this program is to serve individuals who have already completed an academic degree or designers currently employed in broadcast media professions interested in skill-enhancement opportunities. Students entering this certificate program should already have media professions interested in skill-enhancement opportunities. This program is to serve individuals who have already completed video editing, and motion graphics design. A primary function of the program is to serve individuals who have already completed an academic degree or designers currently employed in broadcast media professions interested in skill-enhancement opportunities. 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Students entering this certificate program should already have media professions interested in skill-enhancement opportunities.
6. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
7. Apply knowledge of general engine diagnosis and repair: including but not limited to the engine’s: cylinder heads, valve train, block, lubrication, and cooling system.
8. Apply knowledge of general electrical/electronic systems, including but not limited to: starting, charging, lighting, wiring, accessories, diagnosis and repair.
9. Apply knowledge of general engine performance, including but not limited to: computer controls, ignition, fuel, exhaust, and emission systems, and their maintenance, diagnosis, adjustments, and repair.

**Automotive Fundamentals**

**Business Division**

The Automotive Fundamentals program seeks to meet the needs of individuals interested in a basic exposure to and/or an exploratory opportunity in the automotive technology field.

**Purpose:**
- To provide an understanding of the basic operating principles of an automobile.
- To provide in-depth theory of brake, steering and suspension systems.
- Target Population:
  - Individuals interested in a basic exposure to automotive systems.
  - Individuals interested in an exploratory opportunity in automotive technology.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATP*H100</td>
<td>Integrated Automotive Systems</td>
<td>3</td>
</tr>
<tr>
<td>ATP*H130</td>
<td>Brakes</td>
<td>3</td>
</tr>
<tr>
<td>ATP*H150</td>
<td>Steering and Suspension</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Automotive</td>
<td>2-3</td>
</tr>
<tr>
<td>Elective</td>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
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<td><strong>14-15</strong></td>
</tr>
</tbody>
</table>

To ensure appropriate placement, placement test results and course prerequisites should be reviewed with the Program Coordinator and/or advisor.

**Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. Perform mathematics related to the occupation, including but not limited to: algebraic expressions, arithmetic, decimals and graphs.
2. Relate knowledge of theory and safety to accomplish certain tasks related to the occupation.
3. Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.
4. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
5. Relate knowledge of general engine diagnosis and repair, including but not limited to the engine’s: cylinder heads, valve train, block, lubrication, and cooling system.
6. Relate knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment and repair.
7. Relate knowledge of general disc and/or drum brake system, hydraulics, power assist, and ABS (antilock brakes), maintenance, adjustment, diagnosis, and repair.

**Automotive: General Automotive Service**

**Business Division**

The General Automotive Service program is designed to accommodate individuals desiring an understanding of engine operation and repair, along with knowledge of automotive electrical, brake, steering and suspension systems.

**Purpose:**
- To provide an understanding of automobile engine operation and repair.
- To provide an understanding of automotive electrical theory and its application.
- To provide in-depth theory of brake, steering and suspension systems.
- To provide an understanding of the relationship between scientific principles and their application in the automobile.
- Target Population:
  - Individuals seeking entry-level employment opportunities in the automotive service field.
  - Individuals seeking to upgrade their technical skills.
  - Individuals preparing for career advancement opportunities in the automotive service field.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATP*H100</td>
<td>Integrated Automotive Systems</td>
<td>3</td>
</tr>
<tr>
<td>ATP*H110</td>
<td>Automotive Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ATP*H120</td>
<td>Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>ATP*H130</td>
<td>Brakes</td>
<td>3</td>
</tr>
<tr>
<td>ATP*H150</td>
<td>Steering and Suspension</td>
<td>3</td>
</tr>
<tr>
<td>ATP*H290</td>
<td>Cooperative Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

To ensure appropriate placement, placement test results and course prerequisites should be reviewed with the Program Coordinator and/or advisor.

**Program Outcomes**

Upon successful completion of all program requirements, graduates will be able to:

1. Perform mathematics related to the occupation, including but not limited to: algebraic expressions, arithmetic, decimals and graphs.
2. Use scientific methods and critical thinking to solve problems in science related to the occupation, including but not limited to: electricity, chemical reactions, heat, motion, and hydraulics.
3. Demonstrate workplace skills related to the occupation, including but not limited to: preparing a resume, seeking employment, maintaining a safe and healthy workplace environment, demonstrating workplace ethics and teamwork.
4. Apply knowledge of theory and safety to accomplish certain tasks related to the occupation.
5. Identify and use appropriate tools, testing and measurement equipment to accomplish certain tasks related to the occupation.
6. Use current reference and training materials from accepted industry publications and standards to accomplish certain tasks related to the occupation.
7. Apply knowledge of general engine diagnosis and repair, including but not limited to the engine’s: cylinder heads, valve train, block, lubrication, and cooling system.
8. Apply knowledge of suspension and steering systems (including wheel and tire), diagnosis, service, adjustments, alignment and repair.
9. Apply knowledge of general disc and/or drum brake system, hydraulics, power assist, and ABS (antilock brakes), maintenance, adjustment, diagnosis, and repair.
10. Apply knowledge of general electrical/electronic systems, including but not limited to: starting, charging, lighting, wiring, accessories, diagnosis and repair.
CERTIFICATES, CREDIT PROGRAMS

CADD Modeling (Advanced)
Science, Technology, Engineering & Mathematics Division

The need to attract more students into engineering is a national concern. The Advanced CADD Modeling Certificate is the third of the CADD certificates and continues to prepare a student, upgrading their skills, for employment and career advancement opportunities. NVCC’s Engineering Technologies programs prepare graduates to be engineering technicians who are able to respond to the changing demands of Connecticut's "high tech" industries.

### Course Outcomes

- Upon successful completion of all program requirements, graduates will be able to:
  1. Demonstrate a thorough understanding of engineering graphics and conventional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
  2. Develop an engineering concept through the detail design process and produce professionally finished engineering drawings.
  3. Demonstrate a high level of proficiency in the use of state-of-the-art CAD software and be able to adapt to new CAD systems as they are developed.
  4. Do basic and advanced manual CNC programming.
  5. Write computer generated CNC programming.
  6. Be aware of new developments in CAD and related areas.
  7. Organize activities and perform work in an efficient, accurate manner.
  8. Utilize advanced design methods, such as parametric feature based modeling, animation, simulation, and web-based design.

### Program Requirements

#### Course Outcomes

- Upon successful completion of all program requirements, graduates will be able to:
  1. Demonstrate basic knowledge and understanding of engineering graphics and conventional 2-dimensional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, and auxiliary views.
  2. Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
  3. Explain concepts and requirements for drawings used in the manufacturing process.
  4. Create 2D professionally finished drawings from working drawings under the supervision of a senior draftsperson.
  5. Demonstrate the proper setup and procedures for various manufacturing processes.
  6. Apply language arts skills related to the occupation, including but not limited to: critical thinking, reading, and writing.
  7. Apply mathematics required for basic drafting and manufacturing applications.

### 3D CADD Modeling
Science, Technology, Engineering & Mathematics Division

The need to attract more students into engineering is a national concern. The 3D Computer-Aided Drafting Design Certificate continues to prepare a student to use and/or pursue a career using CAD and meets the need of individuals:

- seeking entry-level employment opportunities.
- seeking to upgrade their technical skills.
- preparing for career advancement opportunities.

NVCC’s Engineering Technologies programs prepare graduates to be engineering technicians who are able to respond to the changing demands of Connecticut's "high tech" industries.

### Course Outcomes

- Upon successful completion of all program requirements, graduates will be able to:
  1. Demonstrate basic knowledge and understanding of engineering graphics and conventional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, and auxiliary views.
  2. Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
  3. Demonstrate a high level of proficiency in the use of state-of-the-art CAD software and be able to adapt to new CAD systems as they are developed.
  4. Do basic and advanced manual CNC programming.
  5. Write computer generated CNC programming.
  6. Be aware of new developments in CAD and related areas.
  7. Organize activities and perform work in an efficient, accurate manner.
  8. Utilize advanced design methods, such as parametric feature based modeling, animation, simulation, and web-based design.

### Course Schedule

#### Course No. Title Credits

- CAD*H150 2D CAD Drafting 3
- MFG*H104 Manufacturing Processes 4
- ENG*H101 Composition 3
- MAT*H137 Intermediate Algebra 3
- Elective Directed Elective† 3

- Total Credit Hours 16

### Directed Electives

- CAD*H200 3D CAD Modeling
- CAD*H220 Parametric Design
- MAT*H172 College Algebra (or higher level Mathematics course)
- MFG*H106 Computer-Aided Manufacturing I
- TCN*H101 Introduction to Engineering Technology

### Program Outcomes

- Upon successful completion of all program requirements, graduates will be able to:
  1. Demonstrate basic knowledge and understanding of engineering graphics and conventional 2-dimensional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, and auxiliary views.
  2. Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
  3. Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
  4. Create 2D professionally finished drawings from working drawings under the supervision of a senior draftsperson.
  5. Demonstrate the proper setup and procedures for various manufacturing processes.
  6. Apply language arts skills related to the occupation, including but not limited to: critical thinking, reading, and writing.
  7. Apply mathematics required for basic drafting and manufacturing applications.

### 2D Computer-Aided Drafting (CAD)
Science, Technology, Engineering & Mathematics Division

The need to attract more students into engineering is a national concern. The 2D Computer-Aided Drafting Certificate meets the need of individuals interested in a basic exposure to, and/or exploration of, using and applying 2D CAD. This opportunity prepares a student to use and/or pursue a career using CAD in numerous fields. NVCC’s Engineering Technologies programs prepare graduates to be engineering technicians who are able to respond to the changing demands of Connecticut's "high tech" industries.

### Course Outcomes

- Upon successful completion of all program requirements, graduates will be able to:
  1. Demonstrate basic knowledge and understanding of engineering graphics and conventional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
  2. Develop an engineering concept through the detail design process and produce professionally finished engineering drawings.
  3. Demonstrate a high level of proficiency in the use of state-of-the-art CAD software and be able to adapt to new CAD systems as they are developed.
  4. Do basic and advanced manual CNC programming.
  5. Write computer generated CNC programming.
  6. Be aware of new developments in CAD and related areas.
  7. Organize activities and perform work in an efficient, accurate manner.
  8. Utilize advanced design methods, such as parametric feature based modeling, animation, simulation, and web-based design.

### Program Requirements

#### Course Outcomes

- Upon successful completion of all program requirements, graduates will be able to:
  1. Demonstrate basic knowledge and understanding of engineering graphics and conventional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
  2. Develop an engineering concept through the detail design process and produce professionally finished engineering drawings.
  3. Demonstrate a high level of proficiency in the use of state-of-the-art CAD software and be able to adapt to new CAD systems as they are developed.
  4. Do basic and advanced manual CNC programming.
  5. Write computer generated CNC programming.
  6. Be aware of new developments in CAD and related areas.
  7. Organize activities and perform work in an efficient, accurate manner.

### Course Schedule

#### Course No. Title Credits

- MFG*H201 Computer-Aided Mfg I 3
- CAD*H220 Parametric Design 3
- CAD*H275 CAD Animation 3D Studio Max 4
- CAD*H294 Senior Project 4
- Elective Directed Elective† 3

- Total Credit Hours 17

### Directed Electives

- CAD*H285 Computer Integrated Manufacturing I
- CAD*H286 Advanced Modeling Techniques
- MAT*H232 Applied Calculus
- MAT*H254 Calculus I
- MEC*H251 Materials Strength
- MFG*H210 Materials of Engineering
- MFG*H275 Mechanics of Materials

### Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate basic knowledge and understanding of engineering graphics and conventional 2-dimensional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, and auxiliary views.
2. Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
3. Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
4. Create 2D professionally finished drawings from working drawings under the supervision of a senior draftsperson.
5. Demonstrate the proper setup and procedures for various manufacturing processes.
6. Apply language arts skills related to the occupation, including but not limited to: critical thinking, reading, and writing.
7. Apply mathematics required for basic drafting and manufacturing applications.

### 3D CADD Modeling
Science, Technology, Engineering & Mathematics Division

The need to attract more students into engineering is a national concern. The 3D Computer-Aided Drafting Design Certificate continues to prepare a student to use and/or pursue a career using CAD and meets the need of individuals:

- seeking entry-level employment opportunities.
- seeking to upgrade their technical skills.
- preparing for career advancement opportunities.

NVCC’s Engineering Technologies programs prepare graduates to be engineering technicians who are able to respond to the changing demands of Connecticut's "high tech" industries.

### Course Outcomes

- Upon successful completion of all program requirements, graduates will be able to:
  1. Demonstrate basic knowledge and understanding of engineering graphics and conventional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
  2. Develop an engineering concept through the detail design process and produce professionally finished engineering drawings.
  3. Demonstrate a high level of proficiency in the use of state-of-the-art CAD software and be able to adapt to new CAD systems as they are developed.
  4. Do basic and advanced manual CNC programming.
  5. Write computer generated CNC programming.
  6. Be aware of new developments in CAD and related areas.
  7. Organize activities and perform work in an efficient, accurate manner.
  8. Utilize advanced design methods, such as parametric feature based modeling, animation, simulation, and web-based design.

### Program Requirements

#### Course Outcomes

- Upon successful completion of all program requirements, graduates will be able to:
  1. Demonstrate basic knowledge and understanding of engineering graphics and conventional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
  2. Develop an engineering concept through the detail design process and produce professionally finished engineering drawings.
  3. Demonstrate a high level of proficiency in the use of state-of-the-art CAD software and be able to adapt to new CAD systems as they are developed.
  4. Do basic and advanced manual CNC programming.
  5. Write computer generated CNC programming.
  6. Be aware of new developments in CAD and related areas.
  7. Organize activities and perform work in an efficient, accurate manner.

### Course Schedule

#### Course No. Title Credits

- MFG*H104 Manufacturing Processes 4
- ENG*H101 Composition 3
- MAT*H137 Intermediate Algebra 3
- Elective Directed Elective† 3

- Total Credit Hours 13

### Directed Electives

- CAD*H275 CAD Animation 3D Studio Max
- CAD*H285 Computer Integrated Manufacturing I
- CAD*H286 Advanced Modeling Techniques
- CAD*H294 Senior Project
- MAT*H185 Trigonometric Functions (or higher level Mathematics course)
- MFG*H106 Computer-Aided Manufacturing I
- TCN*H101 Introduction to Engineering Technology

### Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate basic knowledge and understanding of engineering graphics and conventional 2-dimensional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, and auxiliary views.
2. Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
3. Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
4. Create 2D professionally finished drawings from working drawings under the supervision of a senior draftsperson.
5. Demonstrate the proper setup and procedures for various manufacturing processes.
6. Apply language arts skills related to the occupation, including but not limited to: critical thinking, reading, and writing.
7. Apply mathematics required for basic drafting and manufacturing applications.
CERTIFICATES, CREDIT PROGRAMS

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate a thorough understanding of engineering graphics and conventional drafting practices such as geometric constructions, orthographic, projection, isometric, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
2. Starting with an engineering design concept, create 3D geometric models, develop tolerance requirements, perform basic analysis functions under the supervision of a degree engineer, and produce professionally finished engineering drawings, suitable for use in manufacturing.
3. Demonstrate a thorough understanding of 3-dimensional wire frame, surface, and solid modeling concepts, procedures, and applications.
4. Perform basic CNC programming.

Child and Family Services
Liberal Arts and Behavioral/Social Sciences Division
The increase in the number of families in crisis and the rising number of maltreated children in our communities make it necessary to have trained Human Services professionals who are skilled and knowledgeable about the unique needs of these populations. The Child & Family Services Certificate curriculum focuses on such areas as juvenile justice, single-parent families, divorce, sexuality, abuse, neglect, poverty, adoption, child protection, disability services, mental health, and cultural diversity.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE* H101</td>
<td>Intro to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSE* H202</td>
<td>Intro to Counseling &amp; Interviewing</td>
<td>3</td>
</tr>
<tr>
<td>HSE* H281</td>
<td>Human Services Field Work</td>
<td>3</td>
</tr>
<tr>
<td>SOC* H101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC* H210</td>
<td>Sociology of the Family</td>
<td>3</td>
</tr>
<tr>
<td>SOC* H201</td>
<td>Contemporary Social Issues</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC* H221</td>
<td>Social Inequality</td>
<td>3</td>
</tr>
<tr>
<td>HSE*H115</td>
<td>Child Advocacy in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>PSY* H111</td>
<td>General Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Psychology Elective†</td>
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</tr>
<tr>
<td>PSY* H258</td>
<td>Behavior Modification</td>
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<tr>
<td>Total Credit Hours</td>
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<td>30</td>
</tr>
</tbody>
</table>

†Directed Electives:
PSY*H203 Child Development
PSY*H204, Child & Adolescent

Program Outcomes
Upon successful completion of all certificate requirements, graduates will be able to:

1. Demonstrate a beginning understanding of a range of issues that people in need of human services experience.
2. Utilize critical thinking skills necessary to read and analyze current and future trends as presented in literature in the field of human services and child and family services.
3. Identify socio-cultural dynamics that underlay issues in American society and politics.
4. Demonstrate an ability to utilize the skills, and tasks required for engagement, assessment, case planning, intervention and termination with a diverse population.
5. Present a well organized, comprehensive oral report before a group.
6. Compare and contrast the ecological, functional, and conflict perspectives to understand and analyze social issues such as alienation, poverty, crime and health.
7. Describe how the events and influences of the political, social, and economic climate have shaped the American response to human needs and the historical development of social welfare.
8. Develop an understanding of the expectations of a personal and professional code of ethical standards.
9. Demonstrate an ability to provide referrals to services, concrete information, and emotional support to clients with a goal of promoting empowerment skills.
10. Identify causes, consequences and solutions to inequality due to race, age, gender, religion and economics.

CNC Machining
Science, Technology, Engineering & Mathematics Division
Entry-level programmers as well as machinists/tool makers are needed in the college's service region. The CNC Machining Certificate primarily supports two career ladders:

- An individual with no prior experience in machining or manufacturing, who after the completion of the CNC Machining Certificate, should be able to employed as an entry level programmer.
- An individual with prior experience using manual machines wishing to upgrade skills.

NVCC's Engineering Technologies programs prepare graduates to be engineering technicians who are able to respond to the changing demands of Connecticut's "high tech" industries.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG*H104</td>
<td>Manufacturing Processes</td>
<td>4</td>
</tr>
<tr>
<td>CAD*H150</td>
<td>CAD 2D</td>
<td>3</td>
</tr>
<tr>
<td>MFG*H106</td>
<td>Computer-Aided Mfg I</td>
<td>3</td>
</tr>
<tr>
<td>MFG*H201</td>
<td>Computer-Aided Mfg. II</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Directed Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Directed Elective†</td>
<td>3</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

†Directed Electives:
CAD*H200 3D CAD Modeling
CAD*H220 Parametric Design
EET*H102 Electrical Applications
MAT*H172 College Algebra (or higher level Mathematics course)
MEC*H114 Statics
MEC*H251 Materials Strengths
Any MFG* course
PHY*H121 General Physics I
PHY*H122 General Physics II
TCN*H101 Introduction to Engineering Technology

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate basic knowledge and understanding of engineering graphics and conventional 2-dimensional drafting practices such as orthographic and isometric projection, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
2. Demonstrate proficiency in the use of CAD software for 2-dimensional applications.
3. Explain concepts and skills required for manufacturing processes.
4. Demonstrate proper setup and procedures for various manufacturing processes.
5. Write basic and advanced MDI NC programs.
6. Produce NC programs using Mastercam®, being able to:
   a. import or generate CAD files
   b. utilize tool and material libraries.
   c. generate tool pass.
   d. verify tool pass.
   e. post process using appropriate controller.
CERTIFICATES, CREDIT PROGRAMS

Computer Networking
Business Division

This certificate is designed for those individuals who desire an understanding of personal computer networks and their use in the workplace. The course of study will provide the student with a thorough knowledge of local area network design, network management, installation, servicing and support. Students will possess an understanding of PC network technology and programming, set-up, communications, utilities, and system management.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC*H205</td>
<td>Visual Basic I</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td>CJC*H113 Programming I</td>
<td>3</td>
</tr>
<tr>
<td>CST*H102</td>
<td>Intro to Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CST*H130</td>
<td>Network Essentials I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Elective Courses (9 credits) from this list</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CST*H235</td>
<td>Network Systems</td>
<td>3</td>
</tr>
<tr>
<td>CST*H236</td>
<td>Advanced Network Systems</td>
<td>3</td>
</tr>
<tr>
<td>CST*H239</td>
<td>Servicing &amp; Support of LANS†</td>
<td>3</td>
</tr>
<tr>
<td>CST*H274</td>
<td>Network Security Technology</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H101</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

†Please see advisor for alternative classes.

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Provide the student with the personal computer skills necessary to effectively function in today’s workplace.
2. Offer a “hands-on” learning experience in the personal computer networking software most commonly used in business and industry.
3. Provide the opportunity for a more advanced technical understanding of personal computer local area networks, their design, installation and management.
4. Provide entry-level opportunities to individuals seeking positions requiring computer networking skills.
5. Upgrade the personal computer knowledge and skills of individuals currently employed.

Criminal Justice
Liberal Arts and Behavioral/Social Sciences Division

This certificate program focuses on skills development for those people who are already in the law enforcement and security services and for those who seek entry-level employment in those services. The program may be pursued on a full or part-time basis. For further information, consult the Division Director or the Program Coordinator.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJS*H101</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJS*H102</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJS*H103</td>
<td>Introduction to Security</td>
<td>3</td>
</tr>
<tr>
<td>CJS*H105</td>
<td>Introduction to Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>CJS*H211</td>
<td>Criminal Law I</td>
<td>3</td>
</tr>
<tr>
<td>CJS*H217</td>
<td>American Legal Systems</td>
<td>3</td>
</tr>
<tr>
<td>CJS*H220</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>CJS*H239</td>
<td>CJS Cooperative Work Experience</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Explain the basic structure and functions of the American Criminal Justice System.
2. Explain the structure of the federal and state court systems.
3. Identify the functions and services of private security.
4. Explain the computer crime problem.
5. Explain the development of probation, parole and community supervision.
6. Explain the development of the corrections system in the United States.
7. Demonstrate the various methods of taking written statements and confessions.
8. Define the term investigation and the objectives of a criminal investigation.
9. Explain some of the basic issues and problems in policing, the courts, and corrections in America today.
10. Explain the Bill of Rights and those specific rights guaranteed by the First, Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments.
11. Explain the concept of criminal law, including its purpose as an agent of social control.
12. Define and explain the elements which identify the offenses of assault, sex crimes, burglary, arson, larceny, robbery and homicide.
13. Explain how state and local law enforcement agencies originated in the United States and how they currently function.
14. Identify the areas that establish a police officer’s authority to arrest.
15. Demonstrate work skills relevant to a criminal justice agency.
16. Integrate the theoretical and practical application of the Criminal Justice Program.

Culinary Arts
Business Division

The Culinary Arts certificate program consists of 25 or 27 credits of specific skill courses which will prepare people for careers in food services. Students may pursue the program on a full or part-time basis. Students who wish to pursue the Associate in Applied Science degree may apply the certificate credits to the Foodservices Management or Hotel Management degree. As with other certificate programs, the student must first apply to the Admissions Office. Students requiring basic skills development courses in reading, English, or math as determined by placement testing are advised to begin their program with these basic skills courses to ensure success in the required hospitality courses.

Because of the nature of the program, special tuition and fees for foods, etc., may be required. Please refer to the section on course descriptions for prerequisites.
CERTIFICATES, CREDIT PROGRAMS

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSP*H100</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H101</td>
<td>Principles of Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H102</td>
<td>Food Production &amp; Purchasing</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H109</td>
<td>Food Safety Certification</td>
<td>1</td>
</tr>
<tr>
<td>or</td>
<td>HSP*H108 Sanitation and Safety†</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H135</td>
<td>Service Management</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H202</td>
<td>Catering &amp; Event Management</td>
<td>3</td>
</tr>
<tr>
<td>BIO*H111</td>
<td>Introduction to Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Hospitality Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Chose one baking elective below:

- HSP*H103 Principles of Baking I
  or
- HSP*H215 Principles of Baking II
  or
- HSP*H216 Artisan Bread

Total Credit Hours 25 or 27

† Students interested in the degree program should take HSP*H108

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify, organize, plan and allocate resources in foodservice operations such as time, materials and facilities, money, and human resources.
2. Demonstrate a working knowledge of food preparation theories and techniques, and utilize food production knowledge (quantity and quality standards) to meet production requirements of a foodservice operation within a projected budget.
3. Effectively work with others as a member of a team, serving clients and customers, teaching others new skills, exercise leadership behaviors, negotiate, and work with others from diverse backgrounds.
4. Obtain nationally recognized professional certification in food sanitation (as required by State Statute) and food, beverage, & labor cost controls. Demonstrate appropriate personal hygiene.
5. Organize and evaluate information from a variety of sources including food preparation and service techniques and costs, food and related purchasing specifications, catered events planning, research data, and computer applications and Internet output. Communicate the results to others using oral, written, graphic or multimedia methods.
6. Apply concepts of procurement and inventory to purchase, receive, store, issue and distribute food and related items in a foodservice operation.
7. Demonstrate behavior and self-management reflective of personal and professional ethical conduct.
8. Perform basic mathematical computations accurately and appropriately, especially with regard to food and beverage production, purchasing and cost controls.
9. Identify and apply basic concepts of human nutrition and health in the preparation and service of food.
10. Demonstrate work readiness through resume preparation, appropriate business dress and behavior, and assertive communication skills.

Dance

Liberal Arts and Behavioral/Social Sciences Division

This certificate in dance is designed for individuals who are looking to enhance their technique, broaden their repertoire, and build their choreographic options and production skills. This program is tailored for those who wish to work or presently work with either children or adults in studio, theatre, early childhood or community service environments. Individuals wishing to broaden their dance foundation for working in the art or entertainment industries also may be served.

Many individuals who teach dance have a limited access to higher education in dance. There is a need for technical as well as artistic training. This program will address these needs by providing a firm foundation in the major aspects of dance so that the student may feel confident in his/her involvement in the dance world.

A Formal Pathways to Dance Certification K-12 has been designed for the public school teacher wishing to obtain the State of Connecticut's pending certification.

Students entering this program should have a basic foundation in dance. If the individual does not possess either a degree or experience, he/she may consider enrolling in the Visual and Performing Arts/Dance Degree option. Credits may be applied toward the degree program. Students may substitute, with permission, other dance offerings to fit their needs.

Students must successfully complete the following credit courses with a “B” average:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN*H101</td>
<td>History &amp; Appreciation of World Dance</td>
<td>3</td>
</tr>
<tr>
<td>DAN*H102</td>
<td>Ballet I: Renaissance to Romantic</td>
<td>3</td>
</tr>
<tr>
<td>DAN*H111</td>
<td>Jazz Dance I: Afro-Caribbean/American</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAN*H112</td>
<td>Jazz Dance II: Broadway and Film</td>
<td>3</td>
</tr>
<tr>
<td>DAN*H113</td>
<td>Modern I: Pioneers of America</td>
<td>3</td>
</tr>
<tr>
<td>DAN*H202</td>
<td>Ballet II: Classical to Contemporary</td>
<td>3</td>
</tr>
<tr>
<td>DAN*H213</td>
<td>Modern Dance II</td>
<td>3</td>
</tr>
<tr>
<td>DAN*H221</td>
<td>Repertory/Ensemble I</td>
<td>3</td>
</tr>
<tr>
<td>DAN*H222</td>
<td>Choreographic Principles/Ensemble I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 24

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate mastery skills and techniques necessary for studio and/or theatre dance.
2. Execute a comprehensive historical repertoire of various dance genres using appropriate movement vocabulary.
3. Demonstrate dance as a means of communication and as a reflection of one’s society.
4. Make an accurate assessment of personal & students’ (if teaching) technical and artistic strengths and weaknesses.
5. Execute effectively production skills from the choreographic process to the performance.

Dietary Supervision

Business Division

The certificate is designed primarily for health care food service personnel seeking professional development. In order to satisfy industry standards, students must successfully complete the following credit courses with a grade of “C” or better, and pass the ServSafe Food Protection Manager Certification offered through the Educational Foundation of the National Restaurant Association. Credits may be applied toward the degree program in Foodservice Management.
CERTIFICATES, CREDIT PROGRAMS

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSP*H101</td>
<td>Principles of Food Preparation††</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSP*H102</td>
<td>Food Production &amp; Purchasing†††</td>
<td>3</td>
</tr>
<tr>
<td>HSP*H109</td>
<td>Food Safety Certification†</td>
<td>1</td>
</tr>
<tr>
<td>BIO*H111</td>
<td>Introduction to Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

†HSP*H108 - Foodservice Sanitation
(3 credits) may be substituted for HSP*H109.

††Course substitution may be allowed with written approval of the Hospitality Management Program Coordinator.

†††Course substitution may be allowed with written approval of the Hospitality Management Program Coordinator. Prerequisite of HSP*H101 may be waived with approval of the Hospitality Management Program Coordinator.

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Identify agents and vectors of food-borne illness.
2. Employ proper sanitary procedures in the purchasing, receiving, storing, issuing, preparing, and serving of food products.
3. Design basic sanitation training for foodservice employees.
4. Discuss federal, state and local regulations and standards of foodservice sanitation.
5. Inspect, from a sanitation viewpoint, equipment and facility design.
6. Qualify for certification in applied foodservice sanitation from the Educational Foundation of the National Restaurant Association.
7. Define, discuss, and employ basic food preparation theories and techniques.
8. Recognize and use a variety of kitchen tools, equipment, and raw food products.
9. Plan, organize, prepare, and evaluate finished food items from the raw state.
10. Interpret, and evaluate written recipes; mathematically expand and reduce these recipes; be able to pre-cost the recipes; understand computer applications regarding these calculations.
11. Define, discuss, and explain the importance of nutrition to health status.
12. Apply acquired nutrition knowledge to daily food preparation.

Disabilities/Mental Health
Liberal Arts and Behavioral/Social Sciences Division
This program is designed for students who will work in a variety of mental health settings (many of which have been created through deinstitutionalization) in both the mental health and developmental disabilities fields. Students are prepared for positions in a wide variety of agencies such as crisis centers, community residencies, sheltered workshops, halfway houses, or social rehabilitation clubs, which specifically serve this population.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE*H202</td>
<td>Introduction to Counseling &amp; Interviewing</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H258</td>
<td>Behavior Modification</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H245</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HSE*H281</td>
<td>Human Services Field Work I</td>
<td>3</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate a beginning understanding of a wide range of diagnoses that relate to people in need of social work service, and be knowledgeable about the necessity of a collaborative relationship with area support.
2. Identify the diverse challenges facing people with mental illness, and use effective advocacy strategies to address such challenges.
3. Describe confidentiality guidelines, and Human Services ethical standards of practice, and recognize his or her own personal limitations and professional behavior as a helper.
4. State the psychological theories that may help the Human Services Provider.
5. Explain what effects the social conditions in the United States have on the developmental disabilities and how to deal with them.
6. Understand sociocultural dynamics that underlay social issues in America today.
7. Be knowledgeable about formal and informal assessment practices that reflect both the needs and strengths of disadvantaged people.
8. Provide disadvantaged people the support and information necessary to build self-esteem and empowerment skills.
9. Apply knowledge and skills needed to work with people with mental illness in a variety of agency settings.
10. Demonstrate the ability to utilize the skills and tasks required for engagement, assessment, case planning, intervention and termination.

Drug and Alcohol Recovery Counselor (DARC)
Liberal Arts and Behavioral/Social Sciences Division
The Drug and Alcohol Recovery Counselor (DARC) program is nationally accredited through the National Addiction Studies Accreditation Commission (NASAC) and provides education and training for persons who want to become a Certified Addiction Counselor (CAC). The DARC program (30 credits) is accredited “Addiction Studies” program among all two and four-year colleges in Connecticut.

Employment
Students with a DARC Certificate are highly sought after for entry level opportunities as substance abuse counselors in public and private agencies such as community and residential health facilities, local hospitals, prevention organizations, youth service agencies, and criminal justice system. According to the Occupational Outlook Handbook (2016-17 Ed.), employment of addiction counselors is expected to grow by 22 percent from 2014-2024, much faster than average as addiction counseling services are increasingly covered by insurance. Connecticut is considered one of the states with the highest concentration of jobs in this field with a mean average wage of $46,920.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE*H101</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSE*H133</td>
<td>Disabilities and Mental Health</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H111</td>
<td>General Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>SOC*H101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC*H201</td>
<td>Contemporary Social Issues</td>
<td></td>
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<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC*H221</td>
<td>Social Inequality</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

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CERTIFICATES, CREDIT PROGRAMS

Curriculum

The DARC Certificate can be completed in 1 ½ or 2 years by completing the core DARC courses (DAR*H101, DAR*H111, DAR*H112, DAR*H158) in spring and completing the internship and remaining classes in the next academic year. All DARC courses (DAR*H101, DAR*H111, DAR*H112, DAR*H158, DAR*H213, and DAR*H220) are open to any student at the college, provided they pass the prerequisite of ENG*H096 with a C or better or test into ENG*H101. The internship runs fall/spring of each academic year.

DARC Internship Admission Process

Acceptance into the DARC Internship (DAR*H251, DAR*H252) is selective and not guaranteed. All students participate in a screening and interview process (spring semester) which is intended to evaluate whether the applicant possesses specific skills, behaviors and attitudes that are necessary to work with persons with addiction and co-occurring disorders. Interested applicants must have completed or be enrolled in DAR*H101, DAR*H111, DAR*H112, DAR*H158 and ENG*H101, and pass with a C or better prior to their internship. Students must complete and submit a formal DARC Application prior to the interview. Applications are distributed during the spring semester (Feb/March) each year. After the interviews, students are formally notified regarding acceptance to internship and ability to register for DAR*H251 - Counseling Internship I.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAR*H101</td>
<td>Public Health Issues in Abuse and Addiction</td>
<td>3</td>
</tr>
<tr>
<td>DAR*H111</td>
<td>Addiction Counseling I</td>
<td>3</td>
</tr>
<tr>
<td>DAR*H112</td>
<td>Group Counseling Theory and Techniques</td>
<td>3</td>
</tr>
<tr>
<td>DAR*H158</td>
<td>Biology of Addiction</td>
<td>3</td>
</tr>
<tr>
<td>DAR*H213</td>
<td>Addiction Counseling II</td>
<td>3</td>
</tr>
<tr>
<td>DAR*H251</td>
<td>Counseling Internship I</td>
<td>6</td>
</tr>
<tr>
<td>DAR*H220</td>
<td>Co-Occurring Counseling</td>
<td>3</td>
</tr>
<tr>
<td>DAR*H252</td>
<td>Counseling Internship II</td>
<td>6</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

Program Outcomes

Upon successful completion of the DARC Certificate the successful graduate should be able to:

1. Describe the physical, emotional and psychological basis of addiction
2. Define the causes and characteristics of substance dependence and addiction relevant to various populations and cultures
3. Define and apply counseling theories to addiction counseling including Adlerian, Existential, Person-Centered, Harm Reduction, Motivational Interviewing, Gestalt, Reality, Behavior, Cognitive Behavioral, Solution Focused, and Feminist perspectives
4. Define, demonstrate and apply ethical principles and practices according to NAADAC, the CCB, and professional behavior for working directly in the counseling field
5. Demonstrate knowledge and skills related to relapse prevention education and strategies
6. Describe the categories of drugs and effects on psychological functioning
7. Describe characteristics of individuals with co-occurring disorders and specific treatment strategies for working with this population
8. Demonstrate the ability to develop, write and implement treatment plans for individuals with addiction and co-occurring disorders
9. Co-facilitate group counseling sessions under supervision
10. Describe the use of case management in the treatment of persons with addiction and co-occurring disorders
11. Demonstrate ability to develop discharge plans for persons with addiction and co-occurring disorders
12. Demonstrate understanding of the screening, intake and evaluation process in addiction and co-occurring disorders treatment
13. Demonstrate ability to keep accurate records of group/individual process, treatment and discharge planning
14. Describe and demonstrate skills involved in crisis intervention
15. Describe the purpose and availability of self-help groups for persons with addiction/co-occurring disorders
16. Describe the effects of substance abuse on the family, educational needs and stages of recovery for families
17. Describe the stages of change model and its application to treatment of addiction and co-occurring disorders
18. Describe the use of multicultural counseling skills to assessment, treatment and aftercare issues of persons of different gender, ethnicity, disability, adolescents, the elderly, GLBT and homeless
19. Describe the transdisciplinary foundations and competencies required of addiction counselor (TAP 21)
20. Describe the use of medication in the treatment of addiction and co-occurring disorders
21. Demonstrate engagement in community service activities to educate others about the process, dangers and treatment of addiction
22. Discuss the purpose of clinical supervision and participate in the supervision process
23. Write a comprehensive case study based on a biopsychosocial assessment, including diagnosis, treatment plan goals and interventions acceptable for submission to the Connecticut Certification Board (CCB).

Early Childhood Education
Liberal Arts and Behavioral/Social Sciences Division

The certificate program consists of thirty (30) credits in Early Childhood Education. These courses are designed to develop the basic skills and knowledge necessary in Early Childhood Education. The curriculum is a form of a connector, or intensified refresher program, for those who have either been away from academic studies for a while and/or have been engaged in group child care without formal training in the area. For further information, contact the Program Coordinator.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG*H101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H111</td>
<td>General Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H203</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE*H101</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE*H103</td>
<td>Creative Experiences for Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE*H109</td>
<td>Science and Math for Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE*H141</td>
<td>Infant/Toddler Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE*H176</td>
<td>Health, Safety &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE*H210</td>
<td>Observation and Participation</td>
<td>3</td>
</tr>
<tr>
<td>ECE*H231</td>
<td>Early Language and Literacy Development</td>
<td>3</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Utilize the writing skills for developing lessons and composing reports
2. Be knowledgeable about various theories as they apply to young children
3. Be able to apply theories to the physical, social emotion and cognitive development of children
4. Learn how theories can be applied to understanding children’s behavior.
CERTIFICATES, CREDIT PROGRAMS

5. Demonstrate a basic knowledge of Early Childhood Education & the skills required to make objective observations of young children in the classroom setting.
6. Be able to systematically observe and record children's behavior.
7. Understand the different aspects of speech and communication.
8. Become acquainted with various communication impairments or delays and set realistic goals for young children in the area of language development.
10. Understand how a child's sensorimotor development influences a child's ability to learn.
11. Recognize possible signs of physical handicaps and developmental delays.
12. Be aware of the interrelationships between child development and the areas of health, safety, and nutrition.
13. Be knowledgeable about the control and prevention of communicable diseases.
14. Provide general curriculum adaptations and guidelines to help children meet their special needs.
15. Gain the experience to create a supportive and interesting learning environment.
16. Be able to write goals, objectives and developmentally appropriate activities.
17. Develop a curriculum using a multisensory approach to teaching.
18. Plan, organize, execute and evaluate classroom activities on a weekly basis.
19. Write developmentally appropriate explorations prescription based upon a child's individual learning style.

Electronic Music and Audio Production
Liberal Arts and Behavioral/Social Sciences Division

The certificate in Electronic Music and Audio Production is designed for individuals who wish to learn, or enhance, their skills in the areas of electronic music composition and audio production. The certificate program will serve the specialized needs of students of Digital Arts and Fine Arts as well as individuals interested in electronic music composition and audio production. Students will be exposed to important historical aspects that have influenced compositional styles as well as the impact of technology on music and art.

Students must complete the following courses with a grade of “C” or better:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS*H101</td>
<td>Music History &amp; Appreciation I</td>
<td>3</td>
</tr>
<tr>
<td>DAT/MUS*H218</td>
<td>Electronic Music Composition/Audio Tech I</td>
<td>3</td>
</tr>
<tr>
<td>DAT/MUS*H237</td>
<td>Principles of Sound Recording</td>
<td>3</td>
</tr>
<tr>
<td>*Directed Elective</td>
<td>Arts/Digital Arts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>MUS*H26</td>
<td>20th Century/Modern Music</td>
<td>3</td>
</tr>
<tr>
<td>DAT/MUS*H219</td>
<td>Electronic Music Composition/ Audio Tech II</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H220</td>
<td>Acoustics and Sound Design</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>21</td>
</tr>
</tbody>
</table>

*Directed Electives:
DAT*H110, DAT*H226, DAT*H290, MUS*H103, MUS*H115

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Analyze and evaluate the properties of sound, human hearing, and sound reproduction systems.
2. Use principles of acoustics and psychoacoustics to design state-of-the-art sonic environments.
3. Apply industry-standard techniques and tools to complete two-track and multi-track recording projects.
4. Use digital signal processing tools to manipulate and shape sound.
5. Compose original electronic music compositions.

Engineering Exploratory Certificate
Science, Technology, Engineering & Mathematics Division

The Engineering Exploratory Certificate is designed to prepare students for Engineering Technology programs and enable them to evaluate career choices in Engineering Technologies.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCN*H101</td>
<td>Introduction to Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>MFG*H104</td>
<td>Manufacturing Processes</td>
<td>4</td>
</tr>
<tr>
<td>CAD*H150</td>
<td>CAD 2D</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>ARC*H133</td>
<td>Technical Drafting</td>
<td>3</td>
</tr>
<tr>
<td>EET*H104</td>
<td>Electrical CAD and Fabrication</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>EET*H102</td>
<td>Electrical Applications†</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>11-13</td>
</tr>
</tbody>
</table>

†EET*H102 can be taken instead of EET*H104, but may require additional math courses.

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Evaluate career choices in Engineering technologies.
2. Discuss the history of technology.
3. Meet with faculty in various Engineering Technologies.
4. Demonstrate proper setup and procedures for various manufacturing processes.
5. Use OrCAD Capture and Layout software.
6. Populate a double sided PC board.
7. Use drafting instruments.
8. Prepare a set of working drawings for a small machine assembly.
9. Differentiate between the various technologies used to complete a major engineering project.

Finance
Business Division

The Finance Certificate is designed for individuals who are seeking professional development and advancement in the financial services area. Students entering this program are assumed to have a business foundation either by career or degree. Credits may be applied toward the degree program in Business Finance. Students must successfully complete the following credit courses with a grade of “C” or better:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE AREA</td>
<td>(Required)</td>
<td></td>
</tr>
<tr>
<td>BFN*H201</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECN*250</td>
<td>Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>BFN*H220</td>
<td>Principles of Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>BFN*H203</td>
<td>Investment Principles</td>
<td>3</td>
</tr>
</tbody>
</table>

One elective to be chosen from:
BFN*H205 | Real Estate Law                           | 3       |
BFN*H208 | Financial Analysis                        | 3       |

Total Credit Hours 15

Further information can be obtained by contacting the Chair of the Management Department.
CERTIFICATES, CREDIT PROGRAMS

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate knowledge of business finance including financial planning, long and short-term financing, fixed asset management, and management of long-term debt.
2. Identify strategies and practices in government and consumer financing.
3. Demonstrate knowledge of monetary, fiscal and debt management policies of government.
4. Demonstrate knowledge of basic analytical techniques, problem-solving and decision-making.
5. Identify the basic concepts of Asset Management and be able to provide an overview of Liability-Deposit-Management as relates to the financial services industry.
6. Identify techniques for managing working capital and demonstrate knowledge of the capital budgeting process.
7. Provide an understanding of how the United States economic system is organized, how it functions and how it impacts the global economy.
8. Identify the major goals and functions of financial management.
9. Understand the principle components of financial analysis in all levels of the business organization.
10. Demonstrate an understanding of the interrelationships between Finance and all other areas within a business, including working with other departments to achieve overall strategic goals.

Fundamentals of Machine Technology
Science, Technology, Engineering & Mathematics Division

The objective of the certificate program is to provide entry level skills and knowledge to individuals seeking a background in the machine technology profession. A prerequisite for entry into this certificate program is placement into or above both MAT*095 and ENG*096 or consent of the program director. This certificate program is designed to provide entry level skills to those seeking positions in machine and mechanical technology profession as relates to the financial services industry.

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

- Identify the major goals and functions of financial management.
- Understand the principle components of financial analysis in all levels of the business organization.
- Demonstrate an understanding of the interrelationships between Finance and all other areas within a business, including working with other departments to achieve overall strategic goals.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG*H124</td>
<td>Blueprint Reading I</td>
<td>2</td>
</tr>
<tr>
<td>MFG*H151</td>
<td>Mfg Machinery – Drill Press</td>
<td>1</td>
</tr>
<tr>
<td>MFG*H152</td>
<td>Mfg Machinery – Grinding</td>
<td>2</td>
</tr>
<tr>
<td>MFG*H153</td>
<td>Mfg Machinery – Bench Work</td>
<td>2</td>
</tr>
<tr>
<td>MFG*H154</td>
<td>Mfg Machinery – Lathe I</td>
<td>2</td>
</tr>
<tr>
<td>MFG*H155</td>
<td>Mfg Machinery – Milling I</td>
<td>2</td>
</tr>
<tr>
<td>MFG*H156</td>
<td>Mfg Machinery – CNC I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Directed Electives†</td>
<td></td>
</tr>
<tr>
<td>MFT H5234</td>
<td>Metrology (non-credit course)</td>
<td>3</td>
</tr>
<tr>
<td>MFT H5235</td>
<td>Manufacturing Math I (non-credit course)</td>
<td></td>
</tr>
<tr>
<td>MFT H5236</td>
<td>Career Awareness/Development/Computer Application (non-credit course)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>16</td>
</tr>
</tbody>
</table>

Directed Electives†:
- CAD*H110 Introduction to CAD or
- CAD*H150 CAD 2D or
- QUA*H114 Principles of Quality Control

Gerontology
Liberal Arts and Behavioral/Social Sciences Division

Social services for the elderly are provided by many different kinds of agencies with different purposes, client groups, funding sources, and philosophies. The curriculum which leads to the certificate in Human Services, Gerontology Option is designed to provide an understanding of the behavior and needs of older persons.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE*H171</td>
<td>Death and Dying</td>
<td>3</td>
</tr>
<tr>
<td>HSE*H101</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSE*H170</td>
<td>Introduction to Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>SOC*H101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H111</td>
<td>General Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>SOC*H201</td>
<td>Contemporary Social Issues</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>SOC*H221</td>
<td>Social Inequality</td>
<td>3</td>
</tr>
<tr>
<td>HSE*H202</td>
<td>Introduction to Counseling &amp; Interviewing</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Psychology elective</td>
<td>3</td>
</tr>
<tr>
<td>PSY*H258</td>
<td>Behavior Modification</td>
<td>3</td>
</tr>
<tr>
<td>HSE*H281</td>
<td>Human Services Field Work I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>30</td>
</tr>
</tbody>
</table>

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Be knowledgeable about the issues surrounding the universal prospect of death and the mourning process.
2. Have a beginning understanding of a wide range of diagnoses that relate to people in need of social work service and be knowledgeable about the necessity of a collaborative relationship with area support systems.
3. Identify social and psychological aspects and processes of aging.
4. Locate local, state, and federal programs and services available for the solution of the problems of the elderly.
5. Explain what effects the social conditions in the United States have on the aging.
6. Understand sociocultural dynamics that underlay social issues in America today.
7. Provide elders the support and information necessary to build self-esteem and empowerment skills.
8. Demonstrate the ability to utilize the skills and tasks required for engagement, assessment, case planning, intervention and termination.

Graphics & Animation
Liberal Arts and Behavioral/Social Sciences Division

As a result of completing the Graphics & Animation Certificate, students will be able to design two-dimensional digital graphics, three-dimensional object modeling, digital animation sequences, and interactive media applications. Graduates will be qualified to seek positions in the fields of graphic art production, character animation, electronic publishing, broadcasting, and Web design.

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

- Be knowledgeable about the issues surrounding the universal prospect of death and the mourning process.
- Have a beginning understanding of a wide range of diagnoses that relate to people in need of social work service and be knowledgeable about the necessity of a collaborative relationship with area support systems.
- Identify social and psychological aspects and processes of aging.
- Locate local, state, and federal programs and services available for the solution of the problems of the elderly.
- Explain what effects the social conditions in the United States have on the aging.
- Understand sociocultural dynamics that underlay social issues in America today.
- Provide elders the support and information necessary to build self-esteem and empowerment skills.
- Demonstrate the ability to utilize the skills and tasks required for engagement, assessment, case planning, intervention and termination.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRA*H150</td>
<td>Introduction to Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H106</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H108</td>
<td>Digital Imaging I</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H212</td>
<td>3D Graphics &amp; Animation I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>12</td>
</tr>
</tbody>
</table>
Certifications, Credit Programs

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAT*H116</td>
<td>Interactive Media Design</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H230</td>
<td>Digital Imaging II</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H234</td>
<td>3D Graphics &amp; Animation II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Design, edit, and manipulate digital graphics and image files.
2. Utilize advanced techniques for character modeling and the design of virtual space.
3. Design, model, and animate complete 3-dimensional landscapes.
4. Develop state-of-the-art 3D special effects for film and video productions.
5. Complete significant projects terminating in deliverable software/media products with technical documentation.

Horticulture

Science, Technology, Engineering & Mathematics Division

The Horticulture Certificate program is designed to develop the skills and understanding needed for students to take responsible positions in grounds maintenance, tree and shrub nurseries, wholesale plant growing, landscaping, garden centers and retail greenhouses, golf courses, lawn care, and parks/recreation departments. The certificate will be awarded on completion of all courses and a cooperative work experience.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRT*H101</td>
<td>Landscape Construction</td>
<td>4</td>
</tr>
<tr>
<td>HRT*H102</td>
<td>Woody Plants</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H103</td>
<td>Herbaceous Plants</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H104</td>
<td>Soil Systems</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H202</td>
<td>Landscape Design †</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H207</td>
<td>Landscape Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H222</td>
<td>Greenhouse Operations and Manage- ment</td>
<td>4</td>
</tr>
<tr>
<td>HRT*H290</td>
<td>CWE Horticulture Co-op</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Horticulture††</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

†Prerequisite HRT*H102-Woody Plants or waiver by coordinator.
‡‡Horticulture Electives

- HRT*H105 Fruit and Vegetable Production
- HRT*H106 Fruit Production
- HRT*H107 Vegetable & Herb Production
- HRT*H115 Turf Management
- HRT*H124 Floral Design I
- HRT*H125 Floral Design II
- HRT*H203 Landscape Design II
- HRT*H204 Computers in Landscape Design
- HRT*H206 Landscaping Small Properties
- HRT*H208 Landscape Contract Administration
- HRT*H215 Integrated Pest Management
- HRT*H219 Arboriculture
- HRT*H224 Plant Propagation & Hybridization
- HRT*H240 Nursery Management
- HRT*H250 Hydroponic Production

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify foliage plants commonly used indoors by botanical and common names, state distinguishing characteristics of each, and describe their use and culture in various indoor landscape areas.
2. Control the common weeds, insects, pests and diseases of ornamentals and turf.
3. Select the proper procedures, define the physiological basis, and describe practical applications of the reproduction of plants by asexual and sexual methods.
4. Describe proper design and operation of greenhouse environmental systems, and evaluate their advantages and disadvantages in commercial production.
5. Demonstrate a responsible attitude in relationships with employers, fellow employees, and toward the world of work.
6. Select appropriate techniques for the establishment and management of lawns and utility turf areas.
7. Manage the procedures used in landscape constructions and in the maintenance of small engines.
8. Design flower beds, and mixed borders; place trees and shrubs for a variety of gardens for both residential and commercial properties.
9. Access available resources to incorporate technological innovations.
10. Demonstrate those skills, abilities and values which allow a person to function as a free and responsible citizen.
11. Prepare students for certification as Professional Landscape Architects (APLA).
12. Evaluate site conditions to design attractive, functional landscapes.

Landscape Design Certificate

Science, Technology, Engineering & Mathematics Division

The Horticulture Landscape Design Certificate is designed to prepare students for certification as Professional Landscape Designers. The certificate is designed to develop those skills in plant identification and culture, landscape construction skills, the maintenance of landscapes, as well as hand drawing, sketching, technical drafting, computer aided design, and portfolio assessments. This program is affiliated with the Association of Professional Landscape Designers (APLD).

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRT*H101</td>
<td>Landscape Construction</td>
<td>4</td>
</tr>
<tr>
<td>HRT*H102</td>
<td>Woody Plants</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H103</td>
<td>Herbaceous Plants</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H104</td>
<td>Soil Systems</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H202</td>
<td>Landscape Design I†</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H203</td>
<td>Landscape Design II</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H204</td>
<td>Computers in Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H206</td>
<td>Landscaping Small Properties</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H207</td>
<td>Landscape Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H208</td>
<td>Landscape Contract Administration</td>
<td>3</td>
</tr>
<tr>
<td>Art*H111</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>HRT*H203</td>
<td>Landscape Design 2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>
CERTIFICATES, CREDIT PROGRAMS

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Identify the current repertoire of trees, shrubs, ground covers, vines, annuals, biennials, and perennials by botanical and common names, describe the outstanding characteristics of each; summarize landscape uses, know their cultural requirements; design herbaceous and mixed borders.
2. Evaluate landscape areas and needs; select and place plants in a design; design and place hardscape features in a landscape; draw plans using traditional equipment and computer-aided tools; outline techniques for low maintenance needs in both residential and commercial properties.
3. Transfer portions of aerial designs into perceptual designs, using sketching techniques; develop a plan for pricing out landscape projects and bids; demonstrate oral skills to clients on design ideas; design landscape garden plans using computer design programs; manipulate computer designs to illustrate to landscape design development over time.
4. Demonstrate how to bring color to the landscape through the four seasons with herbaceous and woody plants; how to establish and manage mass planting through the year.
5. Demonstrate and explain how to prune deciduous and evergreen trees and shrubs for a variety of purposes.
6. Interpret fertilizer needs for particular plants from the general recommendations of a soil analysis; recognize signs of nutrient deficiency.
7. Demonstrate techniques for designing small properties; plan and select plants for different kinds of gardens (examples: for woods, meadows, marshes, water, rock gardens).
8. Relate the historical development of the garden through the ages and be able to recognize the contributions and influences of great designers on gardens today.
9. Relate and demonstrate how to use all the subtleties of color and design in the garden in two dimensional and three dimensional formats.
10. Initiate, develop and present a significant design as an independent study project.
11. Demonstrate a responsible attitude in relationships with employers, fellow employees, and toward the world of work.
12. Access available resources to incorporate technological innovations.
13. Be prepared for certification as a Professional Landscape Designer.
14. Initiate landscape design through computer-aided programs.

Lean Manufacturing Certificate Program
Science, Technology, Engineering & Mathematics Division

The Lean Manufacturing Certificate was developed as a response to the expressed future and current needs of the manufacturing community. The U.S. Department of Labor along with local industry has demonstrated a demand and need for courses in the areas of lean management. This certificate provides students with the skills that will increase their employability in the manufacturing field as well as set them on a path that will enable them to further their education.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG* H171</td>
<td>Introduction to Lean Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>MFG* H271</td>
<td>Advanced Lean Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Legal Studies/Paralegal Certificate Program
Business Division

The Legal Studies/Paralegal certificate program is designed to develop and enhance the skills and understanding needed to fill responsible positions in banks, insurance companies, real estate companies, private law offices, corporate law offices, and local, state and federal government legal departments. The Legal Studies/Paralegal Certificate program is a member of the American Association for Paralegal Education. See admission requirements to the Legal Studies/Paralegal Certificate Program below.

The topic of ethics and the paralegal’s role in the legal profession are emphasized throughout the courses in the program.

Eight courses are required for completion of the Legal Studies/Paralegal Certificate Program. The certificate will be awarded on completion of the following courses:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGL* H101</td>
<td>Introduction to Paralegalism</td>
<td>3</td>
</tr>
<tr>
<td>LGL* H102</td>
<td>Legal Research and Writing</td>
<td>3</td>
</tr>
<tr>
<td>LGL* H104</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>LGL* H202</td>
<td>Advanced Legal Research and Writing</td>
<td>3</td>
</tr>
<tr>
<td>LGL* H209</td>
<td>Probate Practice &amp; Estate Administra-</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>tion</td>
<td></td>
</tr>
<tr>
<td>LGL* H208</td>
<td>Litigation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choose two of the following:</td>
<td></td>
</tr>
<tr>
<td>LGL* H270</td>
<td>Cooperative Education Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>LGL* H210</td>
<td>Family Law</td>
<td>3</td>
</tr>
<tr>
<td>LGL* H204</td>
<td>Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>LGL* H230</td>
<td>Advanced Legal Issues Seminar</td>
<td>3</td>
</tr>
<tr>
<td>LGL* H206</td>
<td>Bankruptcy Law</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>24</td>
</tr>
</tbody>
</table>

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Interview client(s) and condense fact patterns into a concise legal analysis.
2. Explain the structure of the State and Federal Court system, including Trial Court function(s) and Appellate Court functions.
3. Identify historical, sociological and political trends that have changed, and continue to change, the American legal system.
4. Explain the role of forensic science in evidentiary matters pertaining to civil and criminal litigation.
5. Research a particular fact pattern to identify all legal issues, and describe the competing arguments that can be advanced by parties to a controversy.
6. Explain the role of the judiciary in providing a balance to the legislative and executive functions of government.
7. Differentiate between liability issues and damage issues in legal controversies.
8. Identify inherent restrictions in the civil and criminal legal process that inhibit the ability of the legal system to function as a tool of social justice.
9. Identify and present a logical plan for a client taking into account the strengths and weaknesses of adopting various legal positions.
10. Maintain organized financial data concerning a client’s case file.
11. Foster good relations between the law firm, department, or public entity and the clients served.
12. Demonstrate organization in handling multiple client case files and maintain strict docket control for timely case file review.
13. Understand conflict resolution as viewed from the theoretical perspective and the pragmatic perspective.
14. Apply common law principles and statutory principles where appropriate.
15. Recognize fundamental tort and contract principles that are found in different areas of the law.
CERTIFICATES, CREDIT PROGRAMS

Management: Business
Business Division
The Management Certificate Program is intended to provide students with a broad background in the field of management. Students completing this certificate program will be qualified to accept entry-level positions in a variety of profit and non-profit fields.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBG*H101</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BMG*H202</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BMG*H105</td>
<td>Supervision and Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>ACC*H113</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elect three of the following, totaling 9 credits:</td>
<td></td>
</tr>
<tr>
<td>BMG*H220</td>
<td>Human Resources Management</td>
<td></td>
</tr>
<tr>
<td>BBG*H210</td>
<td>Business Communication</td>
<td></td>
</tr>
<tr>
<td>BBG*H231</td>
<td>Business Law I</td>
<td></td>
</tr>
<tr>
<td>BMK*H201</td>
<td>Principles of Marketing</td>
<td></td>
</tr>
<tr>
<td>BMG*H105</td>
<td>Supervision and Organizational Behavior</td>
<td></td>
</tr>
<tr>
<td>ACC*H117</td>
<td>Principles of Managerial Accounting</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate basic knowledge of management, human resources, and organizational development in an entry level management position.
2. Identify the skills needed to organize thoughts and ideas, and demonstrate the ability to communicate, verbally and in writing, in a manner that can be easily understood in the business environment.
3. Solve math problems related to various aspects of management including accounting, finance and operations.
4. Understand and practice the various functions of management as well as the nature and responsibilities of a manager.
5. Develop an understanding of the decision-making process and demonstrate effective decision-making.
6. Demonstrate an ability to define management problems, examine alternatives and decide on the best course of action, and submit these in writing to higher management.
7. Develop a personal philosophy of management, enabling him/her to perform as a manager, staff specialist or as a subordinate.
8. Develop an understanding of the nature of change and how to adapt to the accelerating, global environment.
9. Demonstrate a knowledge and use of technological innovations as they apply to management.
10. Develop an ability to interpret management information from various sources such as financial statements, annual reports, and publications.
11. Demonstrate an understanding of the competitive pressures brought by effectiveness, efficiency and innovation issues on organizations.
12. Demonstrate a responsible attitude in relationships with employers, fellow employees, working groups, and the macro environment.

Management Information Systems (MIS)
Business Division
This certificate program will prepare students for applications and system programming positions within a business environment. Courses are designed to offer students immediate positions in industry, and will also provide a solid foundation for continuation in our two year associate’s degree in Computer Information Systems Technology.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Two Required Courses (6 credits)</strong></td>
<td></td>
</tr>
<tr>
<td>CSC*H205</td>
<td>Visual Basic I OR Programming I</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSC*H231</td>
<td>Database Design I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Four Elective Courses (12 credits) selected from this list</strong></td>
<td></td>
</tr>
<tr>
<td>CSC*H101</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H183</td>
<td>Information Systems in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H205 OR</td>
<td>Visual Basic I OR Programming I (if both are taken, one can be used to meet the 4 elective requirement)</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSC*H206</td>
<td>Visual Basic II</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H211</td>
<td>VB &amp; ASP .NET Web Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H227</td>
<td>Web Programming with Java</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H228</td>
<td>Mobile Device Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H229</td>
<td>Programming II</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H250</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H252</td>
<td>Information Systems Project Management</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H237</td>
<td>Database Programming with VB .NET</td>
<td>3</td>
</tr>
<tr>
<td>CST*H130</td>
<td>Networking Essentials I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Acquire a familiarization with terminology and structure of various programming languages.
2. Demonstrate the ability to use software tools for program development.
3. Write, compile and run effective business applications.
4. Troubleshoot common programming problems and test solutions.
5. Demonstrate a basic understanding of relational database concepts.

Marketing Electronic Commerce
Business Division
The world of Marketing is undergoing great change driven by the “Internet — Electronic Marketplace.” The Internet is fast becoming the ultimate distribution system to disseminate marketing data, identify customers and provide salesforce attention, customer service activity, and ordering. This short-term certificate is designed to provide you with the basic electronic commerce skills to effectively prepare and execute electronic commerce “Marketing Plans.” The critical skill areas emphasized are: the understanding of marketing, customer service capabilities, sales skills, computer expertise in electronic commerce, verbal and written communications abilities, and logical analysis problem-solving.
CERTIFICATES, CREDIT PROGRAMS

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMK*H220</td>
<td>Sales</td>
<td>3</td>
</tr>
<tr>
<td>BMK*H201</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BMK*H207</td>
<td>Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BMK*H216</td>
<td>Internet Marketing</td>
<td>3</td>
</tr>
<tr>
<td>CSA*H207</td>
<td>Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>15</td>
</tr>
</tbody>
</table>

A proficiency in computer skills is required and encompasses Windows, electronic spreadsheet, database applications and the Internet. This can be satisfied by work experience in these programs, a Web Page Design Certificate, a Webmaster Certificate, successful completion of CSA*H105, Introduction to Software Applications (or similar course), or permission of the Chair of the Management Department or Division Director.

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Identify and develop solutions to meet customers’ needs via the worldwide web and electronic commerce.
2. Apply the concepts of “Total Quality Management” and “Total Customer Service” to electronic commerce.
3. Prepare marketing material to be disseminated via electronic modalities to include: literature, proposals, point-of-sale literature, and promotion plans for the consumer, trade and sales force.
4. Possess the following computer skills: database management, word processing, internet marketing, desktop publishing, and sales and customer service system configuration/operations.

Modern Manufacturing Design Certificate
Science, Technology, Engineering & Mathematics Division

The Modern Manufacturing Design Certificate is designed for students seeking employment and advancement in support positions in a variety of manufacturing disciplines which require CAD, manufacturing, and mathematics skills. The credit hour requirement for this certificate facilitates completion within one year, and therefore meets the Workforce Investment Act criteria for training programs.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD*H150</td>
<td>CAD 2D</td>
<td>3</td>
</tr>
<tr>
<td>MFG*H104</td>
<td>Manufacturing Processes</td>
<td>4</td>
</tr>
<tr>
<td>TCN*H101</td>
<td>Introduction to Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>CAD*H220</td>
<td>Parametric Design</td>
<td>3</td>
</tr>
<tr>
<td>MFG*H210</td>
<td>Metrology</td>
<td>3</td>
</tr>
<tr>
<td>MAT*H135</td>
<td>Topics in Contemporary Mathematics (or higher level Mathematics course)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>19</td>
</tr>
</tbody>
</table>

Program Outcomes
Upon successful completion of all the program requirements, graduates will be able to:

1. Demonstrate basic knowledge and understanding of engineering graphics and conventional 2-dimensional drafting practices such as orthographic and isometric projection, section, detail, auxiliary views, and geometric dimensioning and tolerancing.
2. Demonstrate proficiency in the use of Cad software for 2-dimensional applications.
3. Explain concepts and skills required for manufacturing processes.
4. Demonstrate proper setup and procedures for various manufacturing processes.
5. To demonstrate the ability to use appropriate mathematical and computational skills needed for entry-level work in manufacturing.
6. To combine oral, graphical, and written communication skills to present and exchange information effectively and to direct manufacturing activities.

Multimedia/Web Authoring
Liberal Arts and Behavioral/Social Sciences Division

The certificate in Multimedia/Web Authoring is designed for individuals who have already earned advanced degrees, are currently employed in interactive multimedia/Web design professions, and are looking for skill-enhancement opportunities. Students entering this certificate program should already have a foundation in the core components of multimedia design and development attained through career performance or degree acquisition. If the individual does not possess either a degree or experience, he/she should consider enrolling in the Digital Arts/Multimedia Authoring degree option. Certificate credits may also be applied toward related degree programs.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAT*H104</td>
<td>Multimedia Authoring I</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H106</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H116</td>
<td>Interactive Media Design</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H205</td>
<td>Multimedia Authoring II</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H215</td>
<td>Multimedia/Web Authoring</td>
<td>3</td>
</tr>
<tr>
<td>DAT*H240</td>
<td>Multimedia Authoring III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>18</td>
</tr>
</tbody>
</table>

Program Outcomes
Upon successful completion of all program requirements graduates will be able to:

1. Utilize current development methods to design advanced multimedia systems.
2. Utilize the phases of the project development life-cycle to assist in the design and completion of multimedia project applications.
3. Conduct user-needs assessment for the development of multimedia systems.
4. Design and implement accessibility-compliant user interfaces.
6. Complete significant projects terminating in deliverable software products with technical documentation.

Object-Oriented Programming
Business Division

This certificate program recognizes the need to educate students in the area of object-oriented programming and systems design. Students will take courses in the area of Object-Oriented Systems (OOS). Programming languages include C++, VISUAL BASIC, and JAVA. An introduction to client/server systems applications is also included in this certificate program. Courses are designed to offer students immediate positions in industry, and will also provide a solid foundation for continuation in our two-year associate’s degree in Computer Information Systems Technology.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC*H205</td>
<td>Visual Basic I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>CSC*H113</td>
<td>Programming I</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H231</td>
<td>Database Design I</td>
<td>3</td>
</tr>
<tr>
<td>Two Required Courses (6 credits)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CERTIFICATES, CREDIT PROGRAMS

Four Elective Courses (12 credits) from this list

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC*H101</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H205 OR</td>
<td>Visual Basic I OR Programming I (if both are</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>taken, one can be used to meet the 4 elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>requirement)</td>
<td></td>
</tr>
<tr>
<td>CSC*H206</td>
<td>Visual Basic II</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H211</td>
<td>VB &amp; ASP .NET Web Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H213</td>
<td>Object Oriented Programming Using C++</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H214</td>
<td>Advanced C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H220</td>
<td>Object Oriented Programming Using Java</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H227</td>
<td>Web Programming with Java</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H228</td>
<td>Mobile Device Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H229</td>
<td>Programming II</td>
<td>3</td>
</tr>
<tr>
<td>CSC*H237</td>
<td>Database Programming with VB .NET</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 18

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate the use of objects in application programs.
3. Write, compile, and execute programs using C++, JAVA, and Visual Basic programming languages.
4. Create applications using object-oriented features.
5. Use inheritance and interfaces to create robust, reusable, programming code.
6. Demonstrate a basic understanding of relational database concepts.

Supply Chain Management

Science, Technology, Engineering & Mathematics Division

The Supply Chain Management Certificate was developed as a response to the expressed future and current needs of the manufacturing community. The U.S. Department of Labor along with local industry has demonstrated a demand and need for courses in supply chain management. This certificate provides students with the skills that will increase their employability in the manufacturing field as well as set them on a path that will enable them to further their education.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG* H172</td>
<td>Intro to Lean Supply Chain Mgmt.</td>
<td>3</td>
</tr>
<tr>
<td>MFG* H272</td>
<td>Implementing Lean Supply Chain Mgmt.</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 6

Sustainable Food Systems

Science, Technology, Engineering & Mathematics Division

The Sustainable Food Systems certificate provides students with career skills in the agriculture and food-service industry. This program will allow students to pursue professional certification as a Qualified Food Operator and Commercial Pesticide Applicator. Students will learn the fundamentals of food safety, fruit and vegetable production, integrated pest management, and associated food service issues. This certificate combines the resources of two strong, viable NVCC programs (Horticulture and Hospitality) and will provide students with career skills in both the agriculture and food-service industry. To earn this certificate, Horticulture students must take one additional class in Hospitality; Hospitality students may choose from several Horticulture courses. Graduates will be qualified to work in a variety of positions associated with local food processing facilities, which include farm-table operations, agricultural enterprises, and wholesale food distribution centers.

Other relevant employment opportunities include nursery worker, nursery manager, farm workers, farm managers, food service supervisor, food science technician and pesticide handlers among others. Data was collected from the U.S. Department of Labor, the U.S. Bureau of Labor Statistics, and the CT Department of Labor.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSP* H109</td>
<td>Food Safety Certification</td>
<td>1</td>
</tr>
<tr>
<td>HRT* H106</td>
<td>Fruit Production</td>
<td>3</td>
</tr>
<tr>
<td>HRT* H107</td>
<td>Vegetable and Herb Production</td>
<td>3</td>
</tr>
<tr>
<td>HRT* H215</td>
<td>Integrated Pest Management</td>
<td>3</td>
</tr>
<tr>
<td>†Directed Electives</td>
<td>Please choose two from list below</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credit Hours 16

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Apply the commercial food safety standards for preventing food-borne illness, including associated legal regulations and national SERVSAFE certification.
2. Apply proper safety protocols for pesticide application and handling utilizing national integrated pest management standards. These applications will be in-class and field based studies which include biological control mechanisms and congenital chemical applications.
3. Demonstrate proficiency in agricultural operations which will include equipment operation and troubleshooting, nutrient analysis, and crop scheduling/succession.
4. Apply proper production methods for fruit and vegetable crops as it relates to commercial agricultural enterprises.

Technical Communications

Liberal Arts and Behavioral/Social Sciences Division

The certificate in Technical Communications prepares and empowers the student to be an effective communicator with the ability to write and speak about technical subjects to co-workers, management and customers. At almost every level of employment, business and industry are seeking employees who can communicate technical information to others. Most jobs call for writing skills to prepare correspondence, instructions, charts, graphs and proposals in order to explain, illustrate and convince. Workers also need to speak well enough to explain procedures, communicate with customers and to teach others.

This certificate is focused on working adults who have a desire to improve their technical communications skills. A unique feature is the five-course duration allowing the student to complete the program in a few semesters. Courses carry college credit and are offered in the evening for the convenience of working students. The following courses comprise the certificate in Technical Communications:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM* H100</td>
<td>Introduction to Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENG* H101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>CSA* H105</td>
<td>Introduction to Software Applications</td>
<td>3</td>
</tr>
<tr>
<td>ENG* H202</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>DAT* H101</td>
<td>Introduction to Digital Arts</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRA* H150</td>
<td>Introduction to Graphic Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 15

To ensure the applicant’s appropriate placement within the program, reading and writing competencies will be assessed. Applicants in need of improvement will be advised to enroll in the College’s academic skills and/or basic writing courses.
CERTIFICATES, CREDIT PROGRAMS

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate increased competencies in writing and speaking skills.
2. Effectively articulate technical procedures to co-workers, management, and customers.
3. Utilize current computer software, audio, and video tools in preparing technical presentations.

Visual Art
Liberal Arts and Behavioral/Social Sciences Division

The Arts certificate program in Visual Art is a generalized program of primarily two-dimensional studio art and art appreciation courses for the student who wishes to begin college-level credited art courses or to continue such study. Not all courses are offered in all semesters.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART*H111</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART*H151</td>
<td>Painting I</td>
<td>3</td>
</tr>
<tr>
<td>ART*H101</td>
<td>Art History I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
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<tr>
<td>ART*H102</td>
<td>Art History II</td>
<td>3</td>
</tr>
<tr>
<td>ART*H112</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART*H152</td>
<td>Painting II</td>
<td>3</td>
</tr>
<tr>
<td>ART*H121</td>
<td>Two-Dimensional Design</td>
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</tr>
<tr>
<td>ART*H131</td>
<td>Sculpture I</td>
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<tr>
<td>Electives</td>
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<tr>
<td>Total Credit Hours</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

Program Outcomes
Upon successful completion of all program requirements, graduates will be able to:

1. Demonstrate mastery of skills and techniques necessary for studio art.
2. Assemble a comprehensive portfolio of artwork.
Lifelong Learning, Non-credit Certificates and Programs

The college offers a variety of non-credit lifelong learning activities to meet the career and professional development needs of our communities. Our programs serve the specialized needs of the people and industries in the State of Connecticut.

Classes are offered days, evenings, and weekends at our main campus in Waterbury and at the Danbury Campus, 190 Main Street, Danbury. At Naugatuck Valley Community College you can find classes to improve your computer skills, prepare for a new career, earn a required license or certification, or master the art of riding a motorcycle safely.

Courses are offered year round and provide either a Completion or Proficiency Certificate.

• Completion Certificate: confirms attainment of a specific subject or skill.

• Proficiency Certificate: verifies significant subject-matter content has been obtained and prepares the student in direct alignment with industry standards and/or State or professional certification or licensure.

Our staff in the Office of Non-credit Lifelong Learning is available to answer your questions and provide additional program information.

Non-Credit Lifelong Learning
(203) 575-8029
nc@nv.edu

Customized Training

In today’s competitive global market, the difference between growth and stagnation lies in the quality of the team. Enhancing the knowledge and skills of employees with experts from Naugatuck Valley Community College (NVCC) can create that high performance environment. Our cost-effective, customized training solutions provide assessment and training that focuses on the needs of business, industry, healthcare, government, and professional associations in the areas that address skills to improve job performance and productivity including: technical skills, management and supervision, employability skills, workplace literacy, and English-as-a-Second Language. NVCC recognizes that training programs need to accommodate employee work schedules and time lines; so we will deliver training where and when needed. Days, evenings, or weekends, your site or ours, we will be there when you need us.
<table>
<thead>
<tr>
<th>COURSE DESIGNATION</th>
<th>COURSE PREFIX</th>
<th>DIVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>ACC*H</td>
<td>Business</td>
</tr>
<tr>
<td>American Sign Language</td>
<td>ASL*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
</tr>
<tr>
<td>Anthropology</td>
<td>ANT*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
</tr>
<tr>
<td>Art</td>
<td>ART<em>H, GRA</em>H</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
</tr>
<tr>
<td>Astronomy</td>
<td>AST*H</td>
<td>Business</td>
</tr>
<tr>
<td>Automotive Technician</td>
<td>ATP*H</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
</tr>
<tr>
<td>Aviation Science</td>
<td>AVS*H</td>
<td>Business</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>BIO*H</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
</tr>
<tr>
<td>Business</td>
<td>BBG<em>H, BES</em>H, BMK<em>H, BMG</em>H</td>
<td>Business</td>
</tr>
<tr>
<td>Business Finance</td>
<td>BFN<em>H, BRE</em>H</td>
<td>Business</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHE*H</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
</tr>
<tr>
<td>Communications</td>
<td>COM*H</td>
<td>Business</td>
</tr>
<tr>
<td>Computer-Aided Drafting/Design</td>
<td>CAD H, CAD*H</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>CSC<em>H, CST</em>H</td>
<td>Business</td>
</tr>
<tr>
<td>Computer Science</td>
<td>CSA*H</td>
<td>Business</td>
</tr>
<tr>
<td>Cooperative Education</td>
<td>CWE H</td>
<td>Student Services</td>
</tr>
<tr>
<td>Criminal Justice/Public Safety</td>
<td>CJ*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
</tr>
<tr>
<td>Dance</td>
<td>DAN*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
</tr>
<tr>
<td>Digital Arts Technology</td>
<td>DAT*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
</tr>
<tr>
<td>Drug and Alcohol Recovery Counselor</td>
<td>DAR*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>ECE*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
</tr>
<tr>
<td>Economics</td>
<td>ECN*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
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<tr>
<td>Electronic Engineering Technology</td>
<td>EET*H</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
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<tr>
<td>EMT-Basic</td>
<td>EMT*H</td>
<td>Allied Health/Nursing/Phys. Ed.</td>
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<tr>
<td>Engineering Technology</td>
<td>TCN*H</td>
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<td>English</td>
<td>ENG*H</td>
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<tr>
<td>English as a Second Language</td>
<td>ESL*H</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
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<tr>
<td>Environmental Science</td>
<td>ENV*H</td>
<td>Business</td>
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<tr>
<td>Fire Technology and Administration</td>
<td>FTA*H</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
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<td>Geography</td>
<td>GEO*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
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<td>Geology</td>
<td>GLG*H</td>
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<td>Health</td>
<td>HLT*H</td>
<td>Allied Health/Nursing/Phys. Ed.</td>
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<td>History</td>
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<td>Liberal Arts and Behavioral/Social Sciences</td>
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<td>Honors</td>
<td>HON H</td>
<td>Academic Affairs</td>
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<tr>
<td>Horticulture</td>
<td>HRT*H</td>
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<tr>
<td>Hospitality Mgt. (Foodservice Mgt. and Hotel Mgt.)</td>
<td>HSP*H</td>
<td>Business</td>
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<td>Human Services</td>
<td>HSE*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
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<td>Humanities</td>
<td>HUM*H</td>
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<td>Interdisciplinary Studies</td>
<td>IDS H</td>
<td>Business</td>
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<td>Languages</td>
<td>CHI<em>H, FRE</em>H, GER<em>H, ITA</em>H, POR*H, ASL *H, SPA *H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
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<td>Latino American Studies</td>
<td>LAS*H</td>
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<td>Legal Assistant/Paralegal</td>
<td>LGL*H</td>
<td>Business</td>
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<tr>
<td>Management</td>
<td>BES<em>H, BMG</em>H</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
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<td>Manufacturing</td>
<td>MFG H, MFG*H</td>
<td>Business</td>
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<td>Marketing</td>
<td>BMK*H</td>
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<td>Mathematics</td>
<td>MAT*H</td>
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<td>Mechanical Engineering Technology</td>
<td>MEC*H</td>
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<td>Medical Assisting</td>
<td>MED*H</td>
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<td>Meteorology</td>
<td>MET*H</td>
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<td>Music</td>
<td>MUS*H</td>
<td>Allied Health/Nursing/Phys. Ed.</td>
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<tr>
<td>Nursing</td>
<td>NSG<em>H, NUR</em>H, HLT*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
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<td>Philosophy</td>
<td>PHL*H</td>
<td>Allied Health/Nursing/Phys. Ed.</td>
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<td>Physical Education</td>
<td>HPE*H</td>
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<td>Physical Therapist Assistant</td>
<td>PTA*H</td>
<td>Allied Health/Nursing/Phys. Ed.</td>
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<td>Physics</td>
<td>PHY*H</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
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<td>Political Science</td>
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<td>Psychology</td>
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<td>Quality Assurance</td>
<td>QUA*H</td>
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<td>Radiologic Technology</td>
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<td>Respiratory Care</td>
<td>RSP*H</td>
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<td>Sociology</td>
<td>SOC*H</td>
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<tr>
<td>Theater</td>
<td>THR*H</td>
<td>Liberal Arts and Behavioral/Social Sciences</td>
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The * denotes courses which have the same number as similar courses at other community colleges in Connecticut.
The following are descriptions of courses offered by Naugatuck Valley Community College. It is the responsibility of the students to check their programs of study, and to carefully check the schedule of course offerings prior to each semester, in order to ascertain which courses will be offered for a particular semester.

In the following course descriptions, the number of credit hours for each course is indicated. Also included are numbers of lab and lecture hours. Students are urged to consult their counselor for information about transferability of courses to four-year institutions.

**NOLO COURSES**
NoLo = No or Low Cost Textbooks
Courses marked as "NoLo" contain text-based materials that are no cost or low cost, and will not exceed $40. Check course descriptions for the "NoLo" tag to take advantage. NoLo = Total Course Materials <= $40. College and course participation may vary. Visit http://www.ct.edu/oer#nolo for more information on how you can search for your NOLO course on mycommnet.edu

**WAIVER OF COURSE PREREQUISITES**
In certain circumstances, course prerequisites may be waived. The student must demonstrate to the program coordinator and/or Division Leader that he/she has mastered the basic concepts of the prerequisite course. Permission to waive a prerequisite should not be taken for granted. Waivers are NOT automatic and will be handled and granted on an individual basis.

*Note: All courses listed in this catalog may not be offered during the current academic year.*

**CREDIT COURSES WHICH DO NOT APPLY TO ELECTIVES OR DEGREES**
The following courses do not satisfy the elective or degree requirements in any program except where specifically listed.

- ENG*H063, 096
- ESL*H012, 013, 015, 017, 022, 025
- HLT*H093
- MAT*H075, 092, 094, 095

**HELPFUL DEFINITIONS WHEN SELECTING YOUR PROGRAM AND COURSES**

1. **Credit Hours (credits)** - College work is measured in units called credit hours. A credit-hour value is assigned to each course and is normally equal to the number of hours the course meets each week. Credit hours may also be referred to as semester hours.

2. **Lecture Hours (lec.)** - The number of clock hours in the fall or spring semester the student spends each week in the classroom. This time frame is different for the shorter summer sessions.

3. **Laboratory Hours (lab.)** - The number of clock hours in the fall or spring semester the student spends each week in the laboratory or other learning environment. This time frame is different for the shorter summer sessions.

4. **Prerequisite** - A course that must be successfully completed, or a requirement such as related life experiences that must be met before enrolling in another course.

5. **Corequisite** - A course that must be taken during the same or earlier semester as the course in which one is enrolling.

6. **General Education Core** - A term which refers to courses as listed under the 11 competencies of Naugatuck Valley Community College's General Education Core which the faculty of the College considers essential to its degree programs. Refer to pages 50-55.

7. **Electives** - Courses which may be chosen from items 8, 9, or 10.

8. **Liberal Arts Electives** - All courses listed in the general education core.

9. **General Electives** - All courses listed in the catalog. Students who have taken restricted courses may apply the courses as general electives if they change programs. Students should consider transferability of courses when choosing general electives.

10. **Directed Electives** - Credit courses that satisfy specific program requirements. These courses are listed with each program area.

11. **Language Equivalencies** - The following equivalencies satisfy the modern language requirements:
   - Three years of high school work in a single foreign language, ancient or modern, or
   - Two years of high school work and an added semester of a college course at a more advanced level in a single foreign language, or
   - Two semesters of a single foreign language in college.

*Note: Students may also take CLEP (College Level Examination Program) to satisfy the modern language requirements. Information on these tests is available from the Testing Center.*

This College continues to add and adjust courses, course designations, and course numbers to its offerings. The general education core and the definitions will be adjusted accordingly.

**SELF-PACED COURSES**
Some of the courses listed in the description are offered as “self-paced” which means that they are conducted in an alternate way to the regular class scheduled meetings. These courses are offered through the standard text books, and specially prepared materials, and/or video/audio tapes. Students are guided through the courses by a relevant member of the faculty. Students should be aware that self-discipline is required for the successful completion of self-paced courses. Permission from a counselor, the relevant faculty member or Division Leader is required before students register for self-paced courses. The student may register at any time. The course must be completed by the end of the succeeding semester.

**INDEPENDENT STUDY** Independent study courses may not be taken if the course is being offered in the same semester.

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**Policy Changes**
Naugatuck Valley Community College reserves the right to change requirements, courses, prerequisites, regulations, tuition, fees and other policies without prior notice. The President of the College upon written request may make waivers of these policies, due to extenuating circumstances. The catalog does not constitute a contract and is for informational use only.
ACCOUNTING
Business Division

ACC*H113 Principles of Financial Accounting 3 credits
Prerequisite: ACC*H113 is a rigorous college level course. Students should have completed all developmental course work. The course offers an introduction to financial accounting with an emphasis on the use and interpretation of financial accounting information. It introduces the student to the balance sheet, income statement, statement of retained earnings, the cash flow statement and the operation of an accounting information system. The course focuses on the fundamental theory and principles of accounting, and utilizes accounting procedures to clarify and demonstrate the underlying concepts. The computer is used in this course.

ACC*H117 Principles of Managerial Accounting 3 credits
Prerequisite: ACC*H113. The major objectives of this course are to introduce management tools and models that use accounting information. The use of accounting information for planning, controlling, and decision-making is explored in topics including cost behavior, budgeting and cost accounting. The analysis and interpretation of information are stressed in this rigorous one semester management accounting course. The computer is used in this course.

ACC*H221 Accounting Software Applications 3 credits
Prerequisites: Grade of “C” or better in ACC*H113, CSA*H105, and MATH*H117. Corequisite: ACC*H117. Recognizing the importance of computer skills in accounting, this course is designed to acquaint the student with techniques and procedures in using microcomputers as a problem-solving tool in accounting and related disciplines. A PC accounting package and a computerized spreadsheet package will be used in the course. The course will be appropriately rigorous, and the spreadsheet usage will be centered around problems typical of a second semester accounting course.

ACC*H241 Federal Taxes I 3 credits
The Federal Income Tax course is a one-semester study of the Internal Revenue Code as it pertains to individuals. Its purpose is to introduce the student to the federal income tax laws and the application of those laws to the preparation of tax returns.

ACC*H271 Intermediate Accounting I 3 credits
Prerequisite: Grade of “C” or better in ACC*H117. This course is designed to develop a high level of technical competence. Beginning with basic accounting issues, the course develops students’ skills to the point at which they can handle complex professional level problems requiring not only a knowledge of procedures, but also a keen awareness of the concepts behind them. Consideration is given to analysis and interpretation of financial data.

ACC*H272 Intermediate Accounting II 3 credits
Prerequisite: Grade of “C” or better in ACC*H117. ACC*H272 is a continuation of the studies begun in CCT-H201. Particular emphasis is on the topics involving financial statement reporting and disclosure. Subjects covered in depth include current and long-term liabilities, long term investments, the accounting for corporate capital, retained earnings and dividends, the preparation of the Cash Flow Statement, and Income Tax Accounting.

ANTHROPOLOGY
Liberal Arts and Behavioral/Social Sciences Division

ANT*H101 Introduction to Anthropology 3 credits
Prerequisite: Eligibility for ENG*H101. This course is an introduction to the four fields of anthropology: physical (or biological), cultural, archaeological, and linguistic. Topics include a study of evolution, the origins of humankind, human variation, the development of culture, economic and political organization, archaeology, language and communication, marriage and family patterns, kinship and descent, religion, the arts, personality and culture, and cultural change.

ANT*H102 Introduction to Archaeology 3 credits
Archaeology is the study of past cultures and societies through examination of their material remains. The class will explore different varieties of archaeology and examine theory, methods, and techniques for investigating, reconstructing, interpreting, preserving, and ultimately, learning from the past. Students will then briefly review human cultural chronology from the time of the first people, the earliest Paleolithic ages, to the present, and deal with not only the artifact remains but also important social, economic, and even ideological questions, such as those on the origins of food production, social inequality, and civilization. Two major emphases throughout the course are archaeology as anthropology and the relevance of archaeology to modern human society and politics. The class will also examine discoveries that make the news during the semester.

ANT*H205 Cultural Anthropology 3 credits
This course is an examination of the concept of culture as the central mode through which humans become people. Students will examine the concept of culture vs. instinct, human cultural adaptation and variation, along with cultural universals, language and communication, marriage and family patterns, kinship and descent, religion, the arts, economic and political organization, personality and culture, and cultural change.

ART
Liberal Arts and Behavioral/Social Sciences Division

The Division of Liberal Arts and Behavioral/Social Sciences encourages students to register for Art courses in order to develop appreciation of, and skills in, the Arts. Some of the courses are required in career programs; others are designed for students’ interests and personal development. Consultation with counselors will help determine specific needs. For information, contact the Division of Liberal Arts and Behavioral/Social Sciences at 575-8004.

ART*H101 Art History I 3 credits
This course is a survey of Western art and architecture from prehistory to the gothic period through an historical, cultural, and technological perspective. The class will include lectures, video and slide presentations for the art major or general student.

ART*H102 Art History II 3 credits
This course is a survey of Western art and architecture from the early Renaissance to the present day through an historical, cultural, and technological perspective. The class will include lectures, video, and slide presentations. For the art major or general student.

ART*H111 Drawing I 3 credits
Prerequisites: ART*H131 or permission of the Division Leader. This course is an introduction to sculptural form and composition with an emphasis on line, shape, and composition. Linear drawing is a fundamental skill for all art students and prepares students for more advanced drawing courses.

ART*H112 Drawing II 3 credits
Prerequisite: ART*H111 or permission of the Division Leader. This is a continuation of ART*H111. Planned experiments using various media and the development of a personal style in drawing are offered.

ART*H121 Two-Dimensional Design 3 credits
This is an introduction to color and design in two-dimensional work in various media.

ART*H122 Three-Dimensional Design 3 credits
This course is an introduction to three-dimensional studio techniques, use of materials, tools and media.

ART*H131 Sculpture I 3 credits
This course is an introduction to sculptural form and composition through direct techniques in a variety of materials including wood, plaster, clay and plastics.

ART*H132 Sculpture II 3 credits
Prerequisite: ART*H131 or permission of the Division Leader. This is a continuation and development of techniques introduced in ART*H131 as well as involvement in more advanced processes such as kinetic, metals and large scale work. Independent work will be encouraged.
ART*H151 Painting I 3 credits
Prerequisite: ART*H111. This is a beginning course in painting in which the student is introduced to the methods and materials of painting and is encouraged to develop some proficiency in the technique of oils, acrylics, or watercolor through exploration and experimentation.

ART*H152 Painting II 3 credits
Prerequisite: ART*H151 or permission of Division Leader. This is a continuation of ART*H151. Emphasis is on the development of skills and individual expression in the use of oils or acrylics.

ART*H161 Ceramics I 3 credits
This is an introduction to the creative possibilities of ceramic clay in pottery and sculpture through basic hand modeling techniques such as coil, slab, drape, and potter’s wheel. Firing and kiln procedures will also be covered.

ART*H162 Ceramics II 3 credits
Prerequisite: ART*H161 or permission of Division Leader. This course is a continuation of ART*H161. Concentration is on wheel thrown and hand built forms, kiln operation and glaze formation.

ART*H167 Printmaking I 3 credits
Introduction to basic techniques in such graphic processes as silk screen, block printing, offset and dry-point etching.

GRA*H150 Introduction to Graphic Design 3 credits
This course is an introduction to the basic principles and processes of Graphic Design. Students will learn basic design, layout, and imaging skills through the use of IBM software applications for computer graphics (Quark Xpress and Adobe Illustrator). Previous drawing/sketching experience and computer skills are helpful.

AST*H101 Principles of Astronomy 3 credits
Prerequisite: MAT*H095 or placement test score. This course explores man’s rapidly growing knowledge of the Cosmos. Topics include: the sun as a star; the birth and death of stars; the nature of black holes, pulsars, and quasars; the origins of our solar system and the Universe; the identification of stars and constellations in the night sky; and the nature of time as man’s invention. Observatory sessions and projects planned as weather permits. Students may not receive credit for both AST*H101 and AST*H111. (fall/spring/summer)

AST*H111 Introduction to Astronomy 4 credits
Pre-requisite MAT*H095 or placement score. This course is designed to give an overview of the major topics in astronomy and requires basic algebra. The topics covered include: the night sky, the origins of astronomy, a brief description of physics in astronomy, our solar system, stars, galaxies and cosmology. The lab portion will support the understanding of concepts and computation in astronomy. Sessions in the NVCC Observatory will be an integral part of the course. Three hours of lecture and two hours of laboratory weekly. Students may not receive credit for both AST*H101 and AST*H111. (fall/spring)

AUTOMOTIVE TECHNICIAN
Business Division

ATP*H100 Integrated Automotive Systems 3 credits
This is an introductory course for the Automotive Technician providing the theory for a foundation in the field. Emphasis will be on basic automotive service procedures and the inter-relationship of the various automotive systems. Shop safety, proper care and use of tools are included. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H110 Automotive Electrical Systems 3 credits
Corequisites: ATP*H100 and MAT*H095 or satisfactory completion of College placement test or with permission of the Coordinator. The study of electrical theory and nomenclature along with applications of electrical/electronic systems. To include, but is not limited to: starting, charging, lighting, wiring, accessories, diagnosis and repairs. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H120 Engine Repair 3 credits
Corequisite: ATP*H100 or with permission of the Coordinator. Diagnosis of automotive engines and their lubrication and cooling systems. Included is engine construction, operation along with disassembly and assembly techniques. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H130 Brakes 3 credits
Corequisite: ATP*H100 or with permission of the Coordinator. Covers the maintenance, diagnosis and repair procedures of disc and/or drum brake systems including ABS (antilock brakes) along with their mechanical, hydraulic and electrical components. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H140 Automotive Heating and Air Conditioning 3 credits
Corequisite: ATP*H100 or with permission of the Coordinator. Theory-related instruction of the automotive heating and air conditioning systems. Emphasis is placed on basic refrigerant cycles, heat transfer, trouble shooting, and diagnosis of both refrigerant and electronic control systems. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H150 Suspension and Steering 3 credits
Corequisite: ATP*H100 or with permission of the Coordinator. The diagnosis and repair of steering and suspension systems and their inter-relationship to wheel alignment. The course includes a thorough knowledge of wheel and tire maintenance. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H185 Automotive Service and Parts Department Management 2 credits
Prerequisite: ATP*H100 or with the permission of Coordinator. Topics in this course include marketing techniques, financial analysis, personnel management, work scheduling and distribution, and use of pricing manuals. An in-depth study of parts numbering, storage, cataloging, retrieval, ordering, and stocking management techniques will be discussed. Two lecture hours weekly.

ATP*H190 Metallurgy/Welding 2 credits
In the automotive field, the use of the oxyacetylene torch and the mig welder is common place. Automotive technicians need to be able to use the processes of welding and brazing, etc. safely and skillfully. This course offers both theory and a practical lab section so students will be both skilled and knowledgeable in all the welding technology covered. One-hour lecture and two hours of laboratory weekly.

ATP*H210 Engine Performance 3 credits
Prerequisite: ATP*H100 or with permission of the Coordinator. Fuel theory and nomenclature necessary to service and repair computerized automotive fuel systems. This includes but is not limited to computer controls, ignition, fuel, exhaust and emission systems and their maintenance, diagnosis, adjustments and repair. Two hours lecture and two and one-half hours laboratory weekly.
ATP*H220 Automotive Emissions 3 credits
Prerequisite: ATP*H210 or with permission of the Coordinator. This is a continuation of ATP*H210, emphasizing practical application on the cause and effect of HC, CO, and NOx emissions. This includes various systems diagnosis, containing but not limited to, general powertrain, computerized powertrain controls, fuel and air induction, emissions control, and I/M failure. Two-hour lecture and two and one-half hours laboratory weekly.

ATP*H261 Manual Drive Train and Axles 2 credits
Corequisite: ATP*H100 or with permission of the Coordinator. The diagnosis and repair of manual drive transmissions and transaxles. This includes clutches, drive (half) shaft, and universal joints along with rear axle and four wheel drive components. One-hour lecture two hours lab weekly.

ATP*H262 Automatic Transmission and Transaxle I 2 credits
Corequisite: ATP*H100 or with permission of the Coordinator. The operation, diagnosis and maintenance of automatic transmission and transaxles to include in-vehicle and off-vehicle adjustments and repair. One-hour lecture and two hours lab weekly.

ATP*H270 Introduction to Diesel Mechanics 3 credits
Corequisite: ATP*H100 or with permission of Coordinator. This course introduces the diesel engine, its capabilities, operations, and its unique engine fuel delivery systems. Two-hour lecture and two and one-half hours of laboratory weekly.

ATP*H280 Alternative Fuel Vehicle Fundamentals 2 credits
This course is designed to prepare automotive technicians, dealers, and repairers to take the ASE Alternative Fuel Vehicle Certification examinations. It covers fundamental procedures, operations, safety, regulations and inspection of Alternative Fuel Vehicles. One-hour lecture and two hours of laboratory weekly.

ATP*H290 Cooperative Work Experience I 3 credits
Prerequisites: ATP*H100, 110, 120, 130, 150, ENG*H101, minimum 30 credits of course work completed and a 2.5 GPA, or with permission of Coordinator. This required course is designed to bridge the gap between academic theory and practical work experience. It consists of a minimum 250-hour Cooperative Work Experience.

ATP*H291 Cooperative Work Experience II 3 credits
Prerequisites: ATP*H290 and a minimum of 40 credits of course work completed and a 2.5 GPA, or with permission of Coordinator. This required course is designed to bridge the gap between academic theory and practical work experience. It consists of a minimum 250-hour Cooperative Work Experience.

AVS*H101 Private Pilot Lecture 3 credits
Corequisite: AVS*H201. This ground school course includes coverage of basic flight concepts, principles of meteorology, aeronautical charts and publications, pre-flight planning, flight computer and plotter, basic radio navigation, Federal Aviation Regulations, basic aerodynamics, aircraft avionics, and emergency procedures. This course prepares students for the FAA Private Pilot Knowledge Test.

AVS*H103 Instrument Lecture 3 credits
Prerequisites: AVS*H101, AVS*H201. This ground school course includes coverage of human factors and aviation physiology, the construction, use and interpretation of aircraft instruments used in instrument flight, Federal Aviation Regulations, instrument navigation, the ATC system, aeronautical charts and publications related to instrument flight, instrument approaches, weather analysis for instrument operations, and instrument emergency procedures. This course prepares students for the FAA Instrument Rating Knowledge Test.

AVS*H104 Commercial Pilot Lecture 3 credits
Prerequisites: AVS*H103, AVS*H203. This ground school course includes coverage of advanced human factors and aeronautical decision making for commercial operations, advanced navigation, advanced aircraft systems, advanced aerodynamics and commercial maneuvers, and emergency procedures for commercial operations. This course prepares students for the FAA Commercial Pilot Knowledge Test.

AVS*H120 Foundations of Aviation 3 credits
This course explores the events that have shaped the development of aviation from the earliest attempts at flight up to the present day. The historical foundation of aviation is used to develop an understanding of the economic, social, and political impact of aviation on society.

AVS*H130 Air Transportation System 3 credits
This course provides a historical background and an overview of the major segments of the air transportation industry. Current state and federal agencies and the regulations influencing air transportation, as well as the basis for their establishment, are also discussed. Requirements of the past, present and future with respect to aircraft and engine design, airports and supporting facilities are reviewed and evaluated. Students are introduced to the economics of airline operations and maintenance, and the general factors that influence an airline’s survival and profitability.

AVS*H140 Aerospace Safety 3 credits
This course is designed to provide the student with an understanding of the role of government agencies in ensuring aerospace safety. The ways in which airlines and airports ensure public safety and security will also be discussed. Emphasis will be on critical analysis of case studies involving investigations and prevention of aircraft accidents.

AVS*H150 Airport Management I 3 credits
This course provides an overview of the operational requirements needed for airports and airport terminals with an emphasis on the facilities that comprise an airport system, including airspace, airfield, terminal, and ground access operations. The financial aspects of airport planning as well as airport capacity considerations are also discussed.

AVS*H151 Airport Management II 3 credits
Prerequisite: AVS*H150. This course is a continuation of AVS*H150. Emphasis is on managing daily airport operations, airport organization and administration, and financial management of the airport facility. Airport improvements and the relationship of airports with tenants and the general public are also discussed.

AVS*H201 Private Pilot Flight Training Lab 3 credits
Corequisite: AVS*H101. All flight training costs are the responsibility of the student. Students will receive approximately 50 hours of flight instruction covering topics that include pre-flight operations, aircraft systems, ground operations, basic flight maneuvers, ground reference maneuvers, normal and emergency procedures, cross-country operations, and flight by reference to instruments. Co-op instruction is designed to augment students’ flight training and includes the use of a flight simulator as well as classroom discussion of selected topics. This course prepares students for the FAA Private Pilot Practical Test (ASEL).

AVS*H203 Instrument Flight Training Lab 3 credits
Corequisite: AVS*H103. All flight training costs are the responsibility of the student. Students will receive approximately 50 hours of flight instruction covering topics that include pre-flight operations, full and partial panel procedures, systems and equipment malfunction, instrument navigation techniques, holding and approach procedures, and emergency procedures for instrument flight. Co-op instruction is designed to augment students’ flight training and includes the use of a flight simulator as well as classroom discussion of selected topics. This course prepares students for the FAA Instrument Rating Practical Test (ASEL).

AVS*H204 Commercial Flight Training Lab 3 credits
Corequisite: AVS*H104. All flight training costs are the responsibility of the student. Students will receive approximately 120 hours of flight instruction covering topics that include pre-flight operations, aircraft systems, advanced ground operations, advanced flight maneuvers, normal and emergency procedures, commercial cross-country operations, and complex aircraft
operations. Co-op instruction is designed to augment students’ flight training and includes the use of a flight simulator as well as classroom discussion of selected topics. This course prepares students for the FAA Commercial Pilot Practical Test (ASEL).

**AVS*H255 Human Factors in Aviation** 3 credits
This course explores physiological and cognitive factors such as hypoxia, disorientation, stress, fatigue, anxiety and the effects of alcohol and other drugs on critical judgment and decision making processes of operational personnel in aviation. Investigation of our unique human capabilities and limitations is used to develop strategies to improve the performance of flight crews, air traffic controllers, flight management and other operational personnel as they identify and respond to critical, time-sensitive situations in aviation operations.

**BIOLOGICAL SCIENCES**
Science, Technology, Engineering & Mathematics Division

**BIO*H105 Introduction to Biology** 4 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. The general principles of biology are taught using a combination of multimedia lectures, discussion groups, and a laboratory component. Topics covered include cell biology, diversity, biotechnology, basic chemistry, cellular respiration and photosynthesis, ecology, genetics, behavior, and evolution. Laboratory includes an animal dissection. Three hours of lecture and three hours of laboratory weekly. (fall/spring/summer)

**BIO*H110 Principles of the Human Body** 3 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. Open to students needing a three-credit science course in their program of study including Liberal Arts and Sciences and General Studies. Students may not receive credit for both BIO*H110 and BIO*H115. This course is an introduction and survey of human anatomy and function including the digestive, circulatory, respiratory, immunological, urinary, nervous, sensory, muscular, skeletal, endocrine, and reproductive systems of the body. The course will include discussions of the evolution of the human body and its dynamic interaction with the environment. Not open for credit to students who have passed any higher-numbered human biology or anatomy and physiology course. (fall/winter/spring/summer)

**BIO*H111 Introduction to Nutrition** 3 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. A basic introduction to the science of nutrition with an emphasis on making healthy food and lifestyle choices. Health and disease, metabolism, cultural diversity and food processing are studied in relationship to individual nutrients as well as to total dietary patterns. Information presented enables analysis and modification of diets to promote health, reduce the risk of deficiencies and chronic diseases related to nutrition and evaluate dietary advertising, controversies and nutritional policies. (fall/spring/summer/winter)

**BIO*H115 Human Biology & Lab** 4 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. Students may not receive credit for both BIO*H110 and BIO*H115. This introductory course will focus on the overarching themes of health, homeostasis, evolution and the environment as they relate to human body systems. Laboratory experiments include microscopic examination of cells and tissues, anatomy, physiology of nerves and muscles, blood typing, and principles of inheritance. Three hours of lecture and three hours of laboratory weekly. (fall/spring/summer)

**BIO*H121 General Biology I - Cellular Biology** 4 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. The general principles of biology are taught integrating lectures, laboratory experiments, computer simulations, discussions, and other activities to help students gain an understanding of the essential biological concepts. The foci of this course are scientific method, cell biology, viruses, prokaryotic organisms, protists, basic cell chemistry, photosynthesis, cellular respiration, mitosis & meiosis, genetics, and biotechnology (plant tissue culture, genetic transformation). Cooperative learning, critical thinking, library research, as well as presentation skills are utilized culminating in a team project that includes a written paper and a short presentation. This course is one part of a two semester sequence in general biology primarily for students seeking transfer into a four-year degree program. BIO*H121 (Cellular Biology) and H122 (Organismal Biology) can be taken in any order and are transferable. This course satisfies the general education core science requirement. Integrated 3 hours lecture & 3 hours lab. (fall/spring/summer)

**BIO*H122 General Biology II - Organismal Biology** 4 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. Utilizing the same integrative approach as BIO*H121, students will investigate biotechnology (gel electrophoresis for DNA and protein analysis), systematics, biological statistics, population genetics, evolution, plant biology (life-cycles and growth of fungi, non-vascular, and vascular plants), animal biology (early development and histology, comparison of invertebrate and vertebrate life cycles and physiological systems), and ecological and environmental processes. Critical thinking and problem solving skills are emphasized. Collaboratively, students will investigate a scientific research topic culminating in a written report and oral presentation to their peers. This course is one part of a two semester sequence in general biology primarily for students seeking transfer into a four-year degree program. This is the second semester of general biology; however, BIO*H121 (Cellular Biology) and H122 (Organismal Biology) can be taken in any order. This course satisfies the general education core science requirement for both non-majors & majors. Integrated 3 hours lecture & 3 hours lab. (spring)

**BIO*H145 General Zoology** 4 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. This lecture-laboratory is a survey of the animal kingdom. Topics discussed include morphology, anatomy and physiology, life cycles, reproduction, evolution, and ecological relationships of various animal forms. Three hours of lecture and three hours of laboratory weekly. (spring)

**BIO*H155 General Botany** 4 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. The focus of this course is how plants function. It is an introduction to plant physiology and development, explaining growth processes, metabolism and hormonal responses. Additional topics, such as soils, plant breeding, and propagation will be addressed. The laboratory component is designed to involve students with important concepts discussed in lecture. Integrated 3 hours lecture & 3 hours lab. (fall/spring)

**BIO*H171 Field Biology** 4 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. Lecture-laboratory. This is an introduction to ecology with special emphasis on identification of Connecticut plants and animals in the outdoors. A wide range of topics will be presented including map reading, edible wild foods, and collecting. Three hours of lecture and three hours of laboratory weekly. (spring)

**BIO*H175 Marine Science** 3 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. This course is an introduction to the major groups of plant and animals in various marine environments, as well as their interactions with each other and the nonliving components of the ocean. The impact of human activity in the ocean, and the potential uses and misuses of the ocean will be discussed.
BIO*H180  Principles of Environmental Science  3 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. Note: Students may not receive credit for both BIO*H180 and BIO*H181. This is a survey course of environmental studies. Topics discussed include basic ecology; human populations; water, soil, forests and pollution; renewable and non-renewable energy; legislation; citizens action. Dynamic Environmental systems are explored via computer simulations. (fall/spring)

BIO*H181  Environmental Science & Lab  4 credits
Prerequisites: Completion of MAT*H094/095 with a "C" or better or an appropriate score on a college placement exam, and eligibility for ENG*H101. Note: Students may not receive credit for both BIO*H180 and BIO*H181. This course has the same lecture as BIO*H180; however, there is an additional laboratory component. Laboratory experiences include water and soil analyses, pond and river studies, computer simulations, field trips to environmental quality facilities and laboratories. Three hours of lecture and three hours of laboratory weekly. (fall/spring)

BIO*H211  Anatomy and Physiology I  4 credits
Prerequisite: Completion of BIO*H105, BIO*H115 or BIO*H212 with a grade of "C" or better or by permission of the Division Leader. Lecture-laboratory. This is the first semester of a two semester comprehensive course designed for those students who plan to continue in the science field or science-related areas. Major topic areas include molecular biology, cells, tissues and the integumentary, skeletal, muscular and nervous systems of the human body. Laboratory includes an animal dissection. Three hours of lecture and three hours of laboratory weekly. (fall/spring/summer)

BIO*H212  Anatomy and Physiology II  4 credits
Prerequisite: Completion of BIO*H211 with a grade of "C" or better or permission of the Division Leader. Lecture-laboratory. Major topic areas include the cardiovascular, lymphatic/immune, respiratory, digestive, endocrine, urinary and reproductive systems of the human body. Laboratory includes an animal dissection. Three hours of lecture and three hours of laboratory weekly. (fall/spring/summer)

BIO*H235  Microbiology  4 credits
Prerequisite: BIO*H105, or BIO*H115, or BIO*H155, or BIO*H121, or BIO*H225, or permission of the Division Leader. This 4-credit course introduces the student to bacteria and other microorganisms. Particular emphasis is placed on the taxonomy, structure, metabolism and growth of bacteria, and various microbial diseases. Similar characteristics of fungi, viruses and protozoa are covered. Current news topics are incorporated into lecture discussions. Immunology, genetics, and biotechnology are also discussed. The emphasis in the laboratory is on the identification, safe handling and cultivation of microorganisms. Qualitative and quantitative activities include basic microscopy, bacterial staining techniques, growth experiments with comparative analysis of results, identification of unknowns, and computer-based research. (fall/spring/summer)

BIO*H260  Principles of Genetics  3 credits
Prerequisite: BIO*H105 or equivalent. This is an introduction to the principles of genetics. It covers Mendelian analysis, chromosomal theory, extensions of Mendelian analysis, molecular genetics, as well as quantitative and population genetics. (Offered periodically)

BIO*H262  Genetics & Lab  4 credits
Prerequisite: BIO*H105 or H115 or H155 or H121 or H225 or permission of Division Director. This course is designed to cover the basic concepts of genetics including the theory of chromosomal inheritance, classical Mendelian inheritance, principles of human genetics, the genetic code, the role of nucleic acids in gene expression, genetic mutations, population genetics and topics in modern genetics in areas such as epigenetics, recombinant DNA, biotechnology, gene mapping and diagnosis of human genetic diseases. Students will develop and master good laboratory practices and safe handling skills while completing laboratory investigations including genetic crosses, molecular diagnostic techniques, and calculating genetic variation in populations. Three hours of lecture and three hours of laboratory weekly.

BIO*H235  Microbiology  4 credits
Prerequisite: BIO*H105, or BIO*H115, or BIO*H155, or BIO*H121, or BIO*H225, or permission of the Division Leader. This 4-credit course introduces the student to bacteria and other microorganisms. Particular emphasis is placed on the taxonomy, structure, metabolism and growth of bacteria, and various microbial diseases. Similar characteristics of fungi, viruses and protozoa are covered. Current news topics are incorporated into lecture discussions. Immunology, genetics, and biotechnology are also discussed. The emphasis in the laboratory is on the identification, safe handling and cultivation of microorganisms. Qualitative and quantitative activities include basic microscopy, bacterial staining techniques, growth experiments with comparative analysis of results, identification of unknowns, and computer-based research. (fall/spring/summer)

BIO*H260  Principles of Genetics  3 credits
Prerequisite: BIO*H105 or equivalent. This is an introduction to the principles of genetics. It covers Mendelian analysis, chromosomal theory, extensions of Mendelian analysis, molecular genetics, as well as quantitative and population genetics. (Offered periodically)

BIO*H262  Genetics & Lab  4 credits
Prerequisite: BIO*H105 or H115 or H155 or H121 or H225 or permission of Division Director. This course is designed to cover the basic concepts of genetics including the theory of chromosomal inheritance, classical Mendelian inheritance, principles of human genetics, the genetic code, the role of nucleic acids in gene expression, genetic mutations, population genetics and topics in modern genetics in areas such as epigenetics, recombinant DNA, biotechnology, gene mapping and diagnosis of human genetic diseases. Students will develop and master good laboratory practices and safe handling skills while completing laboratory investigations including genetic crosses, molecular diagnostic techniques, and calculating genetic variation in populations. Three hours of lecture and three hours of laboratory weekly.

BIO*H235  Microbiology  4 credits
Prerequisite: BIO*H105, or BIO*H115, or BIO*H155, or BIO*H121, or BIO*H225, or permission of the Division Leader. This 4-credit course introduces the student to bacteria and other microorganisms. Particular emphasis is placed on the taxonomy, structure, metabolism and growth of bacteria, and various microbial diseases. Similar characteristics of fungi, viruses and protozoa are covered. Current news topics are incorporated into lecture discussions. Immunology, genetics, and biotechnology are also discussed. The emphasis in the laboratory is on the identification, safe handling and cultivation of microorganisms. Qualitative and quantitative activities include basic microscopy, bacterial staining techniques, growth experiments with comparative analysis of results, identification of unknowns, and computer-based research. (fall/spring/summer)

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BUSINESS

Business Division

BBG*H101  Introduction to Business  3 credits
A survey of the fundamental principles of business will be discussed including marketing, management, finance, accounting, and human resource development. This course is required for most students majoring in business.

BBG*H210  Business Communication  3 credits
Prerequisite: ENG*H101. This course is an analytical approach to the development of content in business writing with emphasis on the relationship of creative and logical thinking to the solution of business problems through concise, coherent written and oral communications.

BBG*H215  Global Business  3 credits
This course provides an introduction to the nature and Environment of international business. Topics will include the nature of international business, international organizations and monetary systems, foreign Environments and management tools necessary for international business opportunities and operations. Social, political and economic factors which impact on international business interactions are also studied.

BBG*H231  Business Law I  3 credits
The legal rights, duties, and responsibilities of the business person are examined. Topics include a general introduction to the meaning and nature of the law, and the structure of the American legal system. Emphasis is placed upon the basic principles of the law of contracts, torts, criminal law and procedure, agency, real property, wills, and decedent’s estates.

BBG*H232  Business Law II  3 credits
This course further develops and examines the American legal system, as well as the international legal system. Topic include the uniform Commercial Code, ethics, consumer protection laws, secured transactions, intellectual property law, corporate law, partnership law, limited liability companies and numerous aspects of international law. It is recommended that Business Law I be taken before Business Law II.

BE*S*H118  Small Business Management  3 credits
This course is designed to assist students with the knowledge and skills needed to operate and/or develop a small business. Emphasis will be placed on the entrepreneurial aspects of creating, managing, and gaining profit from a small business.

BMK*H220  Sales  3 credits
Basic principles underlying the sales process and their practical application to sales situations are studied. Economics and psychological and sociological relationships in the marketplace, as they apply to sales of industrial and consumer goods and intangibles, are examined.

BMG*H105  Supervision and Organizational Behavior  3 credits
Prerequisite: BMG*H202. Emphasis on the latest developments in the fields of management. Group discussions of case studies and problem are included. Also, emphasis on group work and the use of the computer as an aid in the decision-making process in a micro-organizational settings is included. Additional software may be required.

BMG*H202  Principles of Management  3 credits
This course deals with management theory, science, and practice. Consideration is given to management thought and analysis. The relationship of creative and logical thinking to the solution of business problems through concise, coherent written and oral communications.

BMG*H220  Human Resources Management  3 credits
Prerequisite: BBG*H101. This course deals with personnel management in the process of manpower administration in the business organization. Treatment is given to procurement and human resource utilization and the role of labor unions in the industrial organization. The development of the role of the person and personality amidst the
various social sciences and organization structures required to achieve an organization’s goals are studied – as in motivation.

**CHE*H111 Concepts of Chemistry** 4 credits
Prerequisite: MAT*H137. Lecture-laboratory. This is a foundation course designed to present chemical concepts including the metric system, scientific measurements, atomic theory, chemical bonding, periodic variation of the elements, nomenclature, equations, gas laws, stoichiometry, basic types of chemical reactions, and a brief survey of organic chemistry. This course is open to students with little or no background in chemistry. Three lecture hours and three laboratory hours weekly. (fall/spring/summer)

**CHE*H121 General Chemistry I** 4 credits
Corequisite: MAT*H172, its equivalent or permission of instructor. Lecture-laboratory. The fundamental concepts and laws of chemistry are examined. Topics covered include atomic theory, chemical bonding, periodic table and periodic law, nomenclature, states of matter, solutions, stoichiometry, acid-base theory, oxidation, reduction, and coordination chemistry. Three lecture hours and three laboratory hours weekly. (fall/spring/summer)

**CHE*H122 General Chemistry II** 4 credits
Prerequisite: completion of CHE*H121 with a grade of “C” or better. Lecture-laboratory. This course provides a more specific discussion of major topics within the four major divisions of chemistry. Topics covered include colloids, kinetics, equilibrium, thermodynamics, nuclear chemistry, electro-chemistry, discussion of physical and chemical properties of selected groups on the periodic table, ionic equilibria of weak electrolytes, buffer solutions and titration curves, solubility product, qualitative analysis, and a brief introduction to organic chemistry. Three lecture hours and three laboratory hours weekly. (fall/spring/summer)

**BMK*H211 Organic Chemistry I** 4 credits
Prerequisite: CHE*H121-122 or acceptable one-year college chemistry course at another institution. Lecture-laboratory. This is a fundamental course involving systematic study of the reactions of organic compounds, the relationships between molecular structure and reactivity, and an introduction into spectroscopic analysis. The laboratory has been revised to include the ultra modern microscale technique. This approach includes some of the following advantages: elimination of fire or explosion danger, elimination of chemical waste disposal problems, expansion in variety and sophistication of experiments, and creation of a much healthier laboratory environment. Three lecture hours and three laboratory hours weekly. (Offered periodically)

**BMK*H216 Internet Marketing** 3 credits
Develop a working knowledge of the World Wide Web as a marketing vehicle providing fast/efficient electronic commerce and the ability to manage the Internet marketing process for a small to medium-sized business enterprise. Internet is fast becoming the ultimate distribution system to disseminate marketing data, identify/segment customers to provide sales force attention, customer service activity, and ordering. Electronic Commerce Marketing Principles will prepare a student to intelligently apply the Marketing Mix disciplines and concepts to a company’s products/services in order to effectively prepare and execute “Marketing Plans” participating in the growing “electronic commerce” segment of business.

**BUSINESS FINANCE**

**BFN*H201 Principles of Finance** 3 credits
This introductory course will provide an understanding of the role of finance in the economy, business management, government and consumer financing. Included are the fiscal, monetary and debt management policies of government.

**BFN*H203 Investment Principles** 3 credits
This course gives a broad perspective on investment objectives and values, as well as a study of securities, market and values. A study of securities, market procedures, analytical techniques, speculative and institutional markets is also included.

**BFN*H220 Financial Management** 3 credits
Prerequisite: BFN*H201 or permission of Division Leader. This course is an in-depth study of finance including the mathematics of finance, corporate securities; also included are short, intermediate and long term sources of funds; and liabilities, income administration, mergers and acquisitions, and working capital.

**BRE*H201 Real Estate Principles** 3 credits
Prerequisite: BFN*H201, Real Estate License or permission of Division Leader. The topics studied in this course include fundamentals of mortgage, deeds, loan applications, real estate credit, mortgage markets, and current legislation affecting real estate finance.

**BRE*H205 Real Estate Law** 3 credits
This course examines the legal Environment of real estate including contracts, deeds, instruments, easements, estates in land, zoning, tenants, liens, foreclosure, transfers of titles, leases, and relevant court rulings. (LGL*H104 is a substitution for this course.)

**CHEMISTRY**

**Science, Technology, Engineering & Mathematics Division**

**CHE*H112 General Chemistry II** 4 credits
Prerequisite: MAT*H172, its equivalent or permission of instructor. Lecture-laboratory. The fundamental concepts and laws of chemistry are examined. Topics covered include atomic theory, chemical bonding, periodic table and periodic law, nomenclature, states of matter, solutions, stoichiometry, acid-base theory, oxidation, reduction, and coordination chemistry. Three lecture hours and three laboratory hours weekly. (fall/spring/summer)

**COM*H100 Introduction to Communication** 3 credits
Prerequisite: Placement into ENG*H101. An introduction to the field of communication and to the strands of communication study: intrapersonal, interpersonal, small group, and public communication. Students will develop communication skills as they relate to the self and to interaction in small and large groups in everyday interpersonal situations.

**COM*H101 Introduction to Mass Communications** 3 credits
This course acquaints students with the complex nature of the media through which they communicate. The course will introduce the various forms of communication media; the role of media as it informs, entertains and persuades; and the effects of media on individuals and society.

**COM*H154 Film Study and Appreciation** 3 credits
Prerequisite: Placement in or eligible for ENG*H101. This course is an introduction to the art, history, and influence of film. Students will trace the history of cinema through both technical advancements and aesthetic developments enabling them to understand the aesthetics of films as well as the cultural and historical context in which the films were made.
COM*H157 American Film 3 credits
Students survey American film from its beginnings to the present. The course will include the silent era, birth of sound, and typical genres.

COM*H158 International Cinema 3 credits
This course is an introduction to the history of international cinema. Students will develop their sense of visual aesthetics, awareness of important cinematic movements and styles, and knowledge of the history and cultures, and the historical contexts within which the films were produced.

COM*H172 Interpersonal Communication 3 credits
This course examines the role of interpersonal communication in human relationships. The focus of this course is on improving interpersonal skills and helping students increase their communication competence in everyday social exchanges.

COM*H173 Public Speaking 3 credits
This course provides students with an understanding, appreciation, and capacity for public speaking. Excellence in public speaking requires mastery of informative and persuasive techniques of language, organization, citation of evidence, and use of rhetorical patterns of introduction and conclusion. Exposure to theoretical elements and their application in public speaking will be explored in this class.

COM*H178 Small Group Communication 3 credits
The purposes of this course are (a) to provide an overview of theory and research in key areas of study in small group communication, (b) to teach skills in group decision making, and (c) to give students the opportunity to apply theory, research, and decision making skills by interacting in a group environment.

COM*H202 Intercultural Communication 3 credits
Prerequisites: COM*H101 or H172. This course will be an introduction to the major principles and theories of intercultural communication. It will emphasize the application of skills and concepts for increasing cultural awareness and communication competency in a variety of cultural contexts. Exposure to communication systems and formations from different cultures will be used as a means to provide various ways of thinking about cultures.

COM*H226 Journalism 1 3 credits
Prerequisite: ENG*H101. Students explore methods and techniques of news gathering, news writing, and news analysis. By covering campus and community events, they make practical application of theory.

COMPUTER-AIDED DRAFTING/DESIGN TECHNOLOGY
Science, Technology, Engineering & Mathematics Division

Note: All software used in these courses are subject to change.

CAD*H110 Introduction to CAD 3 credits
An introduction to the techniques of generating graphic images with computers, using AutoCAD. Topics include: overview of CAD technology, computer technology, hardware descriptions and requirements, file manipulation and management, two-dimensional geometric construction, symbol library creation, dimensioning, scaling, sectioning, plotting, detail and assembly drawing including tolerance studies. Part of the Advanced Manufacturing Technology Cohort Program.

CAD*H150 CAD 2D (AutoCAD) 3 credits
Introduction to two-dimensional computer-aided drafting using AutoCAD. Included are drafting and editing of elementary geometric entities, dimensioning and plotting. Also, mechanical drafting problems and examples will be studied. One class hour and four laboratory hours weekly. (fall/spring)

CAD*H200 3D CAD Modeling 4 credits
Prerequisite: CAD*H150. The primary focus of this course is to review and continue to develop a working knowledge of Engineering Graphics and develop Three-Dimensional Geometric Computer Modeling. This course will also include an introduction to additive manufacturing techniques. Students will further develop the basic 2D engineering drawings such as: Isometric Drawings, Orthographic Projections, Sectional Views and Auxiliary Views. The modeling will consist of, but will not be limited to, an introduction to the parametric process using SolidWorks to develop computer generated 3D models. Students will also receive an introduction to Additive Manufacturing using state-of-the-art 3D printers. Two class hours and four laboratory hours weekly. (fall/spring)

CAD*H220 Parametric Design 3 credits
Prerequisites: CAD*H150 and CAD*H200. The primary focus of this course is to study and develop advanced aspects of designing with Solid Modeling and Parametric Modeling. The course proceeds in a pedagogical fashion to guide the student from constructing basic solid models to building intelligent mechanical designs, creating multi-view drawings, Surface Models and Assembly Models. One class hour and four lab hours weekly. (fall/spring)

CAD*H275 CAD Animation (3D Studio Max) 4 credits
Prerequisite: CAD*H200 or experience in 3D computer modeling. This course will guide the student through the world of three-dimensional presentation. The student will create realistic still images, animated assemblies, camera fly-bys, robotic motion, and dynamic life-like animated presentations. The concepts covered in this course can be applied to a variety of engineering disciplines. 6 contact hours (2 lecture and 4 laboratory) (Offered periodically.)

CAD*H285 Computer Integrated Manufacturing (CIM) 1 3 credits
Prerequisites: CAD*H200, MAT*H172. This course is an introduction to the mechanical design process used to develop intelligent product models that can be used in Computer Integrated Manufacturing (CIM). The students will gain an understanding of the basic principals of 3D solid modeling, parametric relationships, and controlling design intent and object dependencies. Students will develop complete product designs, outputting 3D solid and sheet metal parts, tolerance analysis, family tables and assembly models, related detail and assembly drawings, and prototypes. 4 contact hours (2 lecture and 2 laboratory) (Offered periodically.)

CAD*H286 Advanced Modeling Techniques 3 credits
Prerequisite: CAD*H285. This course builds on the concepts developed in CAD*H285, Introduction to Advanced Modeling. It develops advanced modeling concepts, techniques and methods used in modern product modelers—topics such as user interface customization, user defined features, writing programs within the CAD system, sweeps, advanced rounds, and basic stress analysis. Students will work on their own and in groups to develop complete product designs, outputting 3D solid parts. 4 contact hours (2 lecture and 2 laboratory) (Offered periodically.)

CAD*H294 Senior Project 4 credits
Prerequisite: CAD*H220, Corequisite: CAD*H275, or approval of the department chair. The course offers students a CAD engineering design activity utilizing an assigned, or approved, design project. The project will incorporate a wide range of learning activities including, but not limited to, library research, written status reports, discussions, oral presentations, time management and project planning, team work, the application of the design process, and the utilization of a variety of CAD applications. This class meets for 6 contact hours per week, 2 lecture and 4 lab. (Offered periodically.)

COMPUTER INFORMATION SYSTEMS
Business Division

CSC*H101 Introduction to Computers 3 credits
This is an introductory course in information technology concepts and software productivity tools intended for Computer Information Systems majors and other students interested in computers and Information Technology. Areas of instruction include computer concepts, current topics and trends in information technology, the role of computer systems in business problem solving, an introduction to the major career areas of Information Technology and Microsoft Office skills that are important to all college students.
**CSC*H113 Programming I** 3 credits
Fundamentals of programming and program development techniques. This is a first step programming course which emphasizes problem solving and sound programming practices. No previous programming experience is necessary. Topics include data types, functions, storage class, selection, repetition, pointers, arrays, and file processing. Programming laboratory projects in a laboratory environment are supervised by the instructor.

**CSC*H183 Information Systems in Organizations 3 credits**
The focus of this course is on how organizations use information systems for decision making. In particular, the course stresses the role of managers in the analysis, design, development, implementation, maintenance and control of information systems as corporate resources. Course includes a hands-on approach to communications using workgroup software.

**CSC*H205 Visual Basic I** 3 credits
This course uses Visual Basic. .NET, an object-oriented/event-driven language, to teach programming concepts. Through “hands-on” application of the concepts presented in the lectures and tutorials, the student will learn the Visual Basic .NET tools used to create applications that correspond to Windows standards. By the end of the course, the student will be able to design and code simple business applications and will be prepared for more advanced courses in programming using VB, C++, etc.

**CSC*H206 VISUAL BASIC II** 3 credits
Prerequisite: CSC*H205. The course covers a wide range of advanced programming topics using Visual Basic.NET an object oriented, event driven programming language. The goal of the course is to develop computer programming skills beyond the basics covered in the introductory course. This includes arrays and collections, object variables, database programming, web programming, web services, and extensive use of the .NET classes.

**CSC*H211 VB & ASP.NET Web Programming** 3 credits
Prerequisite: CSC*H205. This course covers a wide range of topics in the area of web application development using Microsoft ASP.NET and the Visual Basic programming language. After an introduction to basic web design techniques, students will progress to more advanced e-commerce applications. Topics include working with server controls, validation techniques, managing state, authentication, and the use of themes. Relational databases are a big part of e-commerce applications and are also an important topic area in this course.

**CSC*H213 Object-Oriented Programming Using C++** 3 credits
Prerequisite: CSC*H205, CSC*H113, or any programming language equivalent. This course is designed for a more advanced programming student who wish to learn C++ with object-oriented techniques. The course will contain the basic concepts of an object-oriented programming language. Topics will include classes, constructor and destructor functions, function overloading, operator overloading, class inheritance, polymorphism, stream input/output, manipulator functions, templates and exception handling.

**CSC*H214 Advanced C++ Programming** 3 credits
Prerequisite: CSC*H213. Topics include methods and techniques used in software development cycles. You will learn to move beyond a simple mastery of syntax. You will learn to increase productivity by combining tools, idioms, syntax, and libraries. Numerous hands-on exercises provide real-world experience in developing high quality C++. Throughout the course, you gain extensive hands-on experience with advanced C++ programming techniques. You will be required to develop complete programs from architectural design through to refining the implementation via a series of exercises.

**CSC*H217 Object-Oriented Programming Using C#** 3 credits
Prerequisite: CSC*H205 or CSC*H113 or any programming languages equivalent. This course offers students the opportunity to extend their experience and programming skills in the area of .NET development. C# (pronounced C Sharp) is an object-oriented programming language with syntax similar to JAVA, C# is becoming increasingly popular with developers in the areas of Windows applications and web sites using relational databases. Using the Visual Studio Integrated Development Environment (IDE) the course will cover topics including arrays, methods, classes, objects, inheritance, and exception handling, File Streams and database applications will also be an important part of the course.

**CSC*H227 Web Programming with Java** 3 credits
Prerequisites: CSC*H205, CSC*H113. This course picks up where the first Java Programming course left off, introducing the topics of thread and I/O. The remainder of the course serves to extend the student's knowledge of using Java to build enterprise-strength applications, with exposure to both "fat" and "thin" client structures. The course will cover currently used structures of JBDC connectivity, JavaBeans, servlets, JSP and XML and XHTML.

**CSC*H228 Mobile Device Programming** 3 credits
Prerequisite: CSC*H205, CSC*H113 or any programming language equivalent. This course is designed as an introduction to mobile device programming. It is intended for students with an interest in learning to develop applications which will run on Android based smart phones. Prior programming experience using Visual Basic, Java or C++ is expected.

**CSC*H229 Programming II** 3 credits
Prerequisite: C or better in CSC*H113, Programming I. This is a second course in Computer Science. The course emphasizes object-oriented techniques: using and creating classes and objects, inheritance, polymorphism, and interfaces. Other topics include models of abstractions of simulations, simple simulation techniques, file input and output, introduction to event-driven programming, recursion, elementary searching and sorting techniques. It uses a modern high-level programming language such as Java. A substantial project component is included. Students must plan for sufficient time for out-of-class, individual, independent work.

**CSC*H231 Database Design I** 3 credits
An introduction to relational database design. Included will be topics on the evolution of database design, data structures, designing a database, normalizing a database design and implementation of databases utilizing one or more of the popular PC database packages available such as Microsoft SQL Server.

**CSC*H232 Database Design II** 3 credits
Prerequisite: CSC*H231 and CSC*236 Oracle is a complex, object-oriented DBMS that enables high-speed transactions, better business decisions and sophisticated applications. An understanding of its internal functions is essential to maintain integrity, enforce security, and improve performance. In this comprehensive introduction to the Oracle Environment, you will gain knowledge and skills you need to fully utilize Oracle features and develop robust, high performance databases.

**CSC*H237 Database Programming with VB.NET** 3 credits
Prerequisite: CSC*H205. This course covers a wide range of relational database programming topics using Visual Basic .NET and ADO .NET objects. Students will learn programming techniques using the Microsoft SQL Server relational database, the .NET System. Data namespace and classes, and disconnected architecture. Topics include SQL queries to create typed and untyped datasets, table relationships, parameterized queries, bound and unbound controls, and data views. Crystal Reports, XML Schema Designer, and Server Explorer tools are used in a hands-on class/lab environment.

**CSC*H250 Systems Analysis and Design** 3 credits
Prerequisite: Any programming language equivalent. This course is an introduction to systems analysis and design concepts and techniques. Using a case study method, students will conduct system surveys, create feasibility studies, and design typical computer systems used in business and industry.
CSC*H252  Information Systems Project Management  3 credits
Prerequisite: CSC H101 or any programming language equivalent. This course introduces students to the theory and practice of managing Information Systems and Business projects. Students will learn how to initiate, plan, execute, control, and complete projects in order to meet organizational goals. In addition to traditional project management tools like PERT and GANTT charts, students will learn to use a project management software simulation tool to assist them in managing classroom projects. A comprehensive final project will be assigned and completed either individually or in collaboration with a student project team.

CST*H120  Introduction to Operating Systems  3 credits
An introduction to the personal computer, hardware, and Operating Systems software. The most popular microcomputer operating systems and graphical interfaces will be discussed in detail. After satisfactorily completing this course, the student will have a thorough understanding of the command structures of the operating systems. Students will receive a brief introduction to local area networks from a user perspective. Laboratory projects will be assigned throughout the course to reinforce course material.

CST*H130  Networking Essentials 1  3 credits
An in-depth study of communications in a networking Environment. Included is the history of networking, OSI model, data types, signaling, multiplexing, signal conversion, data transmission, topologies, channel access method, switching techniques, SDLC, HDLC, IEEE standards, Arnet, Ethernet, Token Ring, TCP/IP, IP, SNA, and the future of networking.

CST*H235  Network Systems  3 credits
Prerequisite: CST*H130, or a basic understanding of computer networks. This course teaches the student, through lectures, demonstrations, and classroom labs, the skills and knowledge necessary to configure, manage, and troubleshoot a Windows Server network infrastructure. The focus of this course will be the installation, configuration, management and support of Active Directory, IP, DHCP and DNS. The course will also address security, the management and installation of services updates, and routing and remote access. Through the use of lab assignments, there is a heavy emphasis on the “hands-on” application of the concepts presented in the lectures and assigned readings.

CST*H236  Advanced Network Systems  3 credits
Prerequisite: CST*H235. This advanced course will cover higher level system management features of the Window Server Operating System. The focus will be planning, implementing and maintaining an Active Directory infrastructure. Through lectures and lab assignments, the student will learn about integration of Active Directory with DNS, administration of user accounts and groups, group policies, security, remote access, and performance monitoring.

CST*H239  Servicing & Support of Local Area Networks  3 credits
Prerequisite: CST*H130. A hands-on course allowing students to install, upgrade, maintain and troubleshoot on Microsoft server operating systems. Class discussion and laboratory exercises include Network Interface Cards (NIC’s), networking cabling, disk expansions, installations, upgrades, troubleshooting techniques, and common network problems.

CST*H248  Practices in Security Management  3 credits
Prerequisite: CST*H101. Security Management entails the identification of an organization's information assets and the development, documentation, and implementation of policies, standards, procedures, and guidelines that ensure confidentiality, integrity, and availability. This course will prepare the student to understand the planning, organization, and roles and individuals involved in security, develop security policies, and utilize management tools used to identify threats, classify assets, and rate vulnerabilities.

CST*H274  Network Security Technology  3 credits
Prerequisite: CST*H130. This course takes an in-depth look at network security concepts and techniques. Students will examine theoretical concepts that make the world of security unique. Also, this course will adopt a practical, hands-on approach when examining networking security techniques. Along with examining different network strategies, this course will explore the advancement of network implementation as well as timeless problem solving strategies.

COMPUTER SCIENCE
Business Division

CSA*H105  Introduction to Software Applications  3 credits
Prerequisites: Successful completion of ENG*H063, and MAT*H095; successful completion of placement tests. The computer plays a significant role as a productivity tool in many fields of study and in business. This course introduces the student to the basics of how to use computers as a tool rather than how computers work. It offers instruction and practice on the use of personal computers and a variety of application software. Included is work on word processing, spreadsheets, the operating system, and internet browsing. Basic computer science topics are included to the extent that they support the applications approach. A significant amount of lab work outside the classroom is required.

CSA*H135  Spreadsheet Applications  3 credits
The course centers on the use of the current version of MS Excel at an advanced level. Other spreadsheets will be examined, (including online based versions) as well as the exploration of online collaboration (in Wiki fashion). The instructional methodology will consist of exploring and applying advanced spreadsheet concepts to everyday situations and problems as presented in the textbook and as created by the instructor for the class. These are selected examples: Web query (getting data from a Web site directly into Excel), Goal seek, Excel database concepts, multilevel sorts, subtotals feature, Auto Filter, templates, converting table into a range, adding calculated fields to a table, drilling entries, 3-D references, linking workbooks, advanced functions.

CSA*H205  Advanced Applications  3 credits
Prerequisites: CSA*H101 or CSA *105 with a grade of “C” or better. This is a hands-on course that focuses on the advanced use of commonly used Microsoft Office applications (Word, Excel, PowerPoint, Access, and the integration of these). The following are selected examples of skills and concepts learned in this class: 1) WORD: inserting “quick parts,” advanced mail merges, adding editing comments, using the “Track Changes” feature, inserting bookmarks and hyperlinks, and creating equations; 2) EXCEL: protecting worksheet in various ways, creating and modifying Excel tables, creating custom filters, and using advanced analysis tools, applying advanced functions; 3) ACCESS: creating tables using correct field types and properties, creating calculated fields, forms, reports, and sophisticated queries; 4) INTEGRATION: combining data and graphs in various ways using paste options, importing files from external applications, and exporting files in various formats.

CSA*H207  Computer Applications in Management & Marketing  3 credits
Prerequisite: CSA*H105 with a grade of “C” or better, BMK*H201 or BMG*H202. Designed for the career track business student, this course will supply a strong background in the computer skills necessary and useful in business/management and marketing. Specific applications will be based on IBM compatible machines using the Windows Environment, and will include work on business presentations, preparation of brochures, project scheduling, workgroup computing, and business on the internet. Additional topics will be considered.

COOPERATIVE EDUCATION
Student Services Unit

CWE H100  Portfolio Preparation  2 credits
This course stresses analysis of prior learning and self-evaluation of this learning. Students will be expected to assess, organize, and communicate their learning experiences in portfolio form for review by a faculty panel of experts. Students must complete this course to be eligible for formal assessment. Credits do not apply toward...
a degree. Grade reflects success in coursework only; it does not guarantee or even suggest that portfolio credit will be granted or denied by the readers.

**Criminal Justice/Public Safety**

**Liberal Arts and Behavioral/Social Sciences Division**

**CJS*H101** Introduction to Criminal Justice 3 credits
This course introduces students to the criminal justice system on the local, state, and federal levels. Students will be exposed to the structure, function, and modern challenges faced by law enforcement, courts, and correctional agencies. (fall/spring)

**CJS*H102** Introduction to Corrections 3 credits
An overview of the history and philosophy of the American correctional system, organization and operation of the components of the corrections systems, including correctional centers, prisons, probation, parole and community-based programs, correctional treatment programs ranging from pre-trial diversion to post incarceration procedures. Presentation and discussion of current issues and problems in corrections will be discussed.

**CJS*H103** Introduction to Security 3 credits
The historic, philosophical and legal basis of security, and the role of the security officer and his relationships with the public sector are studied. The functional operation of various specialized areas of security such as theft and risk control, security surveys and loss prevention, management in proprietary and government institutions, safety and fire protection and commercial and retail security is surveyed.

**CJS*H105** Introduction to Law Enforcement 3 credits
An introduction course that covers the basics of law enforcement, evolution of the police function, the police in the criminal justice system, and the social and psychological stresses and their effects on police work, health, and the family. The course also includes the study and analysis of the problems of law enforcement as they relate to the community.

**CJS*H210** Constitutional Law 3 credits
Prerequisite: CJS*H101 with a grade of “C” or better. This course traces the history and development of the U.S. Constitution. Topics will include the Commerce Clause, procedural due process, states' rights and civil liberties, the concept of federal supremacy, and state constitutions.

**CJS*H211** Criminal Law I 3 credits
This course is an introduction to the history, theory, and practice of substantive criminal law. Major elements of statutory offenses are discussed. Reference to the Connecticut Penal Code is included.

**CJS*H217** American Legal Systems 3 credits
This course studies the process through which justice is administered and the history of the American legal system. Also examined are the Constitution of the United States as it applies to police forces. Rules of evidence with attention given to judicial notice, presumptions, the nature of real and circumstantial evidence, burden of proof, documentary evidence, hearsay evidence, confessions and admissions will also be studied. Particular emphasis will be given to evidence, arrest procedures, as well as search and seizure.

**CJS*H218** Legal Aspects of Security Operations 3 credits
This course traces the development of the legal aspects of private security in the United States. Material includes the law as it relates to private security, search and seizure, civil and criminal liability, and evidence. Legal requirements such as licensing, training, and education are also examined.

**CJS*H220** Criminal Investigation 3 credits
This is an introduction to criminal investigation. Study includes the presentation of rules and procedures of preliminary investigation; art of interrogation and recording of statements and confessions; collection and preservation of physical evidence at the crime scene; methods used in scientific interpretation of evidence; and preparation of cases for trial.

**CJS*H224** Computer Crimes 3 credits
This course is designed to give the student an understanding of the various aspects of computer crimes, including hacking, computer break-ins, computer fraud, the introduction of viruses, worms, and trojan horses into computer systems, mail fraud, child pornography, pirated software, sabotage, and espionage. Study includes an overview of the various types of computer crimes likely to be encountered in today’s computer environment, as well as the methods of preventing, investigating, and prosecuting those crimes.

**CJS*H225** Forensic Science 3 credits
The purpose of this course is to familiarize the student with the recognition, preservation, and collection of physical evidence at the crime scene as well as the testing and analysis of the evidence at the forensic laboratory. The student will learn through lectures, class participation and discussion, and laboratory experiments.

**CJS*H229** Crime Scene Investigation 3 credits
This is an orientation course that covers the basics of crime scene investigation, including the crime scene, identifying and collecting evidence, and the capabilities and procedures of the crime laboratory.

**CJS*H230** Security Management 3 credits
Prerequisite: CJS*H101 with a grade of “C” or better. This course examines the functions of an integrated security program from a management perspective. Topics to be discussed include how a security organization is managed, actual situations that may be encountered, the duties of the security director, effective management skills, and the day-to-day management of the security function.

**CJS*H232** Industrial and Retail Security 3 credits
Prerequisite: CJS*H101 with a grade of “C” or better. This course examines the responsibilities of industrial security in preventing security related compromises against the company, individuals, and information. Thefts in companies and retail establishments will also be examined. Among other topics to be discussed are sabotage, espionage, physical security, theft prevention, internal control, and techniques of detection, apprehension and prevention.

**CJS*H233** Institutional Security 3 credits
Prerequisite: CJS*H101 with a grade of “C” or better. This course is designed to give the student an understanding of the role of security as it applies to public and private institutions, such as hospitals, airports, and government agencies. The student will learn how an institution can be compromised by breaches of security. Topics to be discussed include physical security, internal control, processing clearances, safeguarding classified information, and visitor and area control.

**CJS*H234** Computer Security and Data Protection 3 credits
This course is designed to give the student a working knowledge of computer security and data protection. Topics that will be covered include types of attacks on computer systems, risk analysis, strategies to counter these attacks and risks, internet security, hacking, and other criminal activity.

**CJS*H235** Information Warfare and Security 3 credits
This course traces the development of information warfare, terrorism, and espionage as they relate to the computer environment. Topics include the threats to military as well as commercial and economic security. The roles of individuals, corporations, and governments in dealing with information-related attacks will be examined. The problems and remedies associated with the topics will also be examined.

**CJS*H241** Correctional Counseling I 3 credits
Prerequisite: CJS*H101 with a grade of “C” or better. This course is an introduction to various concepts, principles, and techniques of counseling as applied by trained professionals in the correctional setting. Group methods, evaluation, and therapeutic Environments will be examined as a means of promoting the understanding of the counseling process. Discussions will include the various counseling models and the history of counseling in correctional institutions and the community.
CJS*H244 Community Based Corrections 3 credits
Prerequisite: CJS*H101 with a grade of “C” or better. This course will examine alternatives to incarceration as viable sentencing options. Topics will include: the development of community corrections, parole, diversion, halfway houses, community service, house arrest, and electronic monitoring. The role of the victim in the correctional process will also be discussed.

CJS*H246 Juvenile Corrections 3 credits
Prerequisite: CJS*H101 with a grade of “C” or better. This course presents the correctional aspects of the history, philosophy and development of the juvenile justice system. Topics to be discussed include the rights of juveniles, alternatives to incarceration, incarceration, treatment methods, and current and future trends.

CJS*H255 Ethical Issues In Criminal Justice 3 credits
This course is designed to give the student an understanding of the necessity for high standards of ethical and moral behavior on the part of the law enforcement officer. Material will include the consequences of unethical and immoral behavior on the part of the law enforcement officer. Topics include gratuities, favoritism, temptations, dishonesty, abuse and misuse of authority.

CJS*H261 Victim and Offender Mediation 3 credits
Prerequisite: CJS*H101 with a grade of “C” or better. The process of victim and offender mediation and reconciliation is examined in this course. The effectiveness of the process in the offender rehabilitation will be discussed. Topics to be discussed include conflict resolution, bringing the victim and offender together, restitution of losses, reconciliation, mediation, and conflict management.

CJS*H280 Victimology 3 credits
Prerequisite: CJS*H101 with a grade of “C” or better. This course is a study of crime, its causes, and effects from the victim’s perspective. The course looks at victim precipitation, restitution, and the varied involvement in, and consequences of, crime on the victim. Major perspectives on victimization as well as patterns of victimization will be analyzed.

CJS*H293 Criminal Justice Cooperative Work Experience 3 credits
Prerequisite: 12 credits in CJS*H courses, with grade of “C” or better. Cooperative Work Experience in Criminal Justice is essential—cooperative training between the school and agency. This required course introduces the student to a specific field in the Criminal Justice system. The course consists of: 1. Minimum 120-hour (volunteer) Cooperative Work Experience 2. Weekly one-hour Co-op Seminar (fall/spring)

DANCE Liberal Arts and Behavioral/Social Sciences Division

The Division of Liberal Arts and Behavioral/Social Sciences encourages students to register for dance courses in order to develop appreciation of, and skills in, the performance arts. Some of the courses are required in career programs; others are designed for students’ interests and personal development. Consultation with the dance advisor will help determine specific needs. Dance courses, except for Dan*H101, are studio courses with a focus on movement. The history and theories of these dance genres are included experientially in class and through reading and writing assignments outside of class. For these studio courses, students must be physically able to perform the skills required in a dance class.

DAN*H101 History & Appreciation of World Dance 3 credits
World Dance is designed to introduce students to dance in its creative, cultural and historical aspects. It will explore “a number of important ways in which dance functions in human societies—always keeping in mind that while dance is a universal human activity, it does not play the same role in every culture.” (Grauer) This course includes seminar, video-viewing, and movement activities.

DAN*H102 Ballet I: Renaissance to Romantic 3 credits
Ballet from the Renaissance to the Romantic period provides students with a basic understanding of the fundamental principles of ballet technique, encourages students to achieve a level of self-discipline and physical control, and instills an appreciation of the historical contributions of ballet to the overall development of dance as an art form. Studio course.

DAN*H109 Ballroom I 1 credit
This course is designed to introduce students to the history, evolution, music, steps, and various styles of ballroom dancing. Three standard style dances, Tango or Swing, the Waltz, and the Fox trot and three Latin style dances, the Rumba, the Salsa, and the Cha, Cha, Cha, will be explored. Studio course.

DAN*H110 Rhythm Tap 1 credit
This course is designed to introduce students to the rhythm tap genre—a collage of sound produced by using taps and body as an instrument. The cultural and historical perspectives of rhythm tap will be discussed. Studio course.

DAN*H111 Jazz I: Afro-Caribbean/American 3 credits
Afro-Caribbean and American Vernacular Jazz Dance is designed to introduce students to the origins of jazz dance in America. Study emphasizes African and Caribbean, as well as “street” and “ballroom” influences. Basic skills of jazz movement, jazz music, and rhythmic awareness are included. Studio course.

DAN*H112 Jazz II: Broadway and Film 3 credits
Musical Theater and Film Dance is designed to segue from American Vernacular Jazz Dance into concert jazz dance and Broadway dance. It continues with the historical (1930’s-2000’s) and cultural perspective particular to this American dance genre as well as its differential styles and techniques. Studio course.

DAN*H113 Modern I: Pioneers of America 3 credits
Pioneers of American Modern Dance is designed to introduce students not only to the basic techniques of modern dance, but also to the social, historical, and cultural changes of the twentieth century that made America ripe for new dance forms. Important figures in the dance world from the turn of the century to 1940 will be presented, along with their techniques, theories of movement and compositional ideas. Exposure to this study will enable the students to integrate the thought behind the movement with the action. Studio course.

DAN*H114 Hip Hop 1 credit
This course is designed to introduce students to the skills of Hip Hop dance with emphasis on general body technique and development, rhythmic awareness, rhythmic combinations of movement and various hip hop styles. It will segue from the Bee Bop and Doo Woo era into Locking, Popping and Breakin’, 1980’s and 1990’s Street Style, and basic House, Voguing, Krumping among others. It includes the historical and cultural perspectives that are particular to this American dance genre and cultural lifestyle.

DAN*H118 Dance Pedagogy for Early Childhood (also listed as ECE*H118) 1 credit
This course is designed to introduce students to the basic techniques and methodology for teaching dance to children, ages 2-5. Using the standards established by the State of Connecticut and the National Dance Education Organization, appropriate content for dance classes will be examined. We will view the dance class from a developmental perspective, identifying appropriate movement activities and strategies for teaching.

DAN*H131 Contemporary African Dance 1 credit
This course is an introductory course to African dance. Students will learn the fundamentals of African dance through basic movement vocabulary and selected traditional dances. This course may include videos, lectures, readings, and discussions to give students a context for learning African dance. Additional instruction may include Afro-Caribbean techniques and dances, as well as other African Diaspora techniques and dances.
DAN*H224 Concert. The Ensemble is the performing arm of the College. Studio working with a group. Elements of performance—costume, decor, making a group work. Students develop creative decision-making in improvisation. Students may find their own personal statement in includes assigned composition problems and structured movement and develop the tools for structuring movement in time and space. It includes assigned compositional problems and structured movement improvisation. Students will continue to explore their own personal statement in movement and develop solos and/ or group work. Students will continue to develop and demonstrate creative decision-making in working with an ensemble, both choreographically and in production. Tools and vocabulary continue to be offered in an environment open to creative communication. Elements of performance (costume, decor, lighting, staging) and production (publicity, press releases, stage and house management, scheduling) will be explored also. Participation in Dance Concert is mandatory.

DAN*H225 Repertory/Ensemble II 3 credits Prerequisites: DAN*H221 and permission of instructor. This course is designed to expand students' study of dance compositions by faculty and renowned choreographers who will teach their work. Modern dance is emphasized but works may be from the jazz dance or ballet genre. The studied works will be videotaped and then rehearsed by the instructor. Students, working as an ensemble, will present these works in formal or informal concert. Performance skills of projection, clarity, staging, spacing, and truth to choreographers' intent and technique will be further practiced. Students will continue to develop and execute production skills related to production. Participation in Dance Concert is mandatory.

DAN*H222 Repertory/Ensemble I 3 credits Prerequisite: Permission of instructor. Modern, Jazz or Ballet compositions by faculty or renowned choreographers will be taught, rehearsed and presented in concert. Performance skills of projection, clarity, staging, spacing and truth to choreographers' techniques will be practiced. Works for repertory may include Charles Weidman's Brahms' Waltzes, Anna Sokolow's Rooms, Balanchine's Tarantella, and Pilobolus' Improvisational Techniques. Studio course. Additional rehearsals required.

DAN*H223 Modern Dance II; Second Generation America 3 credits Prerequisite: DAN*H113 or permission of instructor. This course encompasses the techniques, theories and philosophies of movement as presented by America's second generation from Cunningham to Alvin Ailey. The social and cultural changes that influenced this period's dance also will be explored. Exposure to this study will enable the student to integrate the thought behind the movement. Studio course.

DAN*H221 Repertory/Ensemble I 3 credits Prerequisite: Permission of instructor. Modern, Jazz or Ballet compositions by faculty or renowned choreographers will be taught, rehearsed and presented in concert. Performance skills of projection, clarity, staging, spacing and truth to choreographers' techniques will be practiced. Works for repertory may include Charles Weidman's Brahms' Waltzes, Anna Sokolow's Rooms, Balanchine's Tarantella, and Pilobolus' Improvisational Techniques. Studio course. Additional rehearsals required.

DAN*H224 Choreographic Principles/Ensemble II 3 credits Prerequisite: DAN*H222 and permission of instructor. This course is designed for students to expand their knowledge of movement and dance and to continue to develop the tools for structuring movement in time and space. It includes assigned compositional problems and structured movement improvisation. Students will continue to explore their own personal statement in movement and develop solos and/ or group work. Students will continue to develop and demonstrate creative decision-making in working with an ensemble, both choreographically and in production. Tools and vocabulary continue to be offered in an environment open to creative communication. Elements of performance (costume, decor, lighting, staging) and production (publicity, press releases, stage and house management, scheduling) will be explored also. Participation in Dance Concert is mandatory.
DAT*H106 Digital Design 3 credits
Prerequisite: DAT*H101. This course explores the uses of fundamental visual design principles in emerging technologies used to design and develop interactive electronic documents such as multimedia databases, multimedia electronic books, applications for hand-held devices, and other technologies. Topics include; elements of design, principles of design, XML, and delivery engines.

DAT*H108 Digital Imaging I 3 credits
Prerequisite: DAT*H101. Digital Imaging I provides an in-depth study of digital image files and their uses in the realm of digital graphics, imaging and video. Topics include; alpha channels, composition and lighting, color theory, data compression, filters, raster graphics, vector graphics, gradients, layering, screen resolution and bit depth, and video display formats.

DAT*H110 Digital Video Production I 3 credits
Prerequisite: DAT*H101. Digital Video Production I is an introduction to the three phases of video production; pre-production, production, and post-production. Students will script, storyboard, shoot, and edit original short films. Topics include; alpha channels, aspect ratio, audio production, broadcast standards, computer monitors vs. video monitors, camera techniques, composition, compositing, compression, lighting, rolling credits, transitions, titles, and project management.

DAT*H116 Interactive Media Design 3 credits
Prerequisite: DAT*H104. Interactive Media Design is a practical and theoretical approach to the development and application of interactive digital media for desktop, portable devices, and Web-based applications. Learners will utilize the latest technologies to design, develop and present interactive digital media content. Topics include; principles of interaction design, human-computer interaction, intermediate JavaScript and XML programming, and developing interactive PDF documents.

DAT*H205 Multimedia Authoring II 3 credits
Prerequisite: DAT*H104. Multimedia Authoring II is an intermediate-level course in the application of advanced project development tools used in the creation of interactive multimedia for the entertainment, education and Web industries. Students will learn and apply techniques used to create interactive multimedia for broadcast, electronic games, and WWW applications. Topics include; algorithm analysis, animation, Interaction Design and interactivity, introduction to Human-Computer Interaction, keyframing and tweening, objects and events, Lingo scripting, timeline-based authoring, and Shockwave.

DAT*H212 3D Graphics & Animation I 3 credits
Prerequisite: DAT*H108. The 3D Graphics & Animation I course is an introduction to the design and application of digital character modeling and animation. Students will learn to design 3D modeled objects and examine and apply fundamental 2D and 3D graphic algorithms. Topics include; animation, camera and rendering, extrusions, lighting, modeling, polygons and primitives, surfaces, terrain, texture maps, transforms, and vectors.

DAT*H215 Multimedia Web Authoring 3 credits
Prerequisite: DAT*H205. Multimedia Web Authoring utilizes the latest software technologies and methodologies to develop and deliver complete interactive multimedia software systems for Web-based applications. Topics include; advanced algorithm analysis, complex problems in Human-Computer Interaction, and advanced JavaScript and Action Script programming.

DAT *H218 Electronic Music Composition/ Audio Technology I (also listed as MUS*H218) 3 credits
Prerequisites: CSA*H105 and permission of the instructor. This course is an introduction to the art and techniques of electronic music and audio production. The history, elements, and tools of electronic music and audio will be defined and explored. Topics include; acoustic theory, analog and digital audio principles, composition, recording engineering techniques, sound sampling, electronic synthesis, MIDI, and audio for multimedia and the World Wide Web.

DAT*H219 Electronic Music Composition/ Audio Technology II 3 credits
Prerequisites: DAT*H218, MUS*H218. This course provides intermediate instruction in digital synthesis, digital sequencing software, and electronic composition methods. Students will complete a series of directed and independent compositional projects in a variety of styles. Topic include; construction of timbres, additive and subtractive synthesis, digital sampling, signal processing, and algorithmic composition.

DAT*H220 Acoustics and Sound Design 3 credits
Prerequisite: DAT*H101. The advanced functions of the properties of sound, human hearing, electro-acoustic instruments, digital sound reproduction systems, sound synthesis, and psychoacoustics are examined. Students will develop and participate in a number of practical sound design and audio engineering projects.

DAT*H224 Digital Video Production II 3 credits
Prerequisite: DAT*H110. This course examines advanced project development methods and tools for video production. Students will study and apply the processes involved in transforming a concept to a finished video product. Topics include; analysis, budget, copyright, scripting, storyboarding, sequencing, pre-production, production, and post-production. The learner will design, script, produce, edit, and complete an original video project.

DAT*H226 Motion Graphics for Film & Video 3 credits
Prerequisite: DAT*H110. The study and application of state-of-the-art special effect techniques used in film and video industries will be explored. Topics include; compositing of multiple layers, masks and mattes, advanced motion controls, and advanced color keying.

DAT*H230 Digital Imaging II 3 credits
Prerequisite: DAT*H108. The advanced study of the design and manipulation of digital graphic and image files will be realized through a series of experiential projects. Topics include; photo retouching, drawing with vector paths, creating special effects with multiple layer effects, and designing images for interactive electronic media.

DAT*H234 3D Graphics & Animation II 3 credits
Prerequisite: DAT*H212. This course will explore advanced techniques for character modeling and the design of virtual space. Topics include; lighting and atmospheres, environmental structures, organic modeling, and character construction. The learner will design, model, and animate a complete 3-dimensional virtual world.

DAT*H236 Digital Illustration 3 credits
Prerequisite: DAT*H108 or equivalent experience. This course is an exploration of vector-based illustration. The major elements, components and skills required for the production of graphics used in a variety of fields will be developed.

DAT*H237 Principles of Sound Recording 3 credits
Prerequisite: DAT*H218 or MUS*H218. This course presents an in-depth study of the techniques and methodologies used in studio and live recording. In addition to classroom assignments and exercises, students will be expected to complete field work resulting in the recording, editing, and mastering of a live or studio project. Topics will include two-track and multi-track recording, studio acoustics and design, analog and digital mixing consoles, microphone placement techniques, signal processors, and studio session procedures.

DAT*H240 Multimedia Authoring III 3 credits
Prerequisite: DAT*H205. This course explores advanced multimedia systems and the theoretical and practical issues in designing interactive systems. Topics include; compression techniques, synchronization, user interface accessibility, indexing and retrieval techniques, operating system support for digital audio, video, and animation file formats, as well as network and transport protocols for multimedia. Emphasis will be placed on current design and delivery issues, software implementation and discussion of future directions.
DAR*H101 Issues in Drug and Alcohol Abuse 3 credits
Prerequisite: Eligibility for ENG*H101. This course will introduce students to the substance abuse treatment field and discuss DARC admission and certification requirements. Students will explore key topics such as models of recovery; history of legislation and regulation; self-help and evidenced-based approaches to recovery, ethics, and confidentiality. Public health issues related to substances will be investigated, including trends in substance use, co-occurring disorders, advertising of tobacco and alcohol, costs to society, and continuum of care from prevention to aftercare.

DAR*H111 Addiction Counseling I 3 credits
Prerequisite: Eligibility for ENG*H101. Students will learn, practice, and develop counseling skills such as attending, reflecting, active listening, interviewing, and mirroring as it relates to addictions counseling. Students will learn theories that are fundamental to addiction counseling and understand the relationship of theory to skills. Students will reflect on their roles as counselors and define the qualities, knowledge base, and skills essential to becoming a competent, ethical, culturally-aware counselor-in-training.

DAR*H112 Group Counseling Theory and Techniques 3 credits
Prerequisite: Eligibility for ENG*H101. Students will be introduced to the concepts and theories of group counseling and group dynamics in the addiction field. Types of groups, group formation, and stages of group development, transitions, and termination of groups will be discussed as well as the ethical aspects of group work. Through a combination of didactic and experiential learning, students will have the opportunity to examine their own performances as group members and facilitators.

DAR*H158 Biology of Addiction 3 credits
Prerequisite: Eligibility for ENG*H101. Students will be introduced to the basic pharmacology of drugs of abuse, and drug classification as well as the process of neurotransmission and brain functioning when drugs are introduced to the human body. Discussion of how each class of psychoactive substances alters neurotransmission and homeostasis will occur. The course examines the consequences of short- and long-term substance use, abuse, and addiction on all major bodily systems and the fetus.

DAR*H220 Co-Occurring Disorders Counseling 3 credits
Prerequisite: Eligibility for ENG*H101. The purpose of this course is to educate students about the principles, assessment instruments, strategies, settings, and models for treating clients with co-occurring disorders in the addiction treatment setting. This course will provide education and training on models for treating co-occurring disorders, assessment practices, development of treatment plans, and counseling strategies that may be used in inpatient and outpatient settings.

DAR*H213 Addiction Counseling II 3 credits
Prerequisite: Eligibility for ENG*H101. This course builds upon the theoretical base presented in Addiction Counseling I and will encourage further development of encouraging, paraphrasing, summarizing and reflecting of feelings as they relate to conducting intake interviews, treatment planning, counseling, and the discharge process. Students will also learn about complex issues which include GLBT populations, HIV/AIDS, domestic violence, eating disorders, relapse prevention, specialized self help groups, ethical behavior, and multicultural competencies.

DAR*H251 Counseling Internship I 6 credits
Prerequisites: DAR*H101, 111, 112, 158; Passing grade of "C" or better for ENG*H101 and permission of the program coordinator. Students will spend 15 hours per week in a substance abuse treatment facility under the joint supervision of the DARC program Coordinator and a supervisor at the facility and attend a seminar once per week. Students will observe, practice, and develop competency in the 12 core functions of addiction counseling. As students develop increased competence, they will progress from active observers to co-counselors and then to counselors. Students will continue academic study during a weekly seminar. Students will be expected to reflect on their field work, participate in clinical supervision and peer group interaction. (fall only)

DAR*H252 Counseling Internship II 6 credits
Prerequisites: Passing grade of "C" or better in DAR*H251; Passing grade of "C" or better for ENG*H101 and permission of DARC program coordinator. DAR*H251 and DAR*H252 must be completed in consecutive (Fall/Spring) semesters. A continuation of DAR*H 251, students will continue their field placements for 15 hours per week in the same substance abuse treatment facility. Students will refine their counseling skills and assume increased responsibility for implementing the transdisciplinary foundations and competencies required of addiction counselors. During the semester, students will function as a primary addiction counselor for one or more clients. The classroom component (weekly seminar) of this internship will prepare students for the certification exam and case presentation as well as provide for ongoing clinical supervision, personal reflection, and growth. (spring only)

ECE*H101 Introduction to Early Childhood Education 3 credits
A study of the historical, philosophical, and social perspectives of early care and education. Emphasis will be on modern development and trends, along with an understanding of the organization and composition of early childhood education settings, which include curriculum materials, learning environments and the teacher's role. Four three-hour observations of various types of early childhood programs and field trips are required.

ECE*H103 Creative Experiences for Children 3 credits
This course is designed to study the concept of creativity and the creative process as it applies to art and play for young children. At the completion of this course, the student will be able to set-up a creative play environment, facilitate children's creative play and develop an art philosophy and creative art program for children.

ECE*H106 Music and Movement for Children 3 credits
Prerequisite: ECE*H101. This course is designed to have students acquire skills in order to plan and implement creative music and movement education experiences for young children. Areas of exploration will include singing, listening to music, rhythmic activities, chants, creating music, using instruments with children, multi-cultural music, creative dance and movement, musical games, music for children with special needs, and using music spontaneously in the classroom. The main goals of the course are to develop an understanding of the importance of music and movement education experiences in an early childhood environment, the role that music plays in the growth and development of young children, and how these experiences can be creatively planned, implemented, and integrated throughout the daily curriculum.

ECE*H109 Science and Math for Children 3 credits
This course is designed to help students explore a variety of math, science, social studies and technology experiences suitable for use with young children. Math and science concepts are presented in relationship to everyday objects and experiences. Students will consider how math, science, social studies and technology concepts are embedded in classroom, family, and everyday experiences as well as how to support development of related concepts and skills.
ECE*H118 Dance Pedagogy for Early Childhood (also listed as DAN*H118) 1 credit
This course is designed to introduce students to the basic techniques and methodology for teaching dance to children, ages 2-5. Using the standards established by the State of Connecticut and the National Dance Education Organization, appropriate content for dance classes will be examined. We will view the dance class from a developmental perspective, identifying appropriate movement activities and strategies for teaching. There is no prerequisite for this class.

ECE*H141 Infant/Toddler Growth and Development 3 credits
Prerequisites: ECE*H101. A physical examination is required by a doctor and a criminal background check are required before starting ECE*H141. An introduction to the care and teaching of infants and toddlers, which emphasizes the interrelationship between social, emotional, cognitive, physical, and language development. Age appropriate curriculum strategies will be based on developmental theories. Components of a high quality program will be explored. Students will be required to fulfill 8 weeks (4 hours per week) of field placement work with toddlers as well as complete three, 3-hour observations of infants in child care settings. Placement is determined by the coordinator.

ECE*H176 Health, Safety and Nutrition 3 credits
The relationship between health, safety, nutrition, and child development will be explored. Emphasis will be on the strategies needed to implement a safe, healthy, and nutritionally sound program. Integration of these areas into the total curriculum will be examined.

ECE*H206 Administration and Supervision of Early Childhood Programs 3 credits
Prerequisite: ECE*H101 or permission of the Early Childhood Education Coordinator. An examination of the multi-dimensional role of the early childhood program director/administrator. Administrative styles, management tools, and interpersonal skills that contribute to effective leadership will be explored. Topics such as CT State licensing regulations, NAEYC accreditation, director certification, public policies, and professionalism will be discussed. (spring)

ECE*H210 Observation, Participation and Seminar 3 credits
Prerequisites: ECE 101. A physical examination by a doctor and a criminal background check are required before starting ECE*H210. This course is designed to help students to observe, interpret, and assess children’s behavior and developmental characteristics and to increase awareness of typical and atypical patterns of behavior, as well are provided for the study of young children at the discretion of the coordinator. The students will observe and participate in an accredited center to gain experience in working with young children. In weekly seminars, students will focus on issues related to observing and understanding children’s development. Students will spend a total of 60 hours, (4 hours per week) observing, documenting, and interacting with young children in the classroom.

ECE*H215 The Exceptional Learner 3 credits
Prerequisite: ECE*H101, PSY 205 or permission of the Early Childhood Education Coordinator. The study of the “exceptional child” with emphasis on the history, laws, concepts, practices, and terminology used by professionals in the field. Accommodations and techniques used by teachers in an inclusive classroom will be covered. An observation of a preschool special education class is required.

ECE*H222 Methods and Techniques in Early Childhood Education 3 credits
Prerequisites: ECE*H101; ECE*103, ECE*106, ECE*176, and ECE*231, ENG*H101, PSY*H111, SOC*H101. Should be taken concurrently with ECE-H291. The study of the knowledge and skills needed to plan, implement, and evaluate a developmentally and culturally appropriate curriculum. Experiences will focus on the design of the learning environment, the interaction between teacher, child and family, classroom management, and the fostering of opportunities to enhance the development of the whole child. Guidance of children’s behavior will be explored. Written permission is required before enrollment. (spring)

ECE*H231 Early Language and Literacy Development 3 credits
Prerequisite: ECE*H101. An introduction to language and literacy development in the young child. Exploration of the early childhood language arts curriculum which includes speaking, listening, writing, and reading skills will be examined. Emphasis on the influence of a child’s cultural background and experiences on emerging literacy development will be explored. Creation of a literacy-rich environment that engages children in developmentally appropriate language arts experiences will be included. Field trips are required. (spring)

ECE*H290 Student Teaching I 3 credits
Prerequisites: ECE*H101, 103, 106, 176, and 231, ENG*H101, PSY*H111, SOC*H101. A physical examination by a doctor and a criminal background check are required before starting ECE*H290. This course is designed to develop specific skills needed by the student in order to assume the responsibilities in a classroom. Through guided supervision in the classroom and seminars, the student will gain the needed experience by putting theory into practice. The coordinator will place students in the College’s Center for Early Childhood Education. Written permission is required before enrollment. Topics to be explored will include classroom management, daily schedules, curriculum and developmentally appropriate planning. The student is required to fulfill 120 hours of work experience during the semester. (8 hours per week minimum) (fall)

ECE*H291 Student Teaching II 3 credits
Prerequisites: ECE*H101, 103, 106, 176, 231, and 290, ENG*H101, PSY*H111, 204, SOC*H101. A physical examination by a doctor and a criminal background check are required before starting ECE*H291. This course is a continuation of ECE*H290. During this phase of the work experience, the student will concentrate on working directly with young children. The overall objectives are for the student to be able to manage a classroom independently, plan, organize, execute, and evaluate classroom activities on a weekly basis, and be able to critique effectively one’s role in the classroom. The student will be under the supervision of an on-site supervisor and the College instructor. Individual placements are under the direction of the Coordinator which includes eight hours per week in the Center for Early Childhood Education and four hours per week in another setting. Written permission is required before enrollment. The student is required to fulfill 192 hours of work experience for the semester. (12 hours per week minimum) (spring)

ECONOMICS
Business Division

ECN*H101 Principles of Macroeconomics 3 credits
An introduction to the basic structure of the United States economic system is presented. Topics include: types of economic systems, characteristics of capitalism, supply and demand, inflation and unemployment, the federal reserve system, and economic policy.

ECN*H102 Principles of Microeconomics 3 credits
Prerequisite: ECN*H101. An introduction to the problems of scarcity and resource allocation as it pertains to households and firms. The course centers on production and cost analysis in the four major types of industry models. Topics include: types of economic systems, characteristics of capitalism, supply and demand, elasticity, consumer choice, government in the microeconomy and price determination under various market conditions.

ECN*H130 Consumer Economics 3 credits
Study concerns the proper management of personal income and expenditures. Topics include: a study of inflation and business cycles, commercial and savings accounts, budgets, charge accounts, installment buying use of credit, home ownership, insurance and taxes.

ECN*H250 Money and Banking 3 credits
This course examines monetary theory and policy with special attention to the monetary system, commercial banking, the thrift industry, central banking, and capital markets.
EET*H102 Electrical Applications 3 credits
Prerequisites: EET*H102. An introduction to the fundamental concepts of electricity and electronic technology. A study of DC and AC electrical circuits with the emphasis on instrumentation, measurement, devices, and application of theory to practical systems. Topics covered include electrical circuits, applied electrical technology, transformers, motors and generators, electronic fundamentals and devices. Two class and two laboratory hours weekly. (fall/spring)

EET*H104 Electronic CAD and Fabrication 1 credit
Prerequisites: Some experience with WINDOW operating system. Introduction to the basics of the double sided Printed Circuit Board construction and soldering components to these boards. completion of a small fabrication kit including PC Board, leading to better physical understanding of PCB’s as a prerequisite to using OrCAD Layout software. The CAD then moves into the CAD laboratory to study the concepts of schematic capture (OrCAD CAPTURE) into a NETLIST and on to PCB layout. Three laboratory hours weekly. (fall/spring)

EET*H110 Electric Circuits I 4 credits
Prerequisites: MAT*H172 or MAT*H185. The fundamentals or direct current circuits are established. Emphasis is placed on the characteristics of circuit behavior. Ohm’s law and Kirchoff’s law are used to determine circuit characteristics. Circuit rules, methods and theorem are covered extensively. Resistance, capacitance and transient responses are introduced. Formal laboratory report writing is required. Four class hours and two laboratory hours weekly. (fall/spring)

EET*H114 Electric Circuits II 4 credits
Prerequisites: EET*H110. Corequisites: MAT*H185 or MAT*H186. The application of circuit analysis techniques acquired in Electric Circuits I are extended to circuits excited by AC sources. Emphasis is placed on solving circuit problems using complex numbers and phase diagrams. Topics include: inductance, transients, filter theory, mutual inductance, transformer theory, and an introduction to polyphase circuits. Formal report writing is required. Three class and two laboratory hours weekly. (fall intermittently/spring)

EET*H116 Electronics I 4 credits
Prerequisites: EET*H110. Corequisites: EET*H114, MAT*H185 or MAT*H186. Semiconductor physical concepts and P-N junction theory is established and applied to basic devices such as diodes, bipolar junction transistors, and field effect transistors. Circuit applications of these and other special devices are studied, with an emphasis on operating principles and analysis techniques. Three class and two laboratory hours weekly. (fall intermittently/spring)

EET*H208 Applied Circuit Analysis 3 credits
Prerequisites: EET*H206, EET*H214, MAT*H185 or MAT*H186. The analysis of RLC circuits using classical calculus for inputs which are both sinusoidal and non-sinusoidal are examined. Resulting first and second differential equations are solved using classical methods and by use of Laplace transforms. Basic derivatives and integration are taught as they apply to RLC circuits. Three class and three laboratory hours weekly. This course may be substituted for MAT*H232 for Electrical students only. (fall intermittently/spring)

EET*H232 Electronics II 4 credits
Prerequisites: EET*H136. Corequisites: MAT*H185 or MAT*H186. Characteristics of small signal amplifiers using BJTs and FETs are examined, and followed up with a study of linear op-amp circuits. Comparators and Schmitt Triggers using op-amps are also explored.

Basic characteristics of power amplifiers and oscillators are studied, and the operation of the thyristor family of devices is introduced. Three class and three laboratory hours weekly. (fall/spring)

EET*H242 Fiber Optics 3 credits
Prerequisites: EET*H136, EET*H252, PHY*H122. The course will cover the basic of fiber optics, how it is manufactured, its applications and fiber performance. The differences of different types of fiber optic cabling will be discussed and illustrated, with the advantages and disadvantages of each. Different types of connectors will be covered in both the classroom and the laboratory with the student making many of the actual connections. Measurement of the transmission characteristics of cables will be measured in the laboratory using a Time Domain Reflectometer. The use of single mode and multimode cabling relative to the type of transmission will be discussed. Three class and three laboratory hours. (Course has not been offered in recent years.)

EET*H251 Electronic Instrumentation 3 credits
Prerequisites: EET*H126, EET*H114, Corequisites: EET*H232, EET*H252. A study of the operating principles of electronic and electrical instruments. Both analog and digital instruments are covered. Sources of instrument errors and standards of measurement are included, along with the design of VOM circuits and basic electronic instruments. Also included is an introduction to LABVIEW (Basic Virtual Instrument Programming) and data acquisition. Three class and three laboratory hours weekly. (fall)

EET*H252 Digital Electronics 4 credits
Prerequisites: EET*H114. The study of number systems, Boolean algebra, logic gates and combinational circuits. This study provides the basis for investigating the operation of sequential circuits including flip-flop applications. Design of arithmetic circuits adders and subtractors and BCD are studied. Decoders, encoders, multiplexers and demultiplexers are included as an application of the basic gates. Use of Electronic WorkBench software to solve logic problems. Three class and three laboratory hours weekly. (fall)

EET*H253 Advanced Digital Electronics 3 credits
Prerequisite: EET*H252. A continuation of digital circuit design. Includes counters (asynchronous, synchronous types), multi-bit shift registers, logic families A/D and D/A converters, and code converters. Static and dynamic RAM memory circuits used in computers are studied along with ROMs, masked PROMs and erasable PROMs. CPLD design is explored extensively. Schematic entry and state diagram are methods learned to program a Xilinx FPGA. VHDL is introduced. Three class and three laboratory hours weekly. (spring)

EET*H256 Microprocessors 4 credits
Prerequisite: EET*H252. A study of the fundamentals of Microchip Corporation’s PICTM microcontroller architecture and high level programming language using Micro Engineering Lab’s PIC BASIC PRO compiler. Programming concepts include looping, decisions, time delays, interrupts, and LCD display. Hardware is addressed via the M. E. Labs X1 experimenter board. The PBPro compiler is run within Microchip’s MPLAB Integrated Development Environment allowing full simulation capability as well as use of the Microchip ICD2 In Circuit Debugger for observing hardware operation in a very controlled manner. Three class hours and three laboratory hours weekly. (spring)

EET*H268 Control Systems 3 credits
Prerequisites: EET*H126, EET*H114, EET*H232, EET*H252, MAT*H185 or MAT*H186. An introductory course which investigates primarily electro-mechanical control systems. Discrete control systems using relay logic and programmable controllers (PLC’s) are studied. Open and closed loop analog speed control systems are closely investigated. Motion, work EVSelope, axis of movement and programming lead up to a project with a working robot. Three class and three laboratory hours weekly. (spring)

EET*H294 Projects 2 credits
Prerequisites: EET*H104, EET*H232, EET*H252. Provides the opportunity to construct a project of interest to the student with the approval of the instructor. The course involves research, preparation, and a written report for the project, as well as full implementation.
testing, fabrication, troubleshooting, and final demonstration of the project. Schematics and PCB layouts will be prepared using OrCAD SDT and OrCAD PCB tools. Four laboratory hours weekly. (spring)

**EMT-PARAMEDIC**
Allied Health/Nursing/Physical Education

**EMT*H100  Emergency Medical Technician-Basic (EMT-B)**  **6 credits**
This course includes classroom and clinical experiences and provides students the opportunity to develop the knowledge and skills required for EMT-B National Certification. Emphasis is placed on patient assessment, clinical signs and symptoms, pathophysiology and pre-hospital care of patients. Areas of instruction include CPR, airway essentials, assessment and care of trauma and medical patients including infants, children and the elderly, rescue operations, hazardous materials and pharmacological interventions. Clinical rotation in an emergency room is required. (spring)

**Health Requirements:**
Students will be required to submit the completed immunization and medical compliance requirements before participating in the clinical observation component of this program. Students will receive a packet of information describing current college policies from the course instructor.

**Criminal Background Checks:**
Many clinical sites are now requiring that criminal background checks, be completed on any students who will be attending a clinical rotation at those facilities. Students must follow instructions for obtaining a background check provided to them by the course instructor. Students who are found guilty of having committed a felony/misdemeanor may be prevented from participating in clinical experiences. If you cannot participate in a clinical rotation at an assigned facility, you may not be able to complete the objectives of the course. Specific situations are reviewed by college personnel.

Students are responsible for fees associated with health requirements and background checks.

**ENGINEERING TECHNOLOGY**
Science, Technology, Engineering & Mathematics Division

**TCN*H101  Introduction to Engineering Technology**  **3 credits**
Students will conduct research, including interacting with professionals in the field of Engineering and Technology, to evaluate careers of interest to the student. Student teams will employ technical skills, appropriate software and technology to solve projects related to engineering and technology. They will also evaluate the use of information and technology and how it affects our society. Necessary skills for academic and professional success, such as critical thinking, problem solving, teamwork, study skills, time management and ethics in engineering, will be presented. Students will be required to write a research project and present their findings to the class in an oral presentation. (fall/spring)

**ENGLISH**
Liberal Arts and Behavioral/Social Sciences Division

**ALP/ENG*H063  Writing: Intro to the Essay**  **3 credits**
This course will enhance the student’s confidence in expressing ideas and provide practice with sound writing mechanics. Emphasis is placed on practicing the writing process with a focus on rhetorical methods; skills are taught within the context of essay writing. In addition, students will read, critically assess and write as a response to the readings. Library and research techniques are practiced. This course requires a minimum of six (6) hours of outside work per week.

- This course is part of the Accelerated Learning Program combination of ENG*H063 and ENG*H101.
- Placement into the course(s) will be determined by Accuplacer scores: NG Reading 247-257.
- Students registered for both CRNs will have the opportunity to receive credit for both courses.
- These courses run in consecutive time blocks: ENG*H101 is the primary course and will be offered first, then ENG*H063 will continue through the second block as a workshop to support the work offered in ENG*H101.
- In the ENG*H063 class, students will prepare for and review questions from ENG*H101, write short papers to reinforce concepts taught in ENG*H101, review drafts, and work on reducing writing errors. Requirements for attendance in either one or both classes will be made on an individual basis.

3 Credits for ENG*H101 and 3 credits for ENG*H063 (not toward graduation). Student MUST receive a C or better (73) to pass this course.

**ENG*H096  Introduction to College English**  **3 credits**
Prerequisite: Appropriate score on placement test, or approval from Division Leader or advisor. This course is designed to prepare students for the reading and writing demands in Composition and other college-level courses by integrating reading, writing, and critical thinking. Student writing will focus on understanding, reporting on, reacting to, and analyzing the ideas of others. Texts will serve as models and sources for students to refine their skills in exposition, interpretation, and argumentation. Students learn and practice specific college-level skills through critical reading and writing, class discussions, lectures, group presentations or workshops. This course does not satisfy an English requirement or an elective in any degree program, nor do its credits count toward graduation.

**ENG*H101  Composition**  **3 credits**
Prerequisite: “C” or better in ENG*H096, or “C” or better in ESL, or successful completion of placement tests, appropriate SAT score or recommendation of the Associate Dean of LABSS and instructor. May not be taken concurrently with any other English course except ENG*H063. This course is designed to introduce students to the importance of writing and to develop their critical thinking, reading, and writing skills. The class will focus on the writing of expository essays, often in response to complex readings. This course will emphasize the necessity of revision as a means of producing college-level writing. Intensive library and research techniques are an integral part of this course.

**ENG*H102  Literature and Composition**  **3 credits**
Prerequisite: “C” or better in ENG*H101 or recommendation of the Associate Dean of LABSS and instructor. This advanced writing course is designed to refine student’s critical reading and writing skills through in-depth analysis of literary genres such as fiction, poetry, and drama. Students will engage in sophisticated writing assignments which emphasize the importance of authoritative research and complex logical reasoning, interpretation, and argumentation. Students will apply literary theories while developing their understanding and appreciation of literature and its relationship to society. ENG*H102 is an academic core course.

**ENG*H200  Advanced Composition**  **3 credits**
Prerequisite: “C” or better in ENG*H101 or recommendation of the Associate Dean of LABSS and instructor. This advanced writing course is designed to refine student’s critical reading and writing skills through in-depth analysis of intellectually challenging texts. Students will engage in sophisticated writing assignments which emphasize the importance of authoritative research and complex logical reasoning, and argumentation. Topics to be addressed will be contemporary cultural issues central to present day academic discourse.

**ENG*H202  Technical Writing**  **3 credits**
Prerequisite: ENG*H101. This course involves the student in the study and practice of the basic skills and principles of technical writing for business and industry. The practice of writing is emphasized; graphic and design elements including designing visual formats are given secondary emphasis. The course focuses on the fundamental skills and formats of letter/memos, instructions, proposals, reports, and layperson writing (communicating difficult subjects to general audiences). Individual instructors may add other subjects.
literary perspectives and examines the literary impact of gendered identities. Emphasis is given to how gender roles develop and change and how women's views of themselves are reflected in their writing. From tracing the development of this literature, the class will consider the historical, philosophical, religious, and cultural perspectives that allow us to delve into the writing of major women writers. This course will focus primarily on Western writers, though not exclusively. Assigned readings may include writers from the Renaissance to the present.

ENG*H269 Studies in Young Adult Literature 3 credits
Prerequisite: ENG*H102 or ENG*H200. This course covers selection, evaluation, and critical study of fiction available for adolescents and young adults (ages 12-18). Students will learn about the young adult novel as a literary form with an emphasis on reading of representative fiction. The course will also include the history of the genre and interpretive approaches to texts, the exploration of common themes, as well as the opportunity to write young adult fiction.

ENG*H274 The Graphic Novel as Literature 3 credits
Prerequisite: ENG*H102 or ENG*H200. This course explores the use of the combination of words and graphic images to create effective storytelling. Both contemporary and historic examples of graphic novels will be examined.

ENG*H277 Science Fiction & Society 3 credits
Prerequisite: ENG*H102 or ENG*H200. In this course, students will develop skills in understanding and appreciating the genre of science fiction and its relation to other literary genres. Additionally, students will apply critical methodologies and investigate relationships between science fiction and society, thus confirming their skills of analysis and writing. Particular approaches to science fiction will involve Marxist, feminist, gender, psychoanalytical, and anthropological critical theories.

ENG*H278 Contemporary Literature 3 credits
Prerequisite: ENG*H102 or ENG*H200. This course examines post-WWII literature, including short fiction, poetry, and drama. This course will include discussions of literatures from around the world as well as new developments in literary studies, such as post-Colonialism and postmodernism.

ENG*H281 Creative Writing 3 credits
Prerequisite: ENG*H102 or ENG*H200. This course gives students practical experience in writing various literary genres. The course will include an introduction to the principles and techniques of creative writing aimed at developing the creative process. The emphasis will be on individual creative methods, creative reading and listening, editorial techniques, and the production of finished work, including possible preparation of manuscripts for publication.

ENGLISH AS A SECOND LANGUAGE
Liberal Arts and Behavioral/Social Sciences Division

ESL students registered prior to Fall 2015 may use up to 6 credits of intermediate and advanced levels of ESL courses to fulfill the modern language and/or arts and humanities elective requirements. For new students registered in Fall 2015 or onwards, ESL 169, ESL 162 and ESL 157 only can be used to fulfill the General Education Requirements for Written Communication and Oral Communication respectively. However, transfer of ESL credits from NVCC to other institutions or from other institutions to NVCC are governed by the policies of the receiving institution.

The ESL courses are designed for students whose native language is not English. The sequence endeavors to help students attain a level of proficiency in English that will permit them to succeed in the academic or career programs of the college. The ESL sequence has six levels. The core of the sequence is the 6-credit reading/writing courses which integrate discussion and grammar into the content. There are grammar courses from levels one through five; oral communication courses at levels one, three and five; and one pronunciation course at level three. Placement in ESL courses is determined by the ESL office and is based on the Levels of English Proficiency (LOEP) exam.
and a writing sample. To be promoted to the next level, students must demonstrate mastery of the respective language learning competencies, which is determined by a grade of "C" or better and completion of all coursework. Students in upper levels of ESL may concurrently take some academic courses, in accordance with course prerequisites.

Students in ESL*H152 Reading and Writing V have the option to go either ESL*H162 Reading and Writing VI, especially designed for those who received a "C" or "C+" in ESL*H152. Successful completion of this course with a "C" or better will promote students to ENG 101. For those ESL*H152 students who received a B- or higher or for those who received high placement scores, they can take an accelerated class, ESL*H169 Writing VI that is taken concurrently with an ENG*H110 ALP, which combined are known as Composition I. After successful completion of the ESL ALP, sequence, with a "C" or better, students progress to ENG*H102 or a higher ENG course.

ESL*H013 Writing and Reading I 3 credits
Prerequisite: Successful completion of ESL*H5030 (Real Life English) or specified score on ESL placement exam. In this low beginning level course, students begin to develop basic skills in reading and writing. Coursework focuses on basic grammar structures and sentence construction. Vocabulary is increased through reading and writing. This course requires a minimum of six hours of outside work per week.

ESL*H015 Grammar I 3 credits
Prerequisite: Successful completion of ESL*H5030 Real Life English or specified score on ESL placement exam. In this low beginning level course, students will be introduced to patterns and rules of basic grammar structures. Students will practice and apply these structures through exercises, reading, writing, and discussion. This course requires a minimum of six hours of outside work per week.

ESL*H017 Oral Communications I 3 credits
Prerequisite: Successful completion of ESL*H5030 Real Life English or specified score on ESL placement exam. In this low beginning level course, students will work toward improving their speaking and listening skills. Students will develop their oral communication skills, including pronunciation, through a variety of activities such as role playing, conversation, large and small group discussions, and oral reports. This course requires a minimum of six hours of outside work per week.

ESL*H022 Reading and Writing II 6 credits
Prerequisites: "C" or better in ESL*H013 or specified score on ESL placement exam. In this high beginning level course, students continue to develop reading and writing skills by reading extensively and writing effective sentences and structured paragraphs. Reading and writing also provide the basis for vocabulary and grammar development. This course requires a minimum of twelve hours of outside work per week.

ESL*H025 Grammar II 3 credits
Prerequisite: "C" or better in ESL*H013, or specified score on ESL placement exam. In this high beginning level course, students build on basic grammar structures and practice them with reading, writing, and speaking exercises. This course requires a minimum of six hours of outside work per week.

ESL*H132 Reading and Writing III 6 credits
Prerequisite: "C" or better in ESL*H022 or specified score on ESL placement exam. In this low intermediate course, students continue to develop reading and writing skills by reading extensively and writing effective sentences and structured paragraphs. Assigned readings (including whole works) inspire individual writing assignments as well as discussions in small and large groups. In addition to learning grammatical principles, students work on effective sentence structures, paragraph development and organizational skills in writing compositions. This course requires a minimum of twelve hours of outside work per week.

ESL*H135 Grammar III 3 credits
Prerequisite: "C" or better in ESL*H022 or specified score on ESL placement exam. In this low intermediate course, patterns and rules of grammar structures will be introduced, practiced, and applied in a meaningful context. Formal exercises, short writings, and communicative activities will be used to promote mastery of essential language structures. This course requires a minimum of six hours of outside work per week.

ESL*H137 Oral Communications III 3 credits
Prerequisite: "C" or better in ESL*H022 or specified score on ESL placement exam. In this intermediate level course, communication skills and fluency will be developed using authentic language. Students will develop increased self-confidence and competency through a variety of activities that address oral communication, pronunciation, listening and reading comprehension, and vocabulary development. Activities will include role-playing, interviewing, class and small group discussions, oral reports, and written exercises. This course requires a minimum of six hours of outside work per week.

ESL*H139 Pronunciation III 3 credits
Prerequisite: "C" or better in ESL*H022 or specified score on ESL placement exam. This course will provide extensive, in-depth practice in English pronunciation with special focus on rhythm, stress, and intonation. Basic features of English phonology will be reviewed. Students will learn to evaluate their own speech in order to become more competent, self-assured speakers. Short readings and poetry will be used to facilitate the unique expressive and communicative features of spoken English. This course requires a minimum of six hours of outside work per week.

ESL*H141 Integrated Skills IV 3 credits
Prerequisite: "C" or better in ESL*H132 and permission of the ESL Program Coordinator. This course is designed to help high intermediate level students strengthen reading and writing skills, as well as further develop proficiency in the use of grammar structures in authentic contexts. Short readings (including whole works) will be assigned as a basis for small group and class discussions and will also serve to introduce essential grammar rules, and expand vocabulary for application in a meaningful context. Writing tasks will be assigned to develop both sentence and paragraph structures. Students focus on writing and rewriting of paragraphs and essays to develop ideas, organization, clarity and accuracy in their writing. This course requires a minimum of six hours of outside work per week. ESL students may use up to 6 credits of Intermediate and Advanced levels of ESL courses to fulfill the Modern Languages/Arts and Humanities elective requirements.

ESL*H142 Reading and Writing IV 6 credits
Prerequisite: "C" or better in ESL*H132 or specified score on ESL placement exam. In this high intermediate course, students continue to strengthen reading and writing skills. Assigned readings (including whole works) as well as student writing form the basis for small group and class discussions. Students focus on writing and rewriting essays to develop ideas, organization, clarity and accuracy in their writing. This course requires a minimum of twelve hours of outside work per week.

ESL*H145 Grammar IV 3 credits
Prerequisite: "C" or better in ESL*H132 or specified score on ESL placement exam. In this high intermediate course, students will further develop proficiency in the use of grammar structures through group discussions, oral practice, written exercises, and short writings. Use of grammar structures in authentic contexts will be emphasized. This course requires a minimum of six hours of outside work per week.

ESL*H149 Pronunciation Workshop 3 credits
Prerequisite: "C" or better in ESL*H139 or permission of the ESL Program Coordinator. This course is designed to help students improve features of their American English pronunciation that could confuse or distract listeners and interfere with understanding. By learning how the sounds of English are produced and how authentic rhythm, stress and intonation are expressed, students will increase the accuracy and clarity of their English pronunciation and speaking.
ability. Students will learn how to evaluate their own speech in order to become more competent, self-assured speakers. ESL students may use up to 6 credits of Intermediate and Advanced levels of ESL courses to fulfill the Modern Languages/Arts and Humanities elective requirements.

**ESL*H152 Reading and Writing V** 6 credits

Prerequisite: "C" or better in ESL*H142 or specified score on ESL placement exam. In this low advanced course, students continue to refine reading comprehension and writing proficiency. Assigned readings (including whole works) as well as student writing provide the text for small group and class discussions. Through writing and rewriting essays, students work on organizational skills, development of ideas, clarity and the mechanics of effective writing. This course requires a minimum of twelve hours of outside work per week.

**ESL*H155 Grammar V** 3 credits

Prerequisite: "C" or better in ESL*H142 or specified score on ESL placement exam. In this low advanced course, key grammar structures will be learned and practiced through group discussions, oral and written exercises, and short writings. Use of grammar structures in authentic contexts will be emphasized. This course requires a minimum of six hours of outside work per week.

**ESL*H157 Oral Communications V** 3 credits

Prerequisite: "C" or better in ESL*H142 or specified score on ESL placement exam. In this low advanced course, fluency in oral communication and listening skills will be further developed. Communicative competency will be addressed in an authentic and meaningful setting. Taped lectures and conversations, oral presentations, interviewing, class and small group discussions, role playing and vocabulary development activities will enhance proficiency in English. This course requires a minimum of six hours of outside work per week.

**ESL*H162 Reading and Writing VI** 6 credits

Prerequisite: "C" or better in ESL*H152/152 or specified score on ESL placement exam. In this high advanced course, students continue to develop fluency, clarity, organizational skills and the mechanics of effective writing with a focus on the linguistic and rhetorical requirements of second language learners. Course content and writing assignments are based on reading selections, complete works, and student texts. Students write, revise, and edit drafts participate in group work, and confer with teachers and peers. Successful completion of this course with a "C" or better will promote students to ENG 101. This course requires a minimum of twelve hours of outside work per week.

**ENV*H110 Environmental Regulations** 3 credits

A broad view of federal, state and municipal environmental regulations as they apply to industry, commercial establishments, local governmental facilities and the individual citizen. Provides a practical approach to regulatory understanding to enable one to plan an effective and economically sound management system. Course topics include the Clean Air Act (CAA), Clean Water Act (CWA), Toxic Substance Control Act (TSCA), SARA Title III (Community Right-to-Know), Resource Conservation and Recovery Act (RCRA) CT Transfer of Establishment Act (TASA) and federal, state and local regulations covering such topics as hazardous material transportation, in-ground tank storage and specific hazardous materials such as asbestos and PCBs. ISO 14,000 requirements will be discussed. (spring)

**ENV*H120 Introduction to Hazardous Materials** 3 credits

Hazardous materials are associated with virtually all industrial activities. This course is designed for people who routinely come in contact with hazardous materials in the workplace. OSHA regulations, Material Safety Data Sheets (MSDS), toxicology, selection of protection equipment, ventilation and storage of hazardous materials will be covered. Fire, electrical, radiation and noise hazards will also be discussed. Students will use industrial supply catalogs, computers and the Internet to identify appropriate protective equipment for a range of hazardous materials. (offered periodically)

**ENV*H205 Foundations of Environmental Chemistry** 3 credits

Prerequisite: CHE*H111 or 121. The objective of the course is to study the chemical reactions in natural systems. The fate and transport of contaminants introduced into the environment by humans will be examined. Ways of analyzing for contaminants in the atmosphere, hydrosphere, and lithosphere will be identified and students will obtain practical experience with some of these techniques. Written lab reports will be required. Two class and two laboratory hours weekly. (offered periodically)

**FINANCE Business Division**

Refer to the Business Finance section.

**FIRE TECHNOLOGY AND ADMINISTRATION Business Division**

**FTA*H112 Introduction to Fire Technology** 3 credits

This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives.

**FTA*H116 Building Construction** 3 credits

Corequisite: FTA*H112. This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

**FTA*H118 Fire Prevention and Inspection** 3 credits

Corequisite: FTA*H112. This course provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation.
This course explores the theories and fundamentals of how and why fires start, spread, and are controlled.

FTA*H126  Safety and Survival  3 credits
This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

FTA*H130  Fire Technology and Administration Tech-Prep Internship  3 credits
This course is a directed study and service opportunity for those in a Tech-Prep program. It is designed to allow the participant to develop an awareness of the fire service and provide a service opportunity benefiting both the student and the community. To participate, a student, at a minimum, must be part of a Junior/Cadet/Apprentice/Probationary program sponsored by a fire, rescue, emergency medical service or fire marshal’s office. To obtain college credit for this program, the student must participate in the Tech-Prep program as prescribed for his/her high school. Credit for this course will not be granted separately. The student will be assigned a mentor from his/her sponsor and the Fire Technology and Administration program of Naugatuck Valley Community College. In addition, the student will be required to complete a project designed by the Department and agreeable to the mentor from Naugatuck Valley Community College. In addition, the student will be required to complete at least two assignments one of which will be in support of the major project. Prior to the start of the program the student will be assisted in developing his/her program and what specifically will be required to obtain credit.

FTA*H210  Water Supply and Hydraulics  3 credits
Corequisite: MAT*H107 or MAT*H112. This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

FTA*H216  Municipal Fire Administration  3 credits
Prerequisite: FTA*H112. This course introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer.

FTA*H218  Fire Protection Systems  3 credits
Prerequisite: FTA*H112. This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

FTA*H219  Fire Investigation  3 credits
Prerequisite: FTA*H116. Corequisite: CHE*H111 or Instructor Approval. This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes.

FTA*H272  Terrorism - First Responders  3 credits
Many of the principles that apply to Haz Mat, EMS, and crime scene responses also apply at WMD responses. This course will provide additional information to help the First Responder understand informed, controlled, and safe responses to incidents involving weapons of mass destruction. 3 contact hours.

GEOLOGY
Liberal Arts and Behavioral/Social Sciences Division

GEO*H111  World Regional Geography  3 credits
The interaction of the physical Environment with the social, cultural, political, and economic conditions in various regions of the world, and the diverse patterns of human activity which emerge from the interplay of these forces are examined. The course is organized on natural regions such as Anglo-America, Latin America, Europe, the Middle East, Africa, and the Pacific World.

GEOLOGY, Science, Technology, Engineering & Mathematics Division

GLG*H121  Introduction to Physical Geology  4 credits
Prerequisite: Completion of MAT*H094/095 with a "C" or better, or an appropriate score on a college placement exam and eligibility for ENG*H01. This course will be devoted to the study of the processes involved in the formation of the earth’s crust. A study of earthquakes, volcanoes, mountain building, minerals, oceans, continental drift, and erosion by wind, water, and ice will be explored. Three hours lecture and three hours laboratory weekly. Some field trips may be included. (fall)

GRAPHIC DESIGN
Liberal Arts and Behavioral/Social Sciences Division

Refer to Art.

HEALTH
Allied Health/Nursing/Physical Education Division

HLT*H103  Investigations in Health Careers  3 credits
This course is designed to assist students in meeting the expectations of a health care curriculum and career. The students will become familiar with the rigors of higher education and the specific skills needed to maximize their opportunity for academic and clinical success. The course will include a comprehensive overview of the duties and responsibilities associated with clinical competency. Interdisciplinary learning strategies, correlating clinical and didactic education, life management skills, work ethics, and critical thinking skills necessary for all health providers will be emphasized.

HISTORY
Liberal Arts and Behavioral/Social Sciences Division

HIS*H101  Western Civilization I  3 credits
Prerequisite: Eligibility for ENG*H101. Students may not receive credit for HIS*H104 or 121 in addition to HIS*H101. This course is an issue-oriented course of Western Civilization from the Ancient World to 1715 from a contemporary perspective. Topics selected on the basis of significance and relevance will include oriental despotism, the origins of political democracy, concepts and codes of justice, the first federal empire, feudalism and the emergence of secular nation – states, and the Renaissance and Reformation – as seen through the eyes of statesmen, philosophers, religious leaders, writers, artists, scientists, etc. of their day.

HIS*H102  Western Civilization II  3 credits
Prerequisite: Eligibility for ENG*H101. Students may not receive credit for HIS*H104 or 122 in addition to HIS*H102. This course is an issue-oriented study of Western Civilization from 1715 to the present from a contemporary perspective. Topics, selected on the basis of significance and relevance, will include change through revolution and evolution, industrialization and class conflict, individualism and collectivism, nationalism and imperialism, war and peace, totalitarianism, and the ecumenical spirit – as seen through the eyes of statesmen, philosophers, religious leaders, writers, artists, scientists, etc. of their day.

HIS*H121  World Civilization I  3 credits
Students may not receive credit for HIS*H101 or 104 in addition to HIS*H121. A study and appreciation of African, European, and American civilizations, and their interaction with each other up to 1600.
HIS*H122  World Civilization II  3 credits
Students may not receive credit for HIS*H102 or 104 in addition to HIS*H122. A study and appreciation of African, European, and American civilizations, and the increasing interdependence from 1600 to the present.

HIS*H123  Contemporary Issues in World Civilization  3 credits
In-depth studies of some of the major problems that confront the world today are presented. Course content is likely to vary from one semester to another in order to keep up with the changing complexion of the world's problems.

HIS*H124  Women of the World  3 credits
This course is a study of women as driving forces in history and women driven by historical forces. Portraits of outstanding historical and contemporary female personalities – pagan priestesses and goddesses, women poets, scientists, educators, healers and reformers are presented.

HIS*H201  U.S. History I  3 credits
Prerequisite: Eligibility for ENG*H101. This course is essentially a chronological treatment of the social, economic, political and cultural development of the American people to 1865. Certain topics such as colonial life, the Revolution, the political thought of Hamilton and Jefferson, reform, slavery, abolition, and the Civil War are studied in depth.

HIS*H202  U.S. History II  3 credits
Prerequisite: Eligibility for ENG*H101. The course is essentially chronological in its treatment of the period from 1865 to the present. Certain topics in the social, economic, political, and cultural development of the American nation, such as the Age of Industrialization, International Relations and World War I, the Depression and New Deal, World War II and postwar period including the Cold War, the Eisenhower Era, the Sixties and Vietnam are studied in depth.

HIS*H210  History of Colonial America  3 credits
This course addresses the social, economic, political, and cultural development of the people of the British North American Colonies to 1783. Topics covered in this course will include the Americas prior to European colonization, early European exploration and settlement in the Americas, relations between Great Britain and the American colonies, the background and causes for the American Revolution, the development and operation of the American national government, and development of an American society/culture.

HIS*H213  The United States Since World War II  3 credits
This course addresses the social, economic, political and cultural development of the United States between 1920 and the present. Topics covered in this course will include the culture and economy of the 1920s, the Great Depression and the New Deal, World War II, the Cold War, the Korean War, American society in the 1950s, the Civil Rights Movement, the Women’s Rights Movement, the war in Vietnam, the Counterculture of the 1960s and ’70s, the Reagan and Bush eras, the end of the Cold War, and the Clinton era.

HIS*H215  History of Women in the US  3 credits
This course will examine the position of women in the United States from the late nineteenth century to the present. Topics of study will include the origins and issues of the women’s movement in the nineteenth century, women’s suffrage, the women’s movement in the 1960’s and 1970’s, women and the law, women and patterns of work, women and business, women and religion, women and athletics, women and homemaking, women and assertiveness, women and sexuality, women and aging, women and divorce, and women and affirmative action.

HIS*H218  African-American History  3 credits
This course will utilize historical, sociological, and cultural perspectives in the analysis of the current status of African-Americans in the United States. The quest for equality, problems and prospects, and the role of African-Americans in the development of American and world cultures will be explored.

HONORS

Academic Affairs

HON-H200  Honors Special Topics Seminar  3 credits
Prerequisite: Member of Honors Institute. "B" or better in ENG*H101 and MAT*H137. In this course Honors students will examine a current, "real world" topic from an interdisciplinary perspective. Each student will produce a final research, design, or artistic product that demonstrates independent exploration of the topic. Required for honors designation. Topic varies each semester.

HORTICULTURE

Science, Technology, Engineering & Mathematics Division

HRT*H101  Landscape Construction  4 credits
This course provides applied experiences in assorted construction techniques necessary in the development of landscapes. Included are a survey of construction materials, deck design and construction, patio and walkway installation, stone wall construction, fencing, retaining wall design and construction. Earthwork calculations, measuring and materials estimating are included. Actual field exercises will be provided. (fall)

HRT*H102  Woody Plants  3 credits
This is a basic introduction to common desirable, deciduous and evergreen trees, shrubs and vines for the natural and cultivated landscape. The course emphasizes identification as well as learning the attributes, growth habits and cultural needs of the plants. Nomenclature and fundamental tree biology are discussed. (fall)

HRT*H103  Herbaceous Plants  3 credits
This course provides instruction in the identification and selection of annual and perennial herbaceous plants for various habitats. Students will develop an understanding of the plants’ ornamental value in garden and landscape design, based on flowers, foliage, form, and adaptability to the environment. (spring)

HRT*H104  Soil Systems  3 credits
This course covers the relationships between soils and the environment with emphasis on common horticultural applications such as agricultural production, landscape functions, and greenhouse operations. It specifically focuses on soil texture and classification, the biological and chemical properties of soils, the impact of soils on the environment, and the principles and practices of modifying soils for horticultural applications.

HRT*H105  Fruit and Vegetable Production  3 credits
Primarily a course for residential vegetable and fruit cultivation, the course provides basic knowledge and methods that can be applied on the commercial level as well. Included are topics on site selection and soil preparation, planting, pruning, fertilization and general cultivation of vegetables, small bush and large tree fruits. (offered periodically)

HRT*H106  Fruit Production  3 credits
This course will cover the current principles and cultural practices of tree, bush, and vine fruit crop production. The course provides basic knowledge and methods that can be applied on the commercial and residential level. Included are topics on site selection and soil preparation, planting, pruning and fertilization and general cultivation of a variety of fruiting plants. Site visits to fruit production sites will be included. Lecture and lab.

HRT*H107  Vegetable and Herb Production  3 credits
This course will cover the current principles and cultural practices of traditional and hydroponic vegetable crop production. The course provides basic knowledge and methods that can be applied on the commercial and residential level. Included are topics on site selection and soil preparation, planting, pruning and fertilization and general cultivation of a variety of vegetable plants. Site visits to agricultural businesses will be included. Lecture and lab.
The establishment and maintenance of turf grass are studied in the course. Lawn, golf course, and athletic field care are emphasized. Students will also learn to identify the turf grasses, identify and control weeds, insects, pests and diseases. (offered periodically)

**HRT*H124** Floral Design I 3 credits

The basic principles of design as applied to the art of floral arranging are examined and flower shop management operation. (offered periodically)

**HRT*H202** Landscape Design I 3 credits

*Pre-requisite: HRT*H102.* This course provides students with the basic knowledge and skills to create a successful landscape plan. Starting with the proper placement and design of driveways and walkways, it guides the student through the stages of developing an entire residential property. Appropriate plant selection is based on site characteristics and design principles and elements. (spring)

**HRT*H203** Landscape Design II 3 credits

*Pre-requisite: HRT*H202 or permission of instructor.* This course is designed as a continuation of HRT*H202. This course will aid students in developing skills in perceptual design, job bidding, as well as give an introduction to computer aided drafting, as related to horticulture landscaping. (offered periodically)

**HRT*H204** Computers in Landscape Design 3 credits

This course is an introduction to utilizing computer applications in the landscape design profession. Material will cover the development of two-dimensional base plans, three-dimensional models, and two dimensional renderings. Also, examples of real-life projects will be highlighted to illustrate the transition from computer drawings to construction. The student will develop a working knowledge of AutoCad, ProLandscape, Google Sketchup, and Adobe Photoshop. (offered periodically)

**HRT*H207** Landscape Maintenance 3 credits

This course is designed to assist the professional and amateur landscape gardener to maintain their gardens through an understanding of plant growth, pruning, nutrition, propagation, etc. The course also includes landscape estimating. (fall)

**HRT*H208** Landscape Contract Administration 3 credits

This course covers the topics of contracts, project estimation, and personnel management for small landscape businesses. The course will also review the legal requirements to start and execute landscape projects, maintain occupational licensure, and manage municipal planning review processes.

**HRT*H215** Integrated Pest Management 3 credits

This course reviews the concepts, principles, development and application of Integrated Pest Management (IPM) systems in the commercial horticultural field. IPM constitutes a series of pest control strategies that are more sustainable toward agriculture, natural resources, and urban health. This course will also provide an overview of all of the subjects that the student will need to be familiar with in order to pass the State of Connecticut Custom Grounds Supervisory Pesticide Applicators License Examination.

**HRT*H219** Arboriculture 3 credits

This course is designed to prepare landscape professionals as the State Arborist Exam. Topics include the biology, identification, selection, planting, management, preservation of trees and diagnosis of tree problems. It is recommended that if students lack extensive work experience they should have taken HRT*H102 (Woody Plants) and HRT*H215 (Pest Control) before taking the State Arborist Exam. (offered periodically)

**HRT*H222** Greenhouse Operations & Management 4 credits

This course focuses on the selection, production and management of greenhouse and bedding plants, interior plantscape management and design, management of annuals and perennials. Plant physiology is related to the Environmental effects on plant growth. (fall/spring)
HSP*H102  Food Production and Purchasing  3 credits
Prerequisite: HSP*H101. A continuation and application of the culinary techniques and knowledge acquired in HSP*H101 through the planning and preparation and group service of advanced menus. Discussion of meat, poultry, and fish identification, fabrication, and purchasing specifications, as well as food costing and menu pricing.

HSP*H103  Principles of Baking I  3 credits
This course takes an expansive view of baking and pastry. Students will learn the basic principles of baking through lecture, demonstrations, assignments, and hands-on participation. Technique will be emphasized. Kitchen math, weights and measurements, quality and cost control, and sanitation will be incorporated into each lesson. Students will explore basic baking ingredients and their important characteristics in relation to baked goods. Recipes, both sweet and savory, will include various doughs and their accompanying fillings; pies and tarts; cakes, icings, and fillings; cookies and petit fours; pâte à choux; creams, custards, and mousse; and chocolate desserts.

HSP*H108  Sanitation and Safety  3 credits
An in-depth coverage of commercial foodservice sanitation resulting in SERVSAFE® Qualified Food Operator certification as required by Connecticut law. Included are proper food handling procedures in receiving, storage, preparation, purchasing and service, as well as staff training and quality control SERVSAFE® Alcohol Certification also provided.

HSP*H109  Food Safety Certification (8 weeks)  1 credit
Not open for credit for students who have successfully completed HSP*H108. Designed for the non-degree students employed in the foodservice industry. Aspects of applied commercial foodservice sanitation resulting in nationally recognized SERVSAFE® Qualified Food Operator certification as required by Connecticut law. Prevention of food-borne illness, sanitary procedures in the protection and service of food to the public, laws and regulations, sanitary design and employee training will be discussed. Eight weeks.

HSP*H125  Wine and Viticulture I  3 credits
Botanical study of the grape (vitis) and principles of enology (wine making) are studied and practiced. Students also explore viticultural (grape growing) techniques used throughout the world. Wine tasting sessions included. Per Connecticut State Law, persons under the age of 21 are not allowed to consume alcoholic beverages.

HSP*H126  Wine and Viticulture II  3 credits
An in-depth coverage of the science and art of growing grapes, including all aspects of the physical vine life cycle and cultural considerations throughout human history. Other topics include biology, anatomy, climatic influences, and varietal and hybrid growing characteristics. Further instruction and practice in winemaking is offered. Per Connecticut State Law, persons under the age of 21 are not allowed to consume alcoholic beverages.

HSP*H135  Service Management  3 credits
An exploration of “front of the house” hospitality operations, including styles and standards of dining room, lounge, and concierge services as well as dining room organization, customer relations, merchandising and sales promotion. Special emphasis is placed on manager/supervisor functions such as training, motivation, cashing, revenue control and wine stewardship. Students will serve guests as the schedule dictates. Schedule adjustments may be requested to accommodate guest service.

HSP*H202  Catering and Event Management  3 credits
Prerequisites: HSP*H101, 102. A lecture/laboratory practicum emphasizing the management and planning of catering, banquet and conference service with in-depth discussion of the meetings market and technology. Advanced culinary preparations will be practiced, stressing group service.

HSP*H211  Food and Beverage Cost Control  3 credits
Prerequisites: CSC*H101 or CUA*H105, HSP*H100, HSP*H101, MAT*H095 or equivalent, or consent of Program Coordinator. An in-depth study of the control function of the hospitality manager and its various applications in the purchasing, receiving, storing, issuing, production and sale of food and beverage. Operational planning and analysis, labor and labor cost control, and cost/volume/profit relationships are explored. This course may result in nationally recognized certification upon successful performance on certification examination.

HSP*H215  Principles of Baking II  3 credits
This course expands on the basic techniques and principles of Baking I, though it is not a prerequisite. Students will learn the more advanced baking procedures and their applications through lecture, demonstrations, assignments, and hands-on execution of recipes. Participation and proper technique and method are emphasized. Kitchen math, particularly baker’s percentages, weights and measurements, quality control, and sanitation will be incorporated into each lesson. Baking as science will also be explored including the chemistry of the ingredients, techniques, and methods and their interactions. Students will learn to understand the structure of recipes. Recipes, will include classic and modern preparations of advanced pastries such as petit fours, choux paste, laminated doughs, and chocolate work. Sugar techniques will be included. Students will learn finishing and plating and dessert artistry.

HSP*H216  Artisan Bread  3 credits
This course will serve as an introduction to hand crafted bread, using ferment & fresh yeast methods, with emphasis on understanding the chemical reactions among ingredients. Creativity and presentation of finished product will be highlighted. Students will be taught through lecture, demonstrations, assignments and active participation. Kitchen math, weights and measurements will be discussed throughout the course.

HSP*H237  Hospitality Marketing  3 credits
Prerequisite: HSP*H100. An analysis of the services market with regard to hotel and restaurant marketing and methods of advertising, promotion, public relations, pricing, and discussion of strategic planning and positioning.

HSP*H241  Principles of Travel and Tourism  3 credits
A survey of today’s travel industry and its primary segments, including recreation and leisure systems, the transportation and accommodation industries, destination development and characteristics of the travel market. The role and function of the travel agency and career opportunities will be explored.

HSP*H242  Hotel Management  3 credits
A study of hotel and motel front office systems and procedures, including organization, business flow, reservations and rooming, guest accounting, and security. Management functions and operating statistics are discussed and practiced.

HUMAN SERVICES
Liberal Arts and Behavioral/Social Sciences Division

HSE*H101  Introduction to Human Services  3 credits
This course offers an introduction to the Human Services field, including the history of the various service professions, an overview of the primary populations that receive services, information about a variety of mental health and social service agencies, and a discussion of successful treatment methods. This is the foundation course of the three core program courses. (Fall/Spring)

HSE*H115  Child Advocacy in Human Services  3 credits
The course presents concepts, policies, and practice in the broad field of child and family services and advocacy. Among the topics to be examined are the needs of children and families, the major policies and programs of social services designed for children and families, and the policy issues that emerge for planning for children and families. The intent of the course is to provide the student with a substantive base of knowledge about policies and practice in family and child services. Students will be helped to develop an overall orien-
Family - as a unit of attention, as well as to the emerging professionals in the agencies in which the students are placed. This activity will have the opportunity to apply the values, concepts, and skills agency is a major component of this required course. The student coordinator or Division Leader.

Work experience in a human service

HSE*H171 Death and Dying
(3 credits)
An exploration of the stages of death and dying. Special emphasis will be placed on understanding grief and loss. The course will focus on the following: the dying person, sudden death and the effect on the family, cultural and economic issues, the broad moral aspects of death, and other related problems. (fall)

HSE*H202 Introduction to Counseling and Interviewing
(3 credits)
Prerequisite: HSE*H101 with a grade of “C” or better. This is a systematic study of the basic principles, methods, and current techniques employed in assessment, planning, interviewing, counseling, contracting, and interventions. The course develops student self-awareness of personal values and professional ethics. Students are expected to learn through theory, examination of their own values, and classroom application of interactional skills. (fall/spring)

HSE*H281 Human Services Field Work I
(3 credits)
Prerequisites: HSE*H101, HSE*H202, with a grade of “C” or better. Successful completion of 6 credit hours in Behavioral Sciences, ENG*H101, or permission of the Human Services Coordinator or Division Leader. Work experience in a human service agency is a major component of this required course. The student will have the opportunity to apply the values, concepts, and skills acquired in the introductory and other HS courses. This activity will be conducted under the supervision of the faculty coordinator and the professionals in the agencies in which the students are placed. (fall/spring) The course consists of 1,160-hour Field Work Experience 2. Weekly Field Work Seminar that links field practice to issues related to working within a wide variety of community agencies. (fall, spring)

HUMANITIES
Liberal Arts and Behavioral/Social Sciences Division

HUM*H130 Philosophy and Practices of Yoga
(3 credits)
This course investigates the philosophy of yoga, its origins, and its place in our contemporary lives. It teaches the different aspects of yoga and areas of study that encompass the foundational principles of the discipline. Students will learn the basic poses as well as meditation and breathing techniques.

INTERDISCIPLINARY STUDIES
Liberal Arts and Behavioral/Social Sciences Division

IDS H101 First Year Experience
1.5 credits
The First Year Experience introduces students to diverse academic content, emphasizing the acquisition of learning strategies in preparation for rigorous college study. The content is designed to help students make a smooth transition to college. This course focuses on developing creative and critical thinking skills, developing information literacy and technology skills, improving written and oral communication, setting personal and academic goals, developing structured and consistent study habits, practicing effective time management, and becoming contributing members of the NVCC community. In addition, students will develop a comprehensive academic and career development plan leading to graduation. The course is required of all matriculating first-time, fall-time students. There are no prerequisites.

ITALIAN
Liberal Arts and Behavioral/Social Sciences Division

Refer to Languages.

LANDSCAPING
Business Division

Refer to Horticulture.

LANGUAGES
Liberal Arts and Behavioral/Social Sciences Division

ITA*H101 Elementary Italian I
3 credits
This course focuses on the basic acquisition of the four skill areas (speaking, listening, reading, writing) for survival communication. There is constant exposure to the cultural diversity of the Italian world using audio and video tapes. Knowledge of the language and culture is further enhanced by the technological component which requires students to use the Internet for various class activities.

Note: ITA*H101 is not open to students who have successfully completed three years of Italian courses in high school or who are native speakers except by consent of the Associate Dean of LABSS.

ITA*H102 Elementary Italian II
3 credits
Prerequisite: ITA*H101 or permission of the Associate Dean of LABSS. ITA*H102 is a continuation of the skills taught in ITA*H101. Emphasis is placed on a more fluid style of communication at all skill levels.

ASL*H101 American Sign Language I
3 credits
This course is designed to provide an introduction to American Sign Language (ASL), the language used by the deaf community in the United States. ASL introduces students to the fundamental of ASL grammar, vocabulary, fingerspelling, numbers, and visual-gestural communication. The introduction of deaf culture is integrated into this beginning-level course.

ASL*H102 American Sign Language II
3 credits
Prerequisite: ASL*H101. This course is designed to continue to reinforce American Sign Language, the language used by the deaf community in the United States. This course continues with enabling the student in becoming more engaged with the use and content of ASL in the conversational setting. The continuation will provide the student with the skills necessary both receptively and expressively to appreciate and understand and utilize the language in its structure and format. Emphasis will be on vocabulary, ASL grammar, Deaf Culture and conversational skills.

SPA*H101 Elementary Spanish I
3 credits
This course focuses on the basic acquisition of the four skill areas (speaking, listening, reading, writing) for survival communication. There is constant exposure to the cultural diversity of the Hispanic world using audio and video tapes. Knowledge of the language and culture is further enhanced by the technological component which
requires students to use the Internet for various class activities. Note: SPA*H101 is not open to students who have successfully completed three years of Spanish courses in high school or who are native speakers except by consent of the Associate Dean of LABSS.

**SPA*H102 Elementary Spanish II** 3 credits
Prerequisite: SPA*H101 or permission of the Associate Dean of LABSS. SPA*H102 is a continuation of the skills taught in SPA*H101. Emphasis is placed on a more fluid style of communication at all skill levels.

**SPA*H201 Intermediate Spanish I** 3 credits
Prerequisite: SPA*H102 or permission of the Associate Dean of LABSS. This course is an intermediate Spanish course on the college level. Non-native and native speakers may enroll for credit in this course. The natural approach will be used in developing the four communication skills (listening, speaking, reading and writing). Students will study structure and grammar, read, converse, discuss and write in Spanish. A broad survey of Hispanic culture and custom will be presented.

**SPA*H202 Intermediate Spanish II** 3 credits
Prerequisite: SPA*H201. This course is a continuation of the skills taught in SPA*H201. The natural approach will be used. Grammar and structural studies will continue, but emphasis will be placed on reading, writing, speaking and listening with content based on civilization and cultural topics. Practice on oral tapes is required.

**LATINO AMERICAN STUDIES**
Liberal Arts and Behavioral/Social Sciences Division

**LAS*H201 Latino American Studies** 3 credits
Prerequisite: ENG*H101 with a grade of "C" or higher. This course provides an introduction to the history, literature, ethnicity, culture and socio-economies of Latinos in the United States.

**LEGAL ASSISTANT/PARALEGAL**
Business Division

**LGL*H101 Introduction to Paralegalism** 3 credits
This course is an introduction to various aspects of the law, including but not limited to torts, contracts, criminal law and procedure and constitutional law. The course also surveys the structure and procedure of a number of court systems in the United States, and includes discussions of some topics of concern to the paralegal, including legal ethics, the rights of the elderly, the poor, the young and other disadvantaged minorities.

**LGL*H102 Legal Research and Writing** 3 credits
Selected topics to develop skills in the use of legal encyclopedias, digests, reports, statutes, restatements, law reviews, and other research materials used by the legal profession are presented as an introduction to the uses of the law library. It is necessary that students do much of their legal research assignments in one of the many state or university law libraries located at various places throughout Connecticut. Students who are unable to devote several hours of research per week in one of the law libraries are advised not to enroll in LGL*H102.

**LGL*H104 Real Estate Practice** 3 credits
This course is an introduction to the law of real property, and includes the preparation and recording of deeds, easements, leases and other public documents, in addition to a large variety of other documents, forms and procedures that a paralegal will encounter in real estate practice.

**LGL*H204 Criminal Procedure** 3 credits
This course enables the student to utilize the classroom as a learning law laboratory since it will explore the Bill of Rights and the Fourteenth Amendment in detail as well as the entire United States Constitution. Constitutional law cases will be studied in the context of criminal procedure issues evolving from the precedents set by the United States Supreme Court.

**LGL*H206 Bankruptcy Law** 3 credits
This course will provide students with a thorough review of the United States Bankruptcy Code. The course is tailored to explore the general functions of the Bankruptcy Court. The applicable rules and proceedings for various types of bankruptcy cases will be thoroughly discussed.

**LGL*H208 Litigation** 3 credits
As an introduction to civil and criminal procedures, this course includes a survey of the functions of the federal and state court systems. The preparation of documents relative to the trial and appellate process is examined.

**LGL*H209 Probate Practice and Estate Administration** 3 credits
This course is an introduction to the law of wills, trusts and estates, and includes the law of intestate succession as well as a survey of the probate system. This course will help to prepare the paralegal to become familiar with the various forms and documents associated with probate and estate practice.

**LGL*H210 Family Law** 3 credits
This course will provide a strong background in the area of family law, with special emphasis on family law practice, including litigation. Other family law topics such as adoption, custody, community property, and child support are thoroughly investigated.

**LGL*H230 Advanced Legal Issues Seminar** 3 credits
This course will be taught as a seminar and through a series of lectures. A guest speaker is also likely to participate. The problem-solving method will be used to examine critical issues in the wake of current legal events and new trends in the law.

**MANAGEMENT**
Business Division

**MANUFACTURING**
Science, Technology, Engineering & Mathematics Division

**MFG*H104 Manufacturing Processes** 4 credits
Students study the theoretical concepts involved in the process of manufacturing parts as well as the development of the knowledge and skills required in the manufacturing process. Laboratory study emphasizes Milling, Drilling, Turning, Grinding & other manufacturing processes. Laboratories will involve setup and procedures for various manufacturing processes. Three class and two laboratory hours weekly. (fall/spring)

**MFG*H105 Manufacturing Math II** 3 credits
Prerequisites: Completion of Machine Technology Level I Certificate or with consent of instructor; MFG*H051: Manufacturing Math I (non-credit). Second course in manufacturing mathematics. A further study of arithmetic and trigonometric operations applied to manufacturing circumstances. The following geometric entities are studied in detail: the circle, regular and irregular polygons, the right triangle and oblique triangles. The application of angular arithmetic including the study of: angle decimal conversion, the Pythagorean theorem, Sin, Cos, and Tan functions, and the Law of Sines and Law of Cosines. Part of the Advanced Manufacturing Machine Technology cohort program.

**MFG*H106 Computer-Aided Manufacturing I** 3 credits
Prerequisite: MFG*H104. Basic CNC setup and operations with an introduction to automation programming, and tooling for CNC applications will be discussed. Basic functions using industry standard PLC controls will also be covered. Laboratory will include practice in setup and operation of CNC lathes and milling machines. Two class hours and two laboratory hours weekly. (fall)

**MFG*H124 Blueprint Reading I** 2 credits
First course in blueprint reading. The study of orthographic projection. Topics include lines and their uses, auxiliary views, sectional views, basic and special dimensioning, dimensioning practices for holes, chamfers, angle, tapers, keyways diameters and radii. Also, geometric tolerancing and dimensioning is covered. Part of the Advanced Manufacturing Machine Technology cohort program.

**MFG*H126 Drafting** 3 credits

An introduction to drafting as a technical language. Topics included are: use of the drafting instruments, geometric constructions, orthographic projection, pictorials, sectional views, and descriptive geometry as it relates to auxiliary views and developments. Emphasis will be placed on developing traditional board drafting techniques and geometric constructions. (offered periodically)

**MFG*H125 Blueprint Reading II** 3 credits

Prerequisite: Completion of Machine Technology Level I Certificate or with consent of instructor, MFG*H124: Blueprint Reading I. Second course in blueprint reading. A further study of simple and complex drawings for machining or assembly purposes. Topics include the application and meaning of geometric characteristics and controls, the metric system, weldment, forging and casting drawings and procedures, communication with freelance sketches, blueprint terms and abbreviations. Part of the Advanced Manufacturing Machine Technology cohort program.

**MFG*H151 Manufacturing Machining: Drill Press and Saw** 1 credit

Course on sawing and drilling machines. Topics covered include use of cutoff saws, use of drill presses, using the vertical band saw, drilling tools, countersinking, reaming and counter boring. Part of the Advanced Manufacturing Machine Technology cohort program.

**MFG*H152 Manufacturing Machining: Grinding** 2 credits

Course on the use of various grinding machines. Topics covered include selection and identification of grinding wheels, truing, dressing and balancing wheels, grinding fluids, using the horizontal spindle reciprocating table surface grinder, using the cylindrical grinder, and using the tool and cutter grinder. Part of the Advanced Manufacturing Machine Technology cohort program.

**MFG*H153 Manufacturing Machining: Bench Work** 2 credits

A basic course in the fundamentals, principles, practices and tools used in semi-precision and precision layout and in the various methods, and procedures for common machine shop bench work. Topics include measurement systems, layout principles, hand tools, and power tools. Part of the Advanced Manufacturing Machine Technology cohort program.

**MFG*H154 Manufacturing Machining: Lathe I** 2 credits

First course in the use of the lathe. Topics include identification of major components of the lathe, tool holders and tool holding, cutting tools, operating the controls, facing and center drilling. Part of the Advanced Manufacturing Machine Technology cohort program.

**MFG*H155 Manufacturing Machining - Milling I** 2 credits

First course on the vertical and horizontal milling machines. Topics to include cutting tools and holders, setups, spindles and arbors, work holding methods. Part of the Advanced Manufacturing Machine Technology cohort program.

**MFG*H156 Manufacturing Machinery - CNC I** 2 credits

First course in CNC machinery and programming. Topics include Cartesian coordinates, safe use of CNC equipment, setup and operate a two axis CNC lathe and a three axis CNC machining center, programming and runoff of parts. Part of the Advanced Manufacturing Machine Technology cohort program.

**MFG*H171 Introduction to Lean Manufacturing** 3 credits

The purpose of this course is to provide the student with the fundamental knowledge of current continuous process improvement methodologies in use today within competitive manufacturing environments. This introductory course will expose the student to the basic concepts of Lean Manufacturing theory and the various tools and techniques involved with a lean implementation. This course will be presented following the lean-six sigma process methodology of DMAIC (Define, Measure, Analyze, Improve, and Control) to ensure that at the completion of the course, the student will be competent to participate effectively as a team member in lean implementation projects. (offered in fall in odd-numbered years)

**MFG*H172 Introduction to Lean Supply Chain Management** 3 credits

This course is an introduction to the basic principles and methodologies of Supply Chain Management. The course reviews the lean principles needed to understand and maintain the supply chain. Key concepts are covered such as Value Stream Mapping, customer/supplier roles, supplier types, metrics, quality systems, quality audits, communication, and information flow. Class activities, group assignments, and case studies are emphasized for real-world learning experiences. (offered in fall in even-numbered years)

**MFG*H200 Manufacturing Management** 3 credits

This course introduces the student to the structure and organization of manufacturing management in an industrial society. The role of various management functions including strategic planning, industrial cost accounting, inventory management, and quality control will be studied. Three class hours weekly. (offered periodically)

**MFG*H201 Computer-Aided Manufacturing II** 3 credits

Prerequisite: MFG*H106. This course discusses CNC programming, analog programmable logic control programming, and interfacing controllers, and machine tools. Laboratory practice in writing CNC programs, robotics programming and interfacing, and analog programmable logic controller programming will be studied. Two class and two laboratory hours weekly. (spring)

**MFG*H210 Materials of Engineering** 4 credits

Prerequisites: MFG*H140, CHE*H111. Study of the structure and properties of engineering materials. Materials selection, processing and heat treatment are studied. The changes in structure and properties during forming, machining, and heat treating operations are discussed. Selected experiments to demonstrate the effects of processing, including heat treatment on the properties of engineering materials. Standard materials tests are also performed. Three class and two laboratory hours weekly. (offered periodically)

**MFG*H217 Tool Design** 5 credits

Prerequisites: CAD*H150, MFG*H104, MFG*H210, MAT*H185. The course is designed to teach the theoretical principles, commercial standards and techniques for the design of metal cutting tools, jigs, fixtures, gages and dies. Application of the theory and principles learned in the classroom to design problems. The design problems will include metal cutting tools, jigs, fixtures, gages and dies. Three class and four laboratory hours weekly. (offered periodically)

**MFG*H230 Statistical Process Control** 3 credits

Prerequisite: MAT*H172. Presents a modern approach to quality adapted from the science of statistics. The scope of study ranges from basic statistical concepts, through the history of statistical quality control and the contributions of pioneers like Deming, Juran and Taguchi. Traditional methods of control charts for both variables and attributes and acceptance sampling are presented, as well as the more modern methods. Simple, effective graphical problem-solving tools, histograms, run charts, stem and leaf displays, Pareto charts, cause and effect diagrams and capability ratios (CP & CPK) are covered. The computer is utilized as an aid in calculation and control chart preparation. Two class and two laboratory hours weekly. (offered periodically)

**MFG*H239 Geometric Dimensioning and Tolerancing** 3 credits

A study of the industrial accepted ANSI Specification Y14.5-1973 and ANSI Y14.5M-1982. The ANSI Y14.5 specification creates a unified language through which engineering requirements are specified with respect to actual function and relationship of parts features. Subject matter includes the application of form, profile, orientation, runout, and location types of geometric characteristics, including the application of the feature control frame and tolerance and datum modifiers. Three class hours weekly. (offered periodically)
MFG*H248 Computer-Integrated Manufacturing (CIM) 3 credits
Prerequisite: MFG*H201. This course discusses computer generated CNC programming and computer based additive manufacturing techniques. In addition students will gain an understanding of how to use Mastercam to generate programs for both milling and turning applications. Laboratory includes hands on application of course theory. Two class and two laboratory hours weekly. (offered periodically)

MFG*H254 Manufacturing Machinery - Lathe II 3 credits
Prerequisites: Completion of Machine Technology Level I Certificate or with consent of instructor. MFG*H154: Manufacturing Machinery - Lathe I. Second course on lathe setup, operation, and practices. Topics covered include alignment, turning between centers, and other operations. The student will cut 60 degree external threads, internal threads, tapers, and other thread forms. Use of steady rests and follower rests. Part of the Advanced Manufacturing Machine Technology cohort program.

MFG*H255: Manufacturing Machinery - Milling II 3 credits
Prerequisites: Completion of Machine Technology Level I Certificate or with consent of instructor. MFG*H155: Manufacturing Machinery - Milling I. Second course on milling setup, operation, and practices. Topics covered include use of Offset Boring Heads, side milling cutters, face milling cutters on the horizontal mill, setup and operation of index heads, simple and direct angular indexing, and inspection of gears. Part of the Advanced Manufacturing Machine Technology cohort program.

MFG* H271 Advanced Lean Manufacturing 3 credits
Prerequisite: MFG*H171. The purpose of this course is to provide the student with the knowledge to implement lean improvements within the production environment using a systematic approach. This course will follow an improvement project (from the student's current employer or case study) through the five stages of the DMAIC problem solving methodology. At the completion of the course, the student will be competent to effectively lead a lean implementation project within a company. (offered in spring during even-numbered years)

MFG* H272 Implementing Lean Supply Chain Management 3 credits
Prerequisite: MFG*H172. The course covers the benefits and elements needed for implementing supply chain management. Team building and communication skills are shown as crucial factors in supply chain management. Topics emphasized in the course are measuring the velocity of the supply chain, developing partnerships, logistics, software tools, hardware, and continuous improvement. Class activities, group assignments and case studies are emphasized for real-world learning experiences. (offered in spring during odd-numbered years)

MFG*H275 Mechanics of Materials 3 credits
Prerequisites: MEC*H114, MAT*H185. The study and explanation of the relationships existing between externally applied forces in resisting stresses in deformations. From our study of mechanics of material, we will be able to determine if a body is capable of fulfilling its intended purpose. Limited computer applications of beam theory and a computer demonstration of FEA. Three (3) class hours weekly. (offered periodically)

MAT*H075 Pre-Algebra – Number Sense, Geometry 3 credits
Material is chosen to provide the student with current mathematical concepts and topics needed to continue work in algebra, the mathematics of business, science and basic technology. Topics covered include computation with whole numbers, fractions, decimals, ratios, proportions, percents, and measures. Geometry topics are integrated throughout. Signed number computation, algebraic expression, and equation solving appear regularly, thus familiarizing the students with algebraic concepts. Emphasis is on understanding of mathematical concepts and problem solving techniques. Instruction in calculator use is emphasized along with related applications. This course is only offered as a co-requisite course with MAT*H095 Introductory Algebra. (fall/spring/summer)

MAT*H092 Statway 1 4 credits
(Developmental – no credit toward degree or transfer)
Prerequisite: Successful completion of EDUC 5016 (Transitional PreAlgebra) or an appropriate score on a college placement exam. Corequisite of ENG*H063 or qualifying score on placement exam, or permission of Chair of Mathematics Department. Statway 1 is the first of two courses offering an alternative pathway for students in non-STEM (Science, Technology, Engineering, Mathematics) majors. These courses will combine elements of algebra and statistics into one curriculum. Students will take these courses instead of MAT*H095 (Elementary Algebra), MAT*H137 (Intermediate Algebra), and MAT*H167 (Principles of Statistics). The goal is to significantly improve the retention rate in developmental mathematics. (offered periodically)

MAT*H094 Introductory Algebra 3-4 credits
Prerequisite: Successful completion of EDUC 5016 (Transitional PreAlgebra) or an appropriate score on a college placement exam. The course begins with a brief review of basic computational skills and operations with signed numbers. Algebraic order of operations and evaluation and simplification of algebraic expressions are followed by techniques for solving first degree equations and inequalities in one unknown. Also included in this course are algebraic methods for solving applications involving one and two unknowns. Basic rules of exponents are presented and scientific notation is discussed. This is followed by the basic polynomial operations and graphing linear equations in two unknowns, finding slopes of lines, x- and y-intercepts, and writing the equations of lines. This will not fulfill a mathematics requirement in any degree program. (offered periodically)

MAT*H095 Elementary Algebra Foundations 3 credits
Prerequisite: Successful completion of EDUC 5016 (Transitional PreAlgebra) or a "C-" in MAT*H075 or an appropriate score on a college placement exam. The course begins with a brief review of basic computational skills and operations with signed numbers. Algebraic order of operations and evaluation and simplification of algebraic expressions are followed by techniques for solving first degree equations and inequalities in one unknown. Also included in this course are algebraic methods for solving applications involving one and two unknowns. Basic rules of exponents are presented and scientific notation is discussed. This is followed by the basic polynomial operations and graphing linear equations in two unknowns, finding slopes of lines, x- and y-intercepts, and writing the equations of lines. This will not fulfill a mathematics requirement in any degree program. (fall/winter/spring/summer)
MAT*H121 Applications for Business and Other Careers 3 credits
Prerequisite: Grade of “C” or better in MAT*H094 (Introductory Algebra) or MAT*H095 (Elementary Algebra) or an appropriate score on a college placement exam. Enrollment in MAT*H121 is restricted to specific programs. Topics covered include arithmetic and algebraic operations, statistics, graphs, and tables. This course emphasizes specific mathematical applications for each discipline. (offered periodically)

MAT*H122 Statway II 4 credits
Prerequisite: C or better in MAT*H092 (Statway I). Statway II is the second course in the two semester Statway course sequence. The Statway course sequence is recommended for students enrolled in degree programs that require no mathematics beyond freshman-level statistics. Both courses in the course sequence (Statway I and Statway II) may be used to receive credit for college level statistics with Division Leader approval. Students will use mathematical and statistical tools to explore real life data in a participatory learning environment. Statway II topics include modeling data with functions, quadratic functions, discrete and continuous probability distributions, Central Limit Theorem, sampling distributions, confidence intervals, one-sample and two-sample hypothesis tests, Chi-Square Tests, and ANOVA. This course requires the use of statistical technology. (offered periodically)

MAT*H135 Topics in Contemporary Mathematics 3 credits
Prerequisite: Grade of “C” or better in MAT*H094 (Introductory Algebra) or MAT*H095 (Elementary Algebra) or an appropriate score on a college placement exam. A practical course offering an exposure to a wide range of topics with an emphasis on critical thinking, problem solving and the real number system. Topics include number theory, financial management, set theory, metric system and statistics. This course will not satisfy the General Education mathematics requirement at C1 State Universities. (fall/spring/summer)

MAT*H136 Intermediate Algebra with Lab 4 credits
Prerequisite: Grade of “C” or better in MAT*H094 (Introductory Algebra) or MAT*H095 (Elementary Algebra) or an appropriate score on a college placement exam. This course initiates with the concepts of beginning algebra such as solving first degree equations and inequalities, applications and graphing of linear equations, and simplifying exponential expressions. The course also includes concepts of intermediate algebra such as factoring techniques. The study of polynomial functions is extended via applications involving linear functions, linear systems, and quadratic functions. Students also study exponential functions, rational functions, radical functions, and absolute value functions. This may be used as a general elective; this will not fulfill a mathematics requirement in any degree program. (fall/spring/summer)

MAT*H137 Intermediate Algebra 3 credits
Prerequisite: Grade of “C” or better in MAT*H094 (Introductory Algebra) or “C” or better in MAT*H095 (Elementary Algebra) or an appropriate score on a college placement exam. The main themes of Intermediate Algebra are functions, represented by tables, graphs, and rules, and problem solving. The study of polynomial functions is extended via applications involving linear functions, linear systems, and quadratic functions. Students also study exponential functions, rational functions, radical functions, and absolute value functions. This may be used as a general elective; this will not fulfill a mathematics requirement in any degree program. (fall/winter/spring/summer)

MAT*H143 Math for Elementary Ed: Algebra, Number Systems 3 credits
Prerequisite: Grade of “C” or better in MAT*H136 (Intermediate Algebra with lab) or MAT*H137 (Intermediate Algebra) or an appropriate score on a college placement exam. This course is designed for students planning to become certified in early childhood, elementary or middle school level education. Problem solving strategies will be developed and integrated throughout, in accordance with the NCTM Principles and Standards for School Mathematics. Topics include conceptual and relational understanding of the real numbers, including the subsets of whole numbers, integers, rational and irrational numbers, with an emphasis on place value and the associated operations. Topics from numeration systems, number theory, and set theory will be developed as needed, with regular use of manipulatives and technology. (fall)

MAT*H144 Math for Elementary Ed: Geometry, Data 3 credits
Prerequisite: Grade of “C” or better in MAT*H136 (Intermediate Algebra with lab) or MAT*H137 (Intermediate Algebra) or an appropriate score on a college placement exam. This course is designed for students planning to become certified in early childhood, elementary or middle school level education. Problem solving strategies will be developed and integrated throughout, in accordance with the NCTM Principles and Standards for School Mathematics. Topics include probability, statistics, and geometry concepts presented through a problem-solving approach, and incorporating an extensive use of manipulatives and geometric software. Mathematical discourse is encouraged through cooperative learning and written communication. (spring)

MAT*H146 Math for the Liberal Arts 3 credits
Prerequisite: Grade of “C” or better in MAT*H136 (Intermediate Algebra with lab) or MAT*H137 (Intermediate Algebra) or an appropriate score on a college placement exam. This is a survey course designed to acquaint the liberal arts student with a broad spectrum of mathematical ideas not emphasized in traditional algebra courses. As a terminal mathematics course, it conveys the nature and diversity of mathematics, its methods, applications, and roles in society. Topics are selected from problem solving and critical thinking skills, graph theory, voting and apportionment, introduction to probability, linear programming, patterns and symmetry, linear and exponential applications; others may include fractal geometry, financial management, fair division schemes, game theory, or codes. (fall/spring/summer)

MAT*H167 Principles of Statistics 3 credits
Prerequisite: Grade of “C” or better in MAT*H136 (Intermediate Algebra with lab) or MAT*H137 (Intermediate Algebra) or an appropriate score on a college placement exam. This technology-based course begins with an introduction to data analysis including techniques in the presentation of data and in the determination of statistical measures for central tendency and variation. The topics of linear correlation and regression are explored in the analysis of bivariate data. The basics of probability are presented prior to a thorough examination of discrete and continuous probability distributions. Emphasis is placed on the binomial and normal distributions. Estimation and hypothesis testing for population means are introduced. As time permits, statistical inference techniques for proportion, variance and the difference of means will be presented. (fall/winter/spring/summer)

MAT*H170 Math Education in Practice 1 credit
Prerequisites: Grade of “B” or better in MAT*H172 with two letters of recommendation from instructors at NVCC and permission of the Division Leader or Math Department Chair. This course provides students the opportunity to develop their communication skills in mathematics. Students will assist and tutor peers in mathematics using appropriate technology for a minimum of three hours per week for 14 weeks in the Academic Center for Excellence at Naugatuck Valley Community College under the supervision of a math instructor. The course may be taken up to three times for a maximum of 3 credit hours. (fall/spring)

MAT*H172 College Algebra 3 credits
Prerequisite: Grade of “C” or better in MAT*H136 (Intermediate Algebra with lab) or MAT*H137 (Intermediate Algebra) or an appropriate score on a college placement exam. This course offers the student the development of numeric, algebraic, and graphic problem solving techniques beyond the intermediate level. Techniques are developed to solve equations and inequalities involving polynomials, radicals and rational expressions. Polynomial, inverse, rational, exponential, and logarithmic functions are studied and their applications are explored both algebraically and graphically. (fall/spring/summer)
MAT*H185 Trigonometric Functions 3 credits
Prerequisite: Grade of “C” or better in MAT*H172 (College Algebra) or an appropriate score on a college placement exam.
This course offers the student a development of trigonometry through a functional approach. The trigonometric functions are considered as circular functions with applications of these to the solution of triangulation problems. Topics include trigonometric identities, inverse trigonometric functions, oblique triangle trigonometry and the graphs of the trigonometric functions. Vectors will be introduced and the polar coordinate system will also be considered. (fall/spring/summer)

MAT*H186 Precalculus 4 credits
Prerequisite: Grade of “B+” or better in MAT*H137, or a “C” or better in MAT*H172, or an appropriate score on college placement exam. This course offers students the development of numeric, algebraic, and graphic problem solving techniques beyond the intermediate level. Techniques are developed to solve equations and inequalities involving polynomials, radicals, rational expressions. Polynomial, inverse, rational, exponential, logarithmic, and trigonometric functions are studied and their applications are explored both algebraically and graphically. The trigonometric functions are considered as circular functions with applications of these to the solution of triangulation problems. Topics include trigonometric identities, inverse trigonometric functions, oblique triangle trigonometry, and vectors will be introduced. (fall/spring)

MAT*H210 Discrete Math 3 credits
Prerequisite: Grade of “C” or better in MAT*H186 or MAT*H185.
This course is designed to introduce math and computer science majors to mathematical logic and methods of proof through their applications to set theory, combinatorics, and number theory.

MAT*H221 Intermediate Applied Statistics 4 credits
Prerequisite: Grade of “C” or better in MAT*H167 or MAT*H172 or higher. In-depth study of statistics, probability, estimation, hypothesis testing for single and difference of means and proportions, simple linear and multiple regression, and Chi-Square tests of independence. (offered periodically)

MAT*H232 Applied Calculus 3 credits
Prerequisite: Grade of “C” or better in MAT*H172 (College Algebra) or an appropriate score on a college placement exam.
The purpose of this course is to acquaint students not majoring in mathematics or science with a body of mathematical knowledge that may well demand investigation in view of their various academic goals. Topics covered include function theory, inequalities, tangent problems, continuity, limits, derivatives, and integrals. (offered periodically)

MAT*H254 Calculus I 4 credits
Prerequisite: Grade of “C” or better in MAT*H185 (Trigonometric Functions) or MAT*H186 (Precalculus) or an appropriate score on a college placement exam. A four semester hour course intended to prepare students for advanced mathematics. The course begins with a review of precalculus. New topics include limits, continuity, the derivative, differentiation rules, geometric and physical applications of the derivative, the definite integral and its geometric meaning, antiderivatives and the indefinite integral, and basic integration rules. (fall/spring/summer)

MAT*H256 Calculus II 4 credits
Prerequisite: Grade of “C” or better in MAT*H254 (Calculus I)
A second course in calculus for mathematics or science majors. Topics include applications of the definite integral to areas and volumes, various techniques of integration, improper integrals, plane curves, parametric equations, polar coordinates, and infinite series. (fall, spring, summer)

MAT*H268 Calculus III: Multivariable 4 credits
Prerequisite: Grade of “C” or better in MAT*H256 (Calculus II).
A course in multivariable calculus for mathematics or science majors. Topics include conic sections, vectors and solid analytic geometry, vector-valued functions, functions of several variables, partial differentiation, and multiple integration. (fall only)

MAT*H285 Differential Equations 3 credits
Prerequisite: Grade of “C” or better in MAT*H256 (Calculus II)
Study of ordinary differential equations. Equations studied include the following: first-order linear, separable equations; exact equations; homogeneous linear equations of first or higher order with constant coefficients; auxiliary equations with complex roots; and non-homogeneous equations. Solutions of initial value problems with associated applications are studied. Techniques used include linear differential operators, the method of undetermined coefficients, variation of parameters, and Laplace transforms. (spring only)

MECHANICAL ENGINEERING TECHNOLOGY Science, Technology, Engineering & Mathematics Division

MEC*H114 Statics 3 credits
Prerequisites: TCM*H101, MAT*H186 and PHY*H121. Analysis of the forces which act upon particles and rigid bodies at rest. Balances of forces and moments on an object provide the basis for equilibrium calculations involving points, rigid bodies, trusses, frames and machines with a variety of supports, including frictional. The concepts of centroids, center of gravity and moment of inertia are also introduced. Three class hours weekly. (fall)

MEC*H238 Dynamics 4 credits
Prerequisites: MEC*H114, MEC*H254. This course covers the fundamental techniques used for analyzing the motion of particles and rigid bodies and the forces which cause that motion. Translation and rotation as fundamental components of rectilinear, curvilinear and constrained plane motion are explained. Relative and absolute velocities and accelerations are treated with both graphical and computational techniques. Laboratory practice is used to verify and reinforce the theoretical concepts. Three class and two laboratory hours weekly. (spring)

MEC*H240 Fundamentals of Heat and Thermodynamics 4 credits
Prerequisite: CHE*H121 or permission of instructor. This course covers the fundamental concepts of heat transfer and thermodynamics. Major topics in heat transfer include conduction, convection and radiation and their application to heat exchangers. Major topics in thermodynamics include the First and Second Laws of Thermodynamics and their application in vapor-power and refrigeration cycles. Laboratory experiments will supplement the theoretical class work. Three class and two laboratory hours weekly. (offered in fall during even-numbered years)

MEC*H251 Materials Strength 4 credits
Prerequisite: MEC*H114. Covers the principles involved in the analysis of stresses which occur within machine and structural elements subjected to various types of loads. Analysis of these stresses are made as applied to thin-walled cylinders and spheres, beams, columns, couplings and shafts. Laboratory experiments supplement and reinforce theoretical class work. Three class and two laboratory hours weekly. (offered in fall during odd-numbered years)

MEC*H271 Fluid Mechanics 4 credits
Corequisite: MEC*H114. An introductory survey of the principles and methods involved in the analysis of fluid systems. Included are common fluid properties, hydrostatics, the kinematics of fluid flow and energy relationships. Laminar and turbulent flow in piping systems are analyzed. Laboratory experiments supplement and reinforce theoretical class work. Three class and two laboratory hours weekly. (offered in fall during odd-numbered years)

MEC*H284 Machine Design 4 credits
Prerequisites: CAD*H150 and MEC*H251, or permission of instructor. Deals with the concept of mechanical design from concept to specifications. Covers the procedures, data, and techniques necessary to design/select mechanical components such as gears, springs, bearings, belt and chain drives, clutches, brakes, fasteners, shafts and screws. A design project is also included. Three class and two laboratory hours weekly. (offered periodically)
MEDICAL ASSISTING  
Science, Technology, Engineering & Mathematics Division

MET*H125 Medical Terminology 3 credits  
Prerequisites: None. This course introduces students to the vocabulary of medicine. Terminology describing the anatomy and physiology of the systems of the human body will be covered, with attention given to the meaning and use of roots, prefixes, and suffixes. Also included are medical terms corresponding to diagnosis and description of human disease. Proper use of medical terms, including definition, spelling and pronunciation are stressed.

METEOROLOGY  
Science, Technology, Engineering & Mathematics Division

MET*H101 Meteorology 3 credits  
An introductory course on weather and climate. Through lecture, internet access and other media, this course will cover atmospheric motion, severe weather, global and local climate, and forecasting. (offered periodically)

MULTIMEDIA TECHNOLOGY  
Liberal Arts and Behavioral/Social Sciences Division

MULTIMEDIA TECHNOLOGY courses are listed under Digital Arts Technology section.

MUSIC  
Liberal Arts and Behavioral/Social Sciences Division

MUS*H101 Music History & Appreciation I 3 credits  
The course surveys historically significant music from the medieval period to the 20th century, emphasizing stylistic characteristics found in great music, art, and architecture.

MUS*H103 American Music 3 credits  
This course surveys the history of American music from colonial times to the present day. Emphasis is placed on the ways in which the forms, genres, and styles of American popular and concert music engage with significant moments and trends in American social and cultural history.

MUS*H104 World Music 3 credits  
In World Music students study a variety of ethnic music from around the world. While the primary focus will be limited to certain selected regions and traditions, the overall scope will be broad in that these regions represent many different countries. Because students will be studying music within the context of the societies that create it, the approach to the course material is interdisciplinary, incorporating aspects of the arts, humanities, and social sciences.

MUS*H111 Fundamentals of Music I 3 credits  
This course begins the study of notation and forms that musicians use to arrange, compose and perform music. Topics include musical instruments, clefs, key signatures, time signatures, scales, musical styles and forms.

MUS*H115 Music Theory I 3 credits  
Music Theory I is a study of melodic writing leading to four-part diatonic harmony and should be taken concurrently with Ear Training I. Topics include four-part writing, non-chord tones, cadences, and seventh chords. Music analysis, reading, and aural skills are reinforced together with the Theoretical material presented.

MUS*H116 Music Theory II 3 credits  
Prerequisite: Grade of “C” or better in MUS*H115 or permission of instructor. This is a continuation of MUS*H115 with a study of secondary functions, modulation, form and counterpoint and should be taken concurrently with Ear Training II. Music analysis, reading, and aural skills are developed together with the theoretical material presented.

MUS*H153 Class Instruction – Beginning Piano I 1 credit  
This course offers an introduction to the basics of piano playing. Beginning students will learn basic music notation and work to develop piano technique and artistry. Intermediate students will continue work on technique and artistry and will be assigned other activities based on their entering level of piano skills.

MUS*H156 Guitar Ensemble 2 credits  
This is an opportunity for guitarists and bassists to experience reading and improvising in the context of a section, rather than the traditional rock or jazz band format. The goal is to raise sight reading levels while learning the art of ensemble playing. Special attention is paid to dynamics, phrasing, intonation, ensemble playing, and general musicianship. This course may be repeated for credit.

MUS*H158 Chamber Music / Jazz Ensemble I 2 credits  
Students and community members will perform jazz and contemporary charts from the Big Band Era to Fusion Rock in a small instrumental group. Featured instruments include percussion, bass, keyboard, guitar, saxophone, trumpet, and trombone. The course is open to all students with the consent of the instructor.

MUS*H161 Chorale I 2 credits  
Performance of choral repertoire from all stylistic periods is studied. Performances occur at the College and in the community. The course is open to all students as well as members of the community, with the consent of the instructor and may be repeated for credit.

MUS*H162 Chorale II 2 credits  
Prerequisite: Successful completion of MUS*H161 or permission of instructor. This course is devoted to more advanced study and performance of choral repertoire from all stylistic periods, and is meant to be taken after successful completion of Chorale I (MUS*H161). Performances occur primarily at the College and in the community. The repertoire represents the work of both serious classical composers as well as contemporary popular composers. The course is open to all students with the consent of the instructor and may be repeated for credit.

MUS*H163 Ear Training I 1 credit  
The goal of Ear Training I is to acquire the skills necessary to make intelligent and competent musicians. This course will focus on three major areas; sight singing, rhythmic reading, and dictation. This course is considered to be an aural lab component of Theory I and should be taken concurrently. It is an important course for those wishing to improve their pitch accuracy for the Chorus audition or Voice Lessons.

MUS*H164 Ear Training II 1 credit  
Prerequisite: MUS*H163 or permission of instructor. The goal of Ear Training II is to continue the work done in Ear Training I providing students with advanced training in pitch and rhythm, perception and sight reading. It is considered to be an aural lab component of Theory II and should be taken concurrently. It is an important course for those wishing to improve their pitch accuracy for Chorus or Voice lessons.

MUS*H173 Class Voice 1 credit  
Principles of voice placement and development, breathing, diction and production are practiced. Solo and duet repertoire are explored. This is designed as a beginner class for students with little or no experience. The course may be repeated for credit.

MUS*H183 Applied Private Music Lessons I 1 credit  
Weekly private instruction in student's instrument/voice. Students will study performance techniques, advanced skills, and build repertoire. Students must complete twelve one-hour lessons. An end-of-term jury performance may be required at the discretion of the instructor.
MUS*H218 Applied Private Music Lessons II  2 credits
Weekly private instruction in student's instrument/voice. Students will study performance techniques, advanced skills, and build repertoire. Students must complete twelve one-hour lessons. An end-of-term jury performance may be required at the discretion of the instructor.

MUS*H213 Music Theory III  3 credits
Prerequisite: MUS*H116 with a grade of "C" or better, or permission of instructor. Music Theory III provides training and supervised practice of analyzing, performing, and composing music. Music Theory III is a continuation of Music Theory II and should be taken concurrently with Ear Training III. Secondary chords, altered 6th chords, chromatic harmony, and modulation are mastered. Songwriting is pursued as a means of understanding harmonic rhythm, progressions, accompaniment patterns, and small form structure. Keyboard proficiency is included.

MUS*H214 Music Theory IV  3 credits
Prerequisite: MUS*H213 with a grade of "C" or better, or permission of instructor. Music Theory IV provides training and supervised practice of analyzing, performing, and composing music. Music Theory IV is a continuation of Music Theory III and should be taken concurrently with Ear Training IV. Enharmonic modulation is introduced along with extended and chromatic harmony. Larger formal patterns are discussed (sonata form, rondo, and variation). 20th-century harmony is introduced, including non-functional harmony, dodecaphony, and set theory. Keyboard proficiency is included.

MUS*H218 Electronic Music Composition/Audio Technology I  3 credits
(also listed as DAT*H218)
Prerequisites: CS*H103 and permission of instructor. This course is an introduction to the art and techniques of electronic music and audio production. The history, elements, and tools of electronic music and audio will be defined and explored. Topics will include: acoustics theory, analog and digital audio principles, recording engineering techniques, sound sampling, electronic synthesis, MIDI, and audio for multimedia and the World Wide Web.

MUS*H254 Concert Band  2 credits
This is a modern, symphonic concert band featuring woodwind, brass, and percussion instruments. The band performs for college functions (such as commencement) and for the benefit of the college. The band may perform at other off-campus venues and for non-campus organizations. The instructor selects repertoire each semester based on the available instruments and skill level of players, as well as picking repertoire suitable for college activities. The repertoire represents the work of both serious "classical" composers as well as contemporary popular composers. The course is open to all students with the consent of the instructor and may be repeated for credit.

MUS*H263 Ear Training III  1 credit
Prerequisite: MUS*H164 with a grade of "C" or better, or permission of instructor. Ear Training III provides classroom training and supervised practice of connecting musical sounds to musical notation and harmonic systems. Ear Training III is a continuation of Ear Training II and should be taken concurrently with Music Theory III. Intervals, scales, and chords in all inversions are sung and identified. Melodies for singing and dictation gradually incorporate chromatic alterations and modulation. Keyboard harmony is reinforced.

MUS*H264 Ear Training IV  1 credit
Prerequisite: MUS*H263 with a grade of "C" or better, or permission of instructor. Ear Training IV provides classroom training and supervised practice of connecting musical sounds to musical notation and harmonic systems. Ear Training IV is a continuation of Ear Training III and should be taken concurrently with Music Theory IV. Sight singing, melodic dictation, keyboard harmony, and harmonic dictation incorporating chromaticism (secondary functions, mode mixture, N6, and augmented sixth chords), modulation to both closely and distantly related keys, and advanced rhythmic practices (syncopation, shifting meters, and hemiola).

MUS*H274 Conductor's Lab Ensemble  2 credits
Prerequisite: MUS*H115 Music Theory I or permission of the instructor. The course must be taken concurrently with MUS*H183 or MUS*H184 Applied Music—Conducting. Learners are members of the College Choir. In addition to singing their particular voice part they also act as assistant conductors and are listed as such in concert programs. During the course of the semester assistant conductors utilize the baton and rehearsal techniques taught in the tutorials with the full choral group, either in the setting of a small group, voice section, or the entire chorus.

NURSING Allied Health/Nursing/Physical Education Division

NUR*H101 Introduction To Nursing Practice  8 credits
Prerequisite: Admission to the College and the Nursing Program. The student will focus on concepts basic to nursing practice. Emphasis is placed on application of the nursing process, communication skills, and supervised practice procedure acquisition. Clinical and laboratory experiences offer opportunities to integrate theoretical principles and demonstrate caring and competence in beginning professional role development.

NUR*H102 Family Health Nursing  8 credits
Prerequisites: NUR*H101, PSY*H111, BIO*H235. Corequisite: NUR*H103. The student will focus on issues affecting the family, including childbearing, childrearing, geriatric care and intermediate health care needs of limited duration. The medical-surgical health problems include care for the client in the peri-operative period and the client experiencing orthopedic and simple genitourinary conditions. The course addresses several psychiatric disorders: anxiety and cognitive disorders, common child and adolescent psychiatric disorders. The student will have clinical rotations that provide experience caring for the childbearing family as well as caring for medical-surgical clients across the lifespan.

NUR*H103 Pharmacology for Families Across the Lifespan  1 credit
Prerequisite: NUR*H101. Corequisite: NUR*H102. The student will focus on the safe use, pharmacological principles, indications and nursing implications related to drug therapy when caring for individuals and families. Emphasis will be on medications used with perinatal, neonatal, pediatric, geriatric and peri-operative clients. The course will stress the general characteristics of selected medications and will include indications, pharmacokinetics, side effects, adverse effects, contraindications, administration, nursing implications across the lifespan, client education and relationship to prior learning.

NUR*H120 Nursing in Health Care I  9 credits
Prerequisites: BIO*211, BIO*212, ENG*101. Corequisites: BIO*235, PSY*111. This course provides an introduction to the art and science of nursing using concepts of nursing practice. Concepts related to the Nursing Profession, Health and Illness, Healthcare Systems and Patient Attributes are introduced and integrated throughout the course. Learning experiences in this course assist the student to integrate knowledge from pre-and co-requisite courses into the provision of patient-centered care using the nursing process. Students apply learning related to pathophysiology, pharmacology, medical, and alternative therapies in classroom, laboratory and clinical settings throughout the course. Active learning strategies are employed in this course to introduce and develop critical thinking skills and self-directed lifelong learning.

NUR*H125 Nursing in Health & Illness II  8 credits
Prerequisites: NUR*120, BIO*235, PSY*111. Corequisites: PSY*201, SOC*101. This course builds upon concepts of nursing practice introduced in Nursing in Health & Illness I. Students apply learning related to pathophysiology, pharmacology, medical, and alternative therapies in classroom, laboratory and clinical settings throughout the course. The course integrates a holistic, family-centered approach to the interdisciplinary care of patients, families and groups across the lifespan. Emphasis is placed upon organizational skills of the nurse as a member of the inter-professional healthcare team. Learning experiences provide the student an opportunity to demonstrate critical thinking skills as course concepts are applied in the implementation of safe, patient-centered care in a variety of settings using the nursing process. Active learning strategies are employed to promote the continued development of critical thinking and self-directed lifelong learning.
NUR*H130  LPN to RN Transition I  1 credit
Prerequisite: Charter Oak State College NUR 190: LPN to RN Articulation Bridge. This course is the final component of the Connecticut League for Nursing LPN to RN Articulation Plan for the Connecticut Community Colleges Nursing Program (CT-CCNP) which prepares LPNs to enter the CT-CCNP in the second year of study. Students enrolling in this course have been accepted for admission into the (CT-CCNP) and have chosen the option to enter the third semester. Hours: Clinical: 45 hours (Clinical and laboratory hour distribution is at the discretion of the college attended.)

NUR*H201  Nursing Care of Individuals and Families  1 credit
Prerequisites: NUR*H102, NUR*H103, PSY*H201, SOC*H101. Corequisite: NUR*H202. The student will focus on holistic care of individuals and families across the lifespan with a variety of health care needs. The needs of clients experiencing endocrine, respiratory, gastrointestinal, cardiovascular conditions and selected mental health disorders are examined. Bioterrorism as a health care issue will be addressed. Clinical laboratory experience provides the student an opportunity to administer care to a diverse population of clients in a variety of acute care and community health care settings. The student will utilize critical thinking, caring, professionalism and communication skills in the care of the client. Emphasis is placed on provision of safe and competent care and development of the professional role as a member of a multidisciplinary health care team. Over the semester, the student is increasingly challenged in the clinical area with more complex client assignments.

NUR*H202  Pharmacology for Individuals and Families with Intermediate Health Care Needs  1 credit
Prerequisites: NUR*H102, NUR*H103. Corequisite: NUR*H201. The student will focus on pharmacologic principles related to the care of individuals and families across the lifespan with intermediate health care needs. Emphasis will be placed on medications used for clients who have endocrine, gastrointestinal, respiratory, cardiovascular, autoimmune, and psychiatric conditions and clients who are survivors of bioterrorism.

NUR*H203  Nursing Care of Individuals and Families II  8 credits
Prerequisites: NUR*H201, NUR*H202, ENG*H102. Corequisites: NUR*H204, NUR*H205. The student will focus on the holistic care of individuals, families, and groups with complex health care needs. The student will incorporate critical thinking, caring behaviors, professionalism, and communication skills when providing nursing care in a variety of acute, long-term and/or community settings. Students will have an opportunity to manage a multi client assignment with an emphasis on safe and competent practice. An observational experience with a visiting nurse agency, a dialysis unit and/or a cancer center will be provided.

NUR*H204  Pharmacology for Individuals, Families and Groups with Complex Health Care Needs  1 credit
Prerequisites: NUR*H201, NUR*H202. Corequisite: NUR*H203. The student will focus on safe use, pharmacologic principles, indications and nursing implications related to drug therapy in the care of individuals, families, and groups with complex health care needs. Emphasis will be placed on medications used for clients who have acute and chronic renal failure, oncology and neurological conditions, and multi-system dysfunction and who choose an alternative therapy.

NUR*H205  Nursing Management and Trends  2 credits
Prerequisites: NUR*H201, NUR*H202. Corequisites: NUR*H203, NUR*H204. The student will explore the basic principles of management, leadership and collaborative relationships as they relate to providing safe and competent care. The focus is on the utilization of critical thinking skills to make decisions on priority setting, delegation, legal parameters of nursing practice and ethical issues. Students will expand the concept of caring to the profession of nursing through collegial and interdisciplinary communication. This course facilitates the transition for students into the profession and their role in contemporary nursing practice.

NUR*H220  Nursing in Health & Illness III  9 credits
Prerequisites: NUR*125, PST*201, SOC*101. Corequisite: ENG*102 or ENG*200 per college-specific requirement. This course is designed to further develop concepts of nursing practice introduced in Nursing in Health & Illness I, II & III. Students apply learning related to pathophysiology, pharmacology, medical, and alternative therapies in classroom, laboratory and clinical settings throughout the course. This course focuses on the nursing and inter-professional care of patients, families, groups and communities with a variety of complex health care needs across the lifespan. Emphasis is placed upon management and coordination of care and the related organizational skills of the nurse as a member of the inter-professional health care team. Learning experiences provide the student an opportunity to demonstrate clinical reasoning as course concepts are applied in the implementation of safe, patient-centered care in a variety of settings using the nursing process. Active learning strategies are employed in this course to promote the development of clinical reasoning and self-directed lifelong learning.

NUR*H225  Nursing in Health & Illness IV  8 credits
Prerequisites: NUR*220, ENG*102 or ENG*200 per college-specific requirement. Corequisite: NUR*226, NVCC Oral Communications Competency course. This course is designed to further develop concepts of nursing practice introduced in Nursing in Health & Illness I, II & III. Students apply learning related to pathophysiology, pharmacology, medical, and alternative therapies in classroom, laboratory and clinical settings throughout the course. This course focuses upon the holistic nursing and inter-professional management and coordination of care for patients, families, groups and communities with a variety of complex health care needs across the lifespan. Emphasis is placed on the related organizational skills of the nurse as a member of the inter-professional healthcare team. Learning experiences provide the student an opportunity to demonstrate clinical judgment as course concepts are applied in the implementation of safe, patient-centered care in a variety of settings using the nursing process. In addition, a portion of clinical experiences within this course provide the student with the opportunity to demonstrate knowledge skills and attitudes (KSAs) that reflect awareness of the leadership and management roles of the nurse as a member of the inter-professional healthcare team. Active learning strategies are employed in this course to promote the development of clinical reasoning and self-directed lifelong learning.

NUR*H226  Transition to Professional Nursing Practice  1 credit
Prerequisites: NUR*220, ENG*102 or ENG*200. Corequisite: NUR*225, NVCC Oral Communication Competency course. This course focuses on advanced concepts of nursing practice as they relate to leadership, management and inter-professional relationships at all levels of patient care. This course explores the curricular concepts communication, diversity, evidence based practice, healthcare policy and economics, leadership, patient centered care, professionalism, quality improvement, safety, systems-based practice, and teamwork and collaboration in greater depth. Emphasis is placed upon clinical judgment as it impacts clinical decision making and priority setting in a variety of settings within the healthcare system. Learning experiences assist the student to synthesize concepts in a manner that promotes quality improvement in clinical nursing practice for the benefit of patients, families, groups, communities, and populations across the lifespan. Active learning strategies are employed in this course to engage students in the development and application of nursing leadership and management skills as self-directed lifelong learners.

PHILOSOPHY
Liberal Arts and Behavioral/Social Sciences Division

PHL*H101  Introduction to Philosophy  3 credits
Prerequisite: Grade of "C" or better in ENG*H101. Philosophy 101 surveys several major areas within the discipline, which may include aesthetics, ethics, free will, government, knowledge, logic, meaning of life, mind, reality, religion, and science. Philosophy has as its fundamental mission the cultivation of skills and world views that contribute to student development as autonomous persons and engaged members of society. These skills and dispositions are acquired through studying and doing philosophy. These skills facili-
tate a student's development by encouraging the critical, systematic, and philosophically informed examination of beliefs, values, and conceptions of existence. Such an individual has an independent, flexible, and open mind capable of making well-reasoned decisions.

**PHL*H111 Ethics** 3 credits
*Prerequisite: ENG*H101. This course studies the approaches to ethics, ethical language, and interpretations of “Who am I?” and “What am I to do?” Morality as it relates to freedom, religion, medicine, business, mass media, technology, Environment and personal commitment are among the topics covered. Using logical reasoning, students demonstrate an understanding of ethical behavior in both oral and written form.

**PHL*H112 Medical Ethics** 3 credits
*Prerequisite: ENG*H101. This course is an introduction to moral issues and options in medicine, with particular attention to those most directly affecting the public and general medical personnel. Topics include the meaning of “life,” birth control, artificial insemination, genetic engineering, abortion, human experimentation, behavior control, organ transplantation, truth and the physician, care of the dying, and public health care.

**PHL*H151 World Religions** 3 credits
*Prerequisite: ENG*H101. This course studies various living Eastern and Western religions and their beliefs about the meaning of life, God, reality, truth, morality and worship.

**PHL*H150 Philosophy of Religion** 3 credits
*Prerequisite: ENG*H101. The nature of religion, the reality and existence of God, religious knowledge and values, the soul, life after death, the problem of evil, mysticism, miracles, and the relationship of religion to science and history are explored.

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**PHYSICAL EDUCATION**
**Allied Health/Nursing/Physical Education Division**

The Physical Education and Health Fitness courses at Naugatuck Valley Community College are designed to meet the life-time needs of the individual as teacher and person. Courses develop the basic skills and methodologies required for good physical and mental health. Courses have been recognized for transfer credit by four-year institutions. Activity course descriptions appear at the end of this section.

**HPE*H101 Weight Control and Exercise** 2 credits
Designed to help students realize the importance of healthy diet and exercise behaviors in permanent weight control. Behavior modification techniques are used to help students achieve a healthy lifestyle that will result in either a gradual reduction in body weight, and/or the maintenance of a healthy body weight.

**HPE*H117 Weight Training** 2 credits
Emphasis of this course is on the development of a high degree of individual skills and methods necessary to understand the body mechanics involved in activity exercise. Programs discussed will include training for leisure sports, rehabilitation, muscular tone, endurance, cardiovascular endurance, flexibility, and weight loss.

**HPE*H140 Pilates/Wellness** 1 credit
(also listed as DAN*H140)
This course focuses on the quality of movement, posture and breathing by increasing strength, flexibility, and balance. The holistic perspective includes physical awareness, cognitive reflection, and insights from feelings and focuses on mind-body centering. Pilates/Wellness is designed for the dancer, athlete, health professional or persons interested in overall well-being. This class meets the first ten weeks of the semester. Comfortable clothing is necessary.

**HPE*H147 Self-Defense I** 1 credit
This course is designed to promote the methods and skills to understand and perform the art of karate for self-defense and discipline. It includes the study of history, philosophy and culture of the martial art of karate.

**HPE*H148 Self-Defense II** 1 credit
*Prerequisite: HPE*H147. This course is advanced study in the art and methods of self-defense including elements of physical fitness. Students who enroll in this course will be given a promotion test for belt certification.

**HPE*H261 Yoga** 1 credit
This course is designed to introduce students to the methods and skills necessary to understand and perform Yoga. Relaxation techniques and flexibility training are stressed.

**HPE*H264 Yoga** 2 credits
This course is designed to introduce students to the methods and skills necessary to understand and perform Yoga. Relaxation techniques and flexibility training are stressed.

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**PHYSICAL THERAPIST ASSISTANT**
**Allied Health/Nursing/Physical Education Division**

**PTA*H120 Introduction to Physical Therapy** 3 credits
*Prerequisites: Admission to the PTA Program and PTA*H125. Learning opportunities in this course assist the student to recognize the roles of physical therapy within various practice settings. Students differentiate functions of physical therapists and physical therapist assistants as members of the health care team through study of the history of physical therapy, documentation, ethical & legal principles, evidence based practice, and medical terminology important to the provision of services. Learning also includes development of knowledge and abilities within the domains of professional conduct, interpersonal and professional communication, and sensitivity to individual and cultural differences.

**PTA*H125 PT for Function** 4 credits
*Prerequisites: Admission to the PTA Program and PTA*H120. This lecture and lab based course, provides the student with introductory concepts and techniques regarding physical therapy interventions for function and mobility. Emphasis is placed on enhancing the students’ problem-solving abilities and comprehension of the physical therapist assistant’s role. The importance of modification of physical therapy interventions within the plan of care developed by the supervising physical therapist is highlighted. The laboratory section of this course allows the student to develop the psychomotor skills through simulated patient scenarios.

**PTA*H130 Clinical Anatomy and Kinesiology** 3 credits
*Prerequisite: BIO*H211. This course is designed to enable students to identify the structure and function of the human body including the spine, upper and lower extremities through computer simulation and application. The course includes the study of skeletal and muscular structures involved in human movement. Students will understand movement control and elements of movement dysfunction. The student will also gain an understanding of biomechanical forces, neuromuscular control, and pathological influences through analysis of biomechanical forces on the body.

**PTA*H145 Physical Agents in PT** 3 credits
*Prerequisites: PTA*H120, PTA*H125 and PTA*H130 with a grade of “C” or higher. *Corequisites: PTA*H150 and PTA*H155. This hybrid course develops the student’s competence with problem-solving and application of physical therapy interventions using physical agents, including therapeutic applications of heat, cold, water, electricity, light, and mechanical forces or devices. The student will be exposed to online lecture-based facilitation and laboratory experiences regarding therapeutic application of physical agents that will include: scientific theory; common pathologies that would reflect best practice usage of physical agent interventions; indications, contraindications and precautions to use; patient simulations and case scenarios to allow for problem solving and discussion; expected patient outcomes from the use of physical agents; patient education and communication; appropriate documentation for provided physical agent interventions.
PTA*H150  PT Interventions I  4 credits
Prerequisites: PTA*H120, PTA*H25 and PTA*H130 with a grade of "C" or higher. Corequisites: PTA*H145 and PTA*H155. This course uses a case study approach to enhance problem solving skills and provide integration of various patient examination, goal setting, and intervention techniques within the scope of physical therapist assistant practice. Topics covered include foundational PT skills of goniometric and muscle strength assessment and exercise prescription. The student will achieve competency in the following patient care techniques: data collection skills, exercise prescription, communication and documentation skills including appropriate billing, and patient safety. Manual muscle testing and goniometric measurement of joint range of motion will be incorporated into laboratory exercises. Professionalism, verbal and written communication skills, and ethics are considered throughout.

PTA*H155  Pathology for the PTA I  3 credits
Prerequisites: PTA*H120, PTA*H125, PTA*H130 with a grade of "C" or higher. Corequisites: PTA*H145, PTA*H150. This is the first course of a two-course pathology sequence designed to provide the physical therapist assistant student with the knowledge of human pathology of selected body systems including implications for patient management. Topics covered are inflammation, immune responses, hepatic, pancreatic and biliary diseases, and specific diseases of the endocrine, cardiac, GI, and respiratory systems. This is a foundational course as it promotes an understanding of the disease processes, and it guides the student in application and analysis of medical pathology in patient care. Emphasis is placed on the relationship of medical presentation signs/symptoms and its implication on physical therapy treatment.

PTA*H251  PT Interventions II  3 credits
Prerequisites: PTA*H145, PTA*H150, PTA*H155; Corequisites: PTA*H253, PTA*H258. This course uses a case study approach to enhance problem solving skills and provide integration of various patient intervention techniques within the scope of physical therapy practice. Topics covered include interventions for special populations such as status post amputation, pre/post-partum, neurological diagnoses, and pediatric conditions. The student will achieve competency in the following patient care techniques: specialized exercise prescription, prosthetic & orthotic management, and normal and abnormal reflex identification. Patient education, appropriate billing, patient safety, professionalism, verbal and written communication skills, and ethics are considered throughout.

PTA*H255  Pathology for the PTA II  3 credits
Prerequisites: PTA*H145, PTA*H150, PTA*H155; Corequisites: PTA*H251, PTA*H258. This is the second course of a two-course pathology sequence designed to provide the physical therapist assistant student with the knowledge of human pathology of selected body systems including implications for patient management. Topics covered include the nervous system diseases and the integumentary system. Diagnoses such as CVA, SCI, TBI, amputee, and pediatric development will be covered in detail. This is a foundational course as it promotes an understanding of the disease processes, and it guides the student in application and analysis of medical pathology in patient care. Emphasis is placed on the relationship of medical presentation signs/symptoms and its implication on physical therapy treatment.

PTA*H258  PTA in the Healthcare Arena  2 credits
Prerequisites: PTA*H145, PTA*H150, PTA*H155 with a grade of "C" or higher. Corequisites: PTA*H251, PTA*H255. This course develops the student’s ability to apply physical therapy interventions and data collection techniques within the PTA’s plan of care in the clinic environment and advances the student’s abilities with communication, professional conduct, and problem solving within the physical therapy clinic. PTA in the Healthcare Arena uses the clinical environment as a framework for the application and synthesis of conceptual aspects of the work environment. Clinical education experiences are acquired in a weekly part-time integrated clinical experience and integrated into the classroom to illustrate the current health care delivery system’s impact on the field of physical therapy and the role of the physical therapist assistant. Throughout the semester students will learn to differentiate professional, legal, and ethical standards and analyze how these direct the delivery of patient care.

PTA*H260  Physical Therapy Seminar  2 credits
Prerequisites: PTA*H251, PTA*H255 and PTA*H258 with a grade of "C" or higher. Corequisites: PTA*H262 and PTA*H265. In this course students demonstrate the ability to apply critical thinking to selected professional issues, industry trends, and special populations that may be encountered as a physical therapist assistant. Learning opportunities assist in the transition from student to clinician and identification of interest areas for lifelong learning. (Beginning fall 2019)

PTA*H262  PTA Internship II  5 credits
Prerequisites: PTA*H250, 253 and 258 with a grade of "C" or higher. Within this clinic-based course students learn to integrate and apply physical therapy concepts to effectively perform physical therapy interventions as a physical therapist assistant under the direction and supervision of a physical therapist. Students develop their abilities for daily organization and management of a patient caseload and effectively contribute to the health care team. Students practice professional behaviors in all interactions with patients, families, caregivers, instructors, facility staff, other health care providers, vendors, insurance carriers and administrators. This course takes place during the first half of the semester.

PTA*H265  PTA Internship III  5 credits
Prerequisites: PTA*H250, 253 and 258 with a grade of "C" or higher. Within this clinic-based course students learn to integrate and apply physical therapy concepts to effectively perform physical therapy interventions as a physical therapist assistant under the direction and supervision of a physical therapist. Students practice professional behaviors in all interactions with patients, families, caregivers, instructors, facility staff, other health care providers, vendors insurance carriers and administrators. Students further develop autonomy and competence with daily organization, time management, clinical prioritization, and the entry – level abilities of the physical therapist assistant prior to course completion. This course takes place during the second half of the semester.

PHYSICS
Science, Technology, Engineering & Mathematics Division

PHY*H110  Introduction to Physics  4 credits
Prerequisite: MAT*H095 or equivalent. MAT*H137 is recommended. The course is designed for the student seeking basic introduction to the principles of physics, and offers firsthand experience on learning in a laboratory. Specific topics covered include: a review of essential arithmetic operations and systems of measurements, linear motion, conservation of energy and linear momentum, Newton’s three laws of motion, gas laws, heat, light, electricity, magnetism and atomic theory, as time permits. Three hours of lecture and three hours of laboratory weekly. (fall/spring/summer)

PHY*H111  General Physics I  4 credits
Prerequisite: MAT*H137 or equivalent. Corequisite: MAT*H172. This course is designed for students in technical fields and pre-medicine programs. The course begins with a review of algebra, basic trigonometry and vectors. Topics covered include kinematics, projectile motion, Newton’s Laws, energy, momentum, rotational dynamics, heat and thermodynamics, as time allows. Three hours of lecture and three hours of laboratory weekly. (fall/spring)

PHY*H112  General Physics II  4 credits
Prerequisite: PHY*H121. This course is a continuation of PHY*H121. An overview of thermodynamics is given. Topics include waves, harmonic motion and Coulomb’s Law. The laws describing electric and magnetic fields are studied and how these laws apply to DC and AC circuits, and the properties of light are presented. The properties of light discussed include reflection, refraction, interference and diffraction. Three hours of lecture and three hours of laboratory weekly. (spring)

PHY*H221  Calculus-Based Physics I  4 credits
Prerequisite: MAT*H254 or equivalent. This course is designed for students in technical fields, mathematics, or the physical sciences. Topics covered: Overview of the calculus necessary for physics, kinematics, Newton’s laws, conservation laws, rotational dynamics,
harmonic motion, gravitation, fluid mechanics, waves, sound, heat and thermodynamics. The lab portion of the course will concentrate on gathering data, analysis of data, and the discussion of results. The topics covered in lab will be coincident with the topics covered in the course. Three hours of lecture and three hours of laboratory weekly. (summer)

**PHY*H222  Calculus-Based Physics II  4 credits**  
*Prerequisite: PHY*H221 or equivalent.* This course is designed for students in technical fields, mathematics, or the physical sciences. Topics covered: Overview of the calculus necessary for physics, heat, kinetic theory of gasses and thermodynamics (if not covered in PHYY221). Electrostatics, magnetostatics, circuits (DC and AC), electromodynamics, waves and optics. The lab portion of the course will concentrate on gathering data, analysis of data, and the discussion of results. The topics covered in lab will be coincident with the topics covered in the course. Three hours of lecture and three hours of laboratory weekly. (summer)

**POLITICAL SCIENCE  
Liberal Arts and Behavioral/Social Sciences Division**

**POL*H102  Introduction to Comparative Politics  3 credits**  
*Prerequisite: 3 credit hours in any history or political science course.* A survey of the structure and functioning of the governments is presented. Such contemporary nation states as Russia, Great Britain, France, and Germany are analyzed. A brief history of each government is included.

**POL*H103  Introduction to International Relations  3 credits**  
This course is an introduction to the present nation state system with an analysis of the political, social and economic pressures that produce international tensions and crises. Consideration of the traditional balance of power approach to world peace will be contrasted to the regional and global organizations that have appeared since World War II.

**POL*H111  American Government  3 credits**  
Students are acquainted with the organization, structure, and functions of the American national government and of the American political parties. Attention is paid to the Constitution, the congress, the courts and the presidency and administration.

**POL*H112  State and Local Government  3 credits**  
The structure and functions of the various state and local governments in the United States are studied. Special emphasis is placed on the state government in Connecticut and on the various types of local government in the state.

**POL*H209-292  Practicum in Government I & II  6 credits**  
*Prerequisites: At least 15 credit hours of college work and a 2.6 average, plus a “B” grade in either ENG*H101 or BBG*H210. Practical experience as a staff assistant to a member or committee of the Connecticut General Assembly or to a municipal government executive or agency is provided. At least 200 hours of practical work plus a biweekly seminar meeting of all student interns of NVCC are required. A 10-15 page term paper report will also be required at the end of the semester.*

**PSYCHOLOGY  
Liberal Arts and Behavioral/Social Sciences Division**

**PSY*H111  General Psychology I  3 credits**  
*Prerequisite: eligibility for ENG*H101. A general study of psychology in which the important basic principles of scientific methodology, theories of psychology, biological foundations of behavior, human development, states of consciousness, learning, memory, intelligence, and social psychology are presented.*

**PSY*H201  Lifespan Development  3 credits**  
*Prerequisite: PSY*H111. A study of the changes in the individual from infancy through late adulthood will be examined. Methodology and the physical, cognitive, and social development of the individual will be studied.*
Analysis (ABA), functional behavior assessments, social skills development, communication, parent involvement, and understanding the individual.

PSY*H262 Applied Behavior Analysis 3 credits
Prerequisite: PSY*H238 or permission of the instructor. This course covers the purposes, rationale and methods used in conducting and interpreting functional analyses of challenging behavior. Advanced coverage of measurement methods used in behavioral intervention, and the application of specific behavioral teaching procedures, including prompting, reinforcement, shaping, chaining, error correction and generalization methods, and the development of behavior plans.

QUALITY ASSURANCE
Science, Technology, Engineering & Mathematics Division

QUA*H114 Principles of Quality Control 3 credits
This first course in statistical quality control provides an overview of the tools and techniques required in contemporary quality systems. Topics covered include determination of process capabilities, estimation of process standard deviation from sample data, use of control charts, and calculation of probability of simple events. Students will develop SPC and TQM Manufacturing plans. Part of the Advanced Manufacturing Machine Technology cohort program.

RADIOLOGIC TECHNOLOGY
Allied Health/Nursing/Physical Education Division

RAD*H112 Orientation to Radiology 3 credits
Prerequisite: Admission into the program. This course provides an orientation to radiology, basic radiation protection, ethics, medical terminology, communication, and patient care.

RAD*H114 Rad. Physics / Radiographic Quality I 3 credits
Prerequisites: RAD*H112 and RAD*H197. The course content includes the production of x-rays, the x-ray circuit, radiographic equipment, and the interaction of x-rays with matter. Once learned, the student will utilize the preceding content, applying it to how the x-ray produces the image. The subject material includes introductory principles of radiographic quality, a general overview of radiographic film, intensifying screens, film processing, setting technical factors, and performing technical conversions.

RAD*H197 Clinical Practice I (fall) 2 credits
Clinical Post conference focuses on orientation to radiology, positioning of chest, abdomen, and extremities.

RAD*H198 Clinical Practice II (spring) 2 credits
Clinical Post conference focuses on positioning of the pelvic girdle, hip, vertebral column & trauma radiography.

RAD*H199 Clinical Practice III (summer) 2 credits
Focus on Contrast Media studies and Fluoroscopic exams.

RAD*H297 Clinical Practice IV (fall) 3 credits
Clinical Post conference focuses on positioning of skull and cross sectional anatomy.

RAD*H298 Clinical Practice V (spring) 3 credits
Clinical Post conference focuses on cross sectional anatomy, CT & MRI physics and Pathology.

RAD*H299 Clinical Practice VI (summer) 2 credits
Culmination of all clinical objectives.

RESEARCH
Liberal Arts and Behavioral/Social Sciences Division

RES H211 Mentored Research Project I 3 credits
Prerequisite: Permission of the instructor. Mentored Research Project I engages students in the development of a research proposal for hypothesis-driven research in their chosen discipline. Over the course of the semester the student will use existing peer reviewed literature to develop a research question, hypothesis, and a data collection plan, including the development of questionnaires or other tools for data collection. Students are encouraged to enroll in RES*H212 (Mentored Research Project II) during the subsequent semester. In that course they will collect and analyze the data for this project.

RES H212 Mentored Research Project II 3 credits
Prerequisite: Completion of RES*H211 with a grade of C or better or permission of the instructor. Mentored Research Project II engages students in data collection, analysis, and presentation of hypothesis driven research on a topic in their chosen discipline. The student will use a previously established research plan to complete a project culminating in a written paper and poster presentation. The previous work will usually be completed in Mentored Research Project I (RES*H211) but enrollment will be considered for students who have completed that phase in a different course or under the mentorship of a faculty member without a formal course.

RESPIRATORY CARE
Allied Health/Nursing/Physical Education Division

RSP*H112 Fundamentals of Respiratory Care 4 credits
Prerequisite: Admission to the Program. Corequisite: RSP*H121. A lecture-laboratory course that provides an introduction to basic principles of clinical respiratory care integrating physical principles of respiratory care throughout the course. Topics covered include: principles of infection control, medical gas therapy, aerosol and humidity therapy and basic patient assessment. Three hours of lecture and two hours of laboratory exercises weekly.
RSP*H121 Cardiopulmonary Anatomy and Physiology 3 credits
Prerequisite: Admission to the Program. Corequisite: RSP*H112.
This course includes an in-depth study of the anatomy and physiology of the pulmonary and cardiac system. Topics will include but are not limited to: the circulatory system, applied physiology and physical principles of the respiratory system and gas exchange. Emphasis will be placed on structure and function.

RSP*H131 Applied Pharmacology 3 credits
Prerequisites: RSP*H112, RSP*H121 with grades of “C” or better. Corequisite: RSP*H141. This course includes the study of the composition, indications for and effects of medication administered to patients treated in the field of respiratory care. Emphasis is placed on drugs prescribed for the cardiopulmonary, renal and neurological system.

RSP*H141 Principles of Respiratory Care 4 credits
Prerequisites: RSP*H112, RSP*H121 with grades of “C” or better. Corequisites: RSP*H180 and RSP*H131. This course introduces the student to basic principles of clinical respiratory care. Topics include but are not limited to: medical gas therapy, patient assessment, OSHA and infection control standards, oxygen therapy, aerosol therapy, bronchial hygiene therapy, hyperinflation therapy, ethics and professionalism, medical documentation. An integrated laboratory experience is included.

RSP*H151 Cardiopulmonary Pathophysiology and Diagnostics 3 credits
Prerequisites: RSP*H131, RSP*H141 with grades of “C” or better. Corequisite: RSP*H181. This course focuses on the etiology, pathophysiology, clinical manifestations and treatment of various cardiopulmonary diseases and diseases that directly affect the cardiopulmonary system. Case application will be included.

RSP*H180 Clinical Practicum 1 credit
Prerequisite: Admission to the program. Corequisites: RSP*H141 and RSP*H131. This course provides supervised clinical experience in providing basic respiratory care to patients. Clinical experiences will focus on the areas of chart review, documentation and reporting, bedside assessment, breathing exercises, infection control techniques, medical gas therapy, and aerosol drug delivery.

RSP*H181 Clinical Practicum II 2 credits
Prerequisites: RSP*H180, RSP*H141, RSP*H131 with grades of “C” or better. Corequisite: RSP*H151. This course provides supervised clinical experience in providing respiratory therapy to medical floor patients. Clinical experiences will focus on bronchial hygiene therapy, hyperinflation therapy, bi-level ventilation, airway management, and arterial blood gas sampling. Students will also rotate to ancillary clinical sites focusing on respiratory therapy provided at extended care and rehabilitation facilities.

RSP*H201 Future Trends 2 credits
Prerequisites: RSP*H262, RSP*H270, RSP*H281 with grades of “C” or better. Corequisites: RSP*H282 and RSP*H291. This seminar course focuses on the various current issues affecting respiratory care. Topics include but are not limited to: smoking cessation, pulmonary rehabilitation, communication styles for various age ranges, research methods and statistics.

RSP*H262 Advanced Principles of Respiratory Care 4 credits
Prerequisites: RSP*H151, RSP*H181 with grades of “C” or better. Corequisites: RSP*H270 and H281. The course focuses on conventional and alternative forms of mechanical ventilation. Indications, application, discontinuation and physical effects of mechanical ventilation will be covered. In addition, non-invasive, home and pediatric mechanical ventilation strategies will be covered. This course includes an integrated laboratory that includes demonstrated competency with equipment prior to clinical application.

RSP*H270 Hemodynamic and Critical Care Monitoring 3 credits
Prerequisites: RSP*H151, RSP*H181 with grades of “C” or better. Corequisites: RSP*H262 and RSP*H281. This course focuses on hemodynamic monitoring and assessment on the adult critical care unit. Topics include: EKG rhythm interpretation, central venous pressure monitoring, pulmonary artery pressure monitoring, ACLS overview and intracranial pressure monitoring.

RSP*H271 Pulmonary and Cardiovascular Diagnostics 2 credits
Prerequisite: RSP*H151 with grade of “C” or better. This course provides the student instruction on assessment of pulmonary function studies and other diagnostic procedures used within a pulmonary/cardiovascular laboratory setting. Topics include: stress testing, metabolic testing, rehabilitation techniques, sleep studies and research techniques.

RSP*H281 Advanced Clinical Practicum 2 credits
Prerequisites: RSP*H282 and RSP*H292. This course provides supervised clinical experience in providing respiratory therapy to intensive care patients. Clinical experiences will focus on mechanical ventilation of the adult patient.

RSP*H282 Advanced Clinical Practicum II 2 credits
Prerequisites: RSP*H262, RSP*H270, RSP*H281 with grades of “C” or better. Corequisites: RSP*H201 and RSP*H292. This course provides supervised clinical experiences in the adult, neonatal, and pediatric intensive care units. Clinical experiences will focus on hemodynamic monitoring and assessment, respiratory care in the emergency setting, and continuous mechanical ventilation of the adult, neonate, and pediatric patient. Students will also complete an Advanced Cardiac Life Support (ACLS) course during this clinical practicum.

RSP*H291 Perinatal and Pediatric Respiratory Care 2 credits
Prerequisites: RSP*H270, RSP*H262, RSP*H281 with grades of “C” or better. Corequisite: RSP*H282. This course provides the student with a comprehensive study of pediatric and neonatal respiratory care. Topics include but are not limited to: diagnostic and therapeutic procedures, cardiopulmonary pathophysiology, ventilation management, critical care techniques, PALS and NRP techniques and embryology.

SIGN LANGUAGE
Liberal Arts and Behavioral/Social Sciences Division
Refer to Languages.

SOCIOMETRY
Liberal Arts and Behavioral/Social Sciences Division
SOC*H101 Principles of Sociology 3 credits
Prerequisite: Eligibility for ENG*H101. A general introduction to the science of sociology, including the “sociological imagination,” theory and methods. Students are taught what is unique about the way in which sociologists view and analyze human behavior. The role of the social structure and how it affects our lives will be emphasized. There will also be an emphasis on how sociologists develop and test their hypotheses, as well as on various aspects of social life such as culture, groups and institutions, deviance and social control, inequality, ethnicity, and family.

SOC*H201 Contemporary Social Issues 3 credits
Prerequisite: SOC*H101. This course presents an analysis of current sociological issues with emphasis on social stratification, inequality and sociocultural dynamics. Topics include ageism, sexism, population growth and decline, racism, modernization, and technology.

SOC*H210 Sociology of the Family 3 credits
Prerequisite: SOC*H101 or equivalent. Students will examine marriage and family relationships from a sociological perspective, concentrating on first meetings through marriage, having and rearing a family, divorce, and remarriage. Topics considered include: gender roles, love relationships, sexual fulfillment, communication, dual-income marriages, and step-families.
SOC*H211  Sociology of Gender  3 credits
Prerequisite: SOC*H101. This course explores the social organization, construction and politics of gender within historical and cultural contexts, and explains how gender inequalities are maintained and perpetuated through social institutions and processes of socialization. Topics include gender and sexuality, family, work, politics, power, education, media, violence, intersectionality, and inequality.

SOC*H221  Social Inequality  3 credits
Prerequisite: SOC*H101. This course addresses the causes and consequences of inequality based on race, gender, ethnicity, age, religion, and disability through an examination of the social structure, culture, history, and social institutions of American society.

SOC*H225  Death and Dying  3 credits
(Also listed as HSE*H171)
An exploration of the stages of death and dying. Special emphasis will be placed on understanding grief and loss. The course will focus on the following: the dying person, sudden death and the effect on the family, cultural and economic issues, the broad moral aspects of death, and other related problems. (spring)

SOC*H240  Criminology  3 credits
Prerequisite: SOC*H101 or by permission of instructor. Students will examine problems of law and order from a sociological perspective. The formation of laws, the causes of crime, and societal responses to crime will be considered. Topics to be considered include law-making as a social process, social and psychological explanations of criminal behavior, courts, punishment, imprisonment, and rehabilitation. (fall)

SPANISH
Liberal Arts and Behavioral/Social Sciences Division
Refer to Languages.

THEATER ARTS
Liberal Arts and Behavioral/Social Sciences Division
The Division of Liberal Arts and Behavioral/Social Sciences encourages students to register for theater courses in order to develop appreciation of, and skills in, the theater arts. Some of the courses are required in career programs; others are designed for students' interests and personal development. Theater students are required to engage in both performance and theater courses in order to develop appreciation of, and skills in, the theater arts. Some of the courses are required in career programs; others are designed for students' interests and personal development. Theater students are required to engage in both performance and technical theater course work. Consultation with counselors will help determine specific needs.

THR*H101  Introduction to Theater  3 credits
A survey of the historical development of Western dramatic literature from the Greeks to the present. This course also explores the essential hands-on components of the theater, including playwriting, acting, design, and crew, utilizing both creative and analytical projects.

THR*H110  Acting I  3 credits
A practical approach to the art of acting, with special attention to the development of the actor's instrument, including voice, body, the senses, creativity, and interpretation. The course combines individual and group exercises and assignments.

THR*H120  Stagecraft  3 credits
This course will examine the basic components of stagecraft and production techniques, with a focus on set construction and painting, lighting, properties, costumes, and production management. The course involves classroom study but includes hands-on application on stage productions. Three laboratory hours required.

THR*H190  Theater Practicum I  3 credits
This course involves students in play production. Such areas as set construction, lighting, costuming, box office, running crew and stage managing will be explored through the process of rehearsing and mounting a play for performance. Three lab hours required.
PROFESSIONAL STAFF

A

Abazi, Kajmet, Bursar; A.S., Naugatuck Valley Community College; B.A., Teikyo Post University.

Adams, Wayne, Information Technology Technician II; A.S., Teikyo Post University.

Altman, Lawrence G., Professor of Biology; B.A., M.S., Ph.D., Fordham University.

Anderson, Lisa M., Associate Professor of Nursing; A.S., Central Connecticut State University; B.S.N., University of New Hampshire.

Anderson, Susan, Professor/Director of Respiratory Care; A.S., University of Bridgeport; B.S., University of New Mexico; M.S., University of Texas at Dallas.

Angelastro, Peter S, Associate Professor of Biology; B.A., Ithaca College; Ph.D., Yale University.

Antonicka, Barbara E., Professor of Humanities; M.A., Jagellonian University, Krakow, Poland.

Arsenault, Bruce, Network Manager; A.S., Naugatuck Valley Community College.

Ayala, Johanis, Financial Aid Assistant; A.S., Naugatuck Valley Community College; B.A., University of Bridgeport.

B

Bage, Robyn-Jay, Professor of Management; B.A., National University; M.P.A., State University of NY at Albany.

Ball, Karlene, ESL Program Coordinator, B.A., University of Hartford; M.A., Central Connecticut State University.

Baker, B.L., Associate Dean of Liberal Arts & Behavioral/Social Sciences; B.A., B.F.A., Northern Kentucky University; M.A., University of Maryland; ABD, University of Maryland.

Beaupre, Patricia, Professor/Academic Coordinator of Clinical Education for the Physical Therapist Assistant Program; B.S. & M.S., Springfield College.

Bensi, Peter, Professor of Physics, B.S., Eastern Connecticut State University; M.S., University of Connecticut.

Binney, Rebecca, Associate Professor of Biology; B.A., The College of St. Rose; M.Sc., Albany Medical College; Ph.D., Albany Medical College.

Bish, Kimberly, Associate Professor of Nursing; A.D.N., Naugatuck Valley Community College; B.S.N., Grand Canyon University; M.S.N., South University.

Blake, Karen, Director of Student Activities; B.A., Central Connecticut State University; M.B.A., University of New Haven.

Boyce, Lewis S., Jr., Education Technology Specialist; B.S., University of New Haven; M.S., University of South Carolina.

Boyko, Lisa, Associate Director of Financial Aid; A.A., Naugatuck Valley Community College; B.A., Western Connecticut State University; M.S., Central Connecticut State University.

Bratt, Alexander, Assistant Professor; B.A., Trinity College; M.A., The Catholic University of America; M.F.A., The Catholic University of America.

Buchanan, Charles, Academic Associate; Pre-MFG Certificate, Naugatuck Valley Community College.

Burt, Harold, Professor of Mathematics; B.A., University of New Haven; M.S., Polytechnic Institute of New York.

C

Calabrese, Lisa, Assistant Director of Admissions; A.S., Mattatuck Community College; B.G.S, University of Connecticut.

Calo, Abbie, Director, Child Development Center; B.F.A., University of Hartford; M.A., St. Joseph College.

Carleton, William, Diversity, Recruitment, Advising & Retention Specialist; B.A.A.S., University of Delaware.

Carolina, Kimberly, Director of Human Resources and Labor Relations; B.A., M.B.A., M.S.M, Albertus Magnus College.

Celotto, David, Director of Bridge to College, B.S., University of Connecticut, M.S., Southern Connecticut State University.

Chacky, Joseph, Assistant Professor of Computer Information Systems; B.S., Youngstown State University; M.S., Union College.

Chapman, Angela, Associate Dean of Development, A.S., Albertus Magnus College; B.S. Albertus Magnus College; M.B.A., University of New Haven.

Charris, Martha, Assistant Director of Admissions; A.S., Naugatuck Valley Community College; B.A., Western Connecticut State University.

Cisek, Peter J., Professor of Business Computer Applications; B.S., M.S., Johnson and Wales University.

Clancy, Edward, Associate Registrar; A.A., Mattatuck Community College; B.A., Quinnipiac University; M.A. Western Connecticut State University.

Clough, David, Professor/Coordinator of the Legal Assistant Program; B.A., Lehman College; J.D., Gonzaga Law School.

Cocchiola-Meyer, Christine, Professor of Human Services; B.S., Western Connecticut State University; M.S.W., University of Connecticut.

Coleman, Althea, Assistant Professor of English; B.A., M.A., Marquette University, Ph.D, Fordham University.

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Cummings, Delwyn, Professor of Environmental Science; B.S., Alfred University; M.S., Rensselaer Polytechnic Institute; M.S., University of Connecticut.

Curns, Jonathan, Technical Coordinator, Fine Arts Center Theater; B.F.A., University of Connecticut.

D

Dagan-McGee, Kristen, Professor, Electrical Engineering Technology; A.S., Mattatuck Community College, B.S., M.S., University of New Haven.

Damiano, Jeffrey, Associate Professor, Biology; B.S., M.A., Central Connecticut State University; Ph.D., University of Hartford.
PROFESSIONAL STAFF

D’Amore, Deirdre, Enrollment & Retention Specialist; A.S., Dean College; B.S., Charter Oak State College.

DeFeo, Joseph, Program Director, Advanced Manufacturing Technology Center; A.S.E.E., Norwalk State Technical College; B.S., M.B.A., Sacred Heart University.

De Filippis, Daisy Cocco, President; B.A. summa cum laude, Queens College, CUNY; M.A., Queens College, CUNY; M.Phil, The Graduate School and University Center, The City University of NY; Ph.D., The Graduate School and University Center, The City University of N.Y.

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Diefenderico, Anthony, Business & Industry Instructor, Manufacturing

Divjak, Robert, Director of Facilities; B.S., M.E., Fairfield University School of Engineering.

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E

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F

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Feder, Travis, Systems Librarian; B.S., University of Massachusetts; M.S., Kent State University

Florencio, David, Systems Manager; B.S., Lehman College – CUNY

Foster, William III, Professor of English; B.A., University of Massachusetts-Amherst; M.A.L.S., Wesleyan University.

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G

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Gager, Sarah E., Dean of Student Services; A.S., B.S., Post College; M.B.A., University of New Haven

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H

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Holmes, Mitchell J., Academic Division Director/Business; B.A., University of Utah; M.B.A., Sacred Heart University.

Horvath, Carrie, Director, Education Technology; A.A.S., Briarwood College; B.S., Southern Connecticut State University; M.S., Southern Connecticut State University; Ph.D., Capella University

Houlihan, Susan, Academic Advisor / Student Retention Specialist; B.A., Alfred University.

J

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K

Kaufman, Elizabeth A., Professor of Communications; A.A., Suffolk County Community College; B.S., State University of New York at Brockport; M.A., Bowling Green State University.

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L

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Larkin, Conal, Associate Dean of Information Technology, B.A., M.B.A., Iona College; M.S., Mercy College.

Latella, Terry, Counselor/Learning Disabilities; B.S., LaSalle University; M.S., Johns Hopkins University.

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Leite, Ray, Associate Professor, Program Coordinator/Digital Arts Technology; B.A., Marist College; M.S., Central Connecticut State University.

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Leonetti, John, Librarian; A.S., Naugatuck Valley Community College; B.S., Springfield College; M.L.S., Southern Connecticut State University.

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M

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Martone, Mark, Associate Professor, Radiologic Technology/Program Coordinator/Program Director; A.S., Naugatuck Valley Community College; B.S., Quinnipiac University; M.S., Quinnipiac University.

Mattrella, Anne L., Professor of Modern Languages; B.A., M.A., University of Connecticut; Ph.D., Catholic University of America.

McCann, Vincent, Coordinator, New Student Advising/Student Success; A.S., Middlesex Community College; B.A., University of Connecticut; M.S. Central Connecticut State University.

McGary, Nikki, Assistant Professor; B.A., University of Connecticut; M.A., California Institute of Integral Studies (CIIS); Ph.D., University of Connecticut.

McLure, Curtiss, Business & Industry Instructor; A.S., Naugatuck Valley Community College.

McNeil-Coates, Beth, Public Relations Associate; B.A., Fairfield University.

Meo, Cynthia, Professor of Early Childhood Education; B.S., Central Connecticut State University; M.S., 6th Yr. Certificate, Southern Connecticut State University.

Milia, Kim, Child Development Assistant Teacher; A.S., Naugatuck Valley Community College; B.A., Teikyo Post University; M.A., St. Joseph College.

Miller, Jessica, Placement Testing Specialist, A.S., Naugatuck Valley Community College; B.A., Western Connecticut State University.

Milnor, Elaine, Library Associate; A.B., Mount Holyoke College; M.Ed., Boston University.

Monchun, Beth, Executive Assistant to the President, B.A., Charter Oak State College; M.S., Bay Path University.

Moore, H. Justin, Associate Dean of STEM, B.S., Ph.D. University of Houston.

Morris, Karen, Accounts Payable Coordinator; B.A., Gettysburg College; M.B.S., Southern New Hampshire University.

Mulaney, David, Professor of Biology; B.A., Saint Anselm College; M.S., University of New Hampshire.

Murphy, Kathryn P., Professor of Nursing; B.S.N., Southern Connecticut State University, M.S.N., Ph.D., University of Hartford.

N

Nguyen, Hien, Instructor of Mathematics; B.S., M.S., Central Connecticut State University

Nichols, Simmie, Assistant Professor of Mathematics; B.S., Albany State College; M.A., University of Detroit Mercy

O

O’Donnell, Kim, Professor of Psychology; B.A., New York University; Ph.D., Temple University.

Ormond, Earl, Associate Professor/Program Coordinator of Criminal Justice; B.A., Southern Connecticut State University; M.A., Sacred Heart University; J.D., Quinnipiac university School of Law.

P

Palen, Lisa, Director of Finance and Administrative Services; B.S., Eastern Connecticut State University; M.B.A., University of Connecticut.

Pallis, Patricia Ann, Professor of English; B.A., Trinity College; M.A., University of Maine; Ph.D., University of Connecticut.

Parlato, Steven, Professor of English; B.F.A., University of Connecticut; M.A.L.S., Wesleyan University.

Pelletier Kate, Associate Professor of English; B.A., Saint Michael’s College; M.A., Central Connecticut State University.

Perez, Carissa, Academic Associate, A.S., Hartnell College; B.S., University of California

Perkins, Duane E., Professor of Business Computer Applications; A.S., Mattatuck Community College; B.S., Northeastern University; M.B.A., University of Bridgeport.
Pestretto-Demers, Linda, Human Resources Generalist, A.S., Post University; B.S., Post University

Petitfrere, Julia, Professor of English; B.A., Fairfield University; M.F.A., Sarah Lawrence College.

Petrakopoulos, Laura, Child Development Teacher, B.S., University of Connecticut

Petruzzi, Elizabeth, Clinical Coordinator; B.S.N., Western Connecticut State University; M.S.N., Walden University

Pettinico, Sandra, Professor of Mathematics; B.S., Fairfield University; M.S., University of Connecticut.

Picard, Ronald, Professor of English; B.S., University of Connecticut; M.A., Boston College; Ph.D., Purdue University.

Pirota, Monica, Professor of Nursing; A.D., Mattatuck Community College; B.S.N., University of Hartford; M.S.N., University of Hartford.

Plaza, Carlos, Instructor of Mathematics; B.A., Central Connecticut State University; M.A., Central Connecticut State University

Rafey, Zohra, I.T. Technician I; A.S., Naugatuck Valley Community College.

Ramer, Kevin, Assistant Professor of Mathematics; B.A., Marist College; Ph.D., University at Albany, State University of New York.

Rempfer, Christopher, Assistant Professor of English; B.A., Connecticut College; M.F.A., The City College of New York.

Rivera-Smith, Maribel, Assistant Professor of Nursing; B.S.N., Adelphi University, M.S.N., University of Phoenix

Rodrigues, Rose-Mary, Associate Director, Academic Support Center, B.A., Fairfield University; M.A. Fairfield University.

Rodrigues-Doolabh, Lisa, Director of Institutional Research, B.S., University of Zimbabwe; M.A., Ph.D., Stony Brook University.

Roosa, Sandra, Assistant Professor of Nursing; B.S., Western Connecticut State University; M.S., University of Connecticut.

Rosamilio, Noel, Associate Dean of Enrollment Management; B.A., Southern New Hampshire University; M.B.A. Southern New Hampshire University

Rotella, Karen, Professor/Coordinator of Hospitality Management, B.S., M.S., University of Connecticut.

Sackett, Rachel, Professor of Biology; B.S., Florida Atlantic University; M.S., University of North Carolina at Wilmington.

Saltourides, Eleni, Professor of English as a Second Language; B.A., Trinity College; M.A., English as a Second Language; Ph.D., Second Language Acquisition and Teaching, University of Arizona.

Santiago, Antonio, Dean of Danbury Campus; B.A., S.U.N.Y. Purchase College; M.S., Manhattanville College

Santos, Antonio R., Professor/Clinical Coordinator of Radiologic Technology; A.S., Mattatuck Community College; B.S., Quinipiac College; M.H.A., Western CT State University.

Santos, Luiz, Business & Industry Instructor, Manufacturing

Schaubel, Mark, Associate Professor, Automotive Technology Coordinator; B.S. Central Connecticut State University; A.S.E., Certificate, Hartford Technical Institute.

Schwartz, Michael, Academic Assistant; A.A., Naugatuck Valley Community College; B.A., Western Connecticut State University

Scott, Beth-Ann, Professor of English; B.A., M.A., Western Connecticut State University

Seabury, Jason, Associate Professor; B.A., Cornell University; B.A., University of Hartford; M.S., University of Connecticut.

Sepanski, Courtney, Child Development Teacher; B.S., New York University; M.A., University of Connecticut.

Shapiro, Sharon R., Professor of English; B.A., Brooklyn College; M.S., Western Connecticut State University; Sixth Year Certificate, Certification in Administration and Supervision, Central Connecticut State University.

Sharma, Narendra, Professor/Coordinator Mechanical Engineering Technology; B.S., Architectural Engineering Tech, Wentworth Institute of Technology; B.S., Mechanical Eng., University of New Haven; M.Sc., Mechanical Eng., University of Rhode Island; Ph.D, Mechanical Eng., University of Rhode Island.

Sheftel, Robert, Director, Academic Support Center; A.S., Manchester Community College; B.S., Eastern Connecticut State University; M.S., Rensselaer Polytechnic Institute

Shuchter, Lisa, Professor of Arts and Humanities; B.A., Hofstra University; M.A., Ed.D., Columbia University.

Smith, Tara, Graphic Specialist; B.A., Assumption College

Solomon, Elma, Professor of Accounting; B.S.C., University of West Indies; M.B.A., University of New Haven.

Spino, MariLynne, Child Development Teacher; A.S., Naugatuck Valley Community College; B.S., University of Connecticut; M.A., St. Joseph College.

Stango, Linda, Director of Workforce Transition and Outreach; A.S., Mattatuck Community College; B.S., Post College; M.S., Central Connecticut State University.

Stebbins, Jenna, Librarian; B.A., Trinity College; M.L.I.S., Drexel University

Swanson, Jacquie, Associate Director of Human Resources; B.A., Gettysburg College; M.B.A., University of New Haven.

Syta, Anna, Associate Registrar; B.A., M.S., Central Connecticut State University

Targett, Patricia, CNA/PCT CE Coordinator, B.A., United States International University; M.A.L.S., Wesleyan University.
Tarzia, Wade, Associate Professor of English; B.A., M.A., Ph.D., University of Massachusetts.

Taylor, Karen, Professor of Nursing; B.S., Western Connecticut State University; M.S.N., Southern CT State University.

Taylor, Kathy, Associate Professor of Legal Assistant / Paralegal; B.A., Hampton University; J.D., University of Connecticut School of Law.

Tirita, Gregory, Business & Industry Instructor; B.S., Southern Connecticut State University.

Tiru, Angela, Professor of Psychology; B.A., M.A., University of Hartford.

Tolbert-Rivers, Pamela, Associate Professor of English; B.A., Brown University; M.Ed., Mississippi College, M.Ed., Ed.D., Teachers College, Columbia University.

Tuccio, Christopher, Associate Professor of Horticulture; B.S.L.A., Cornell University; MLA UD, Harvard University.

Tucker, Jacqueline Yvette, Academic Advisor / Retention Specialist; B.S., Springfield College; M.Ed., Cambridge College.

U

Urbina-Lilback, Ruth, Professor of Math; B.S., Yale University; M.S., Southern Connecticut State University; Ph.D., University of Connecticut.

V

Valente, Sandra I., Professor of Psychology; Coordinator of Drug and Alcohol Recovery (DARC) Counselor program; B.S., M.S., Southern Connecticut State University; Ph.D., University of Connecticut.

Venuk, Lawrence, J., Professor of Psychology; B.S., M.S., Central Michigan University.

Villanueva, Nephtali, Director of Information Technology; A.S., Naugatuck Valley Community College; B.G.S. University of Connecticut.

Voghel-Ochs, Sydney, Director of Marketing and Public Relations; A.S., Fashion Institute of Technology; B.A., Mount Holyoke College.

W


Wampler, Jane, Professor of Mathematics; B.S., M.S., Louisiana Tech University; B.S., University of Alabama, Huntsville.

Ward-de Leon, Claudia, Public Relations Associate; B.A., Southern Connecticut State University; M.F.A., Emerson College.

Warriner, Beth A., Professor of Criminal Justice and Public Safety; B.A., Hofstra University; M.S., Florida State University.

Wormack, Antony, Director of Center for Job Placement and College Opportunities; B.S., Lesley University; M.S., Eastern Connecticut State University.

Z

Zerbi, Mariangeli, Associate Professor of Mathematics, B.S., Georgia Institute of Technology; M.S., Stanford University.

Zheng, Jianyu, Professor of Biology; B.S., Nankai University; M.S., Nankai University; Ph.D., Hiroshima University;

Zozulin, Alex, Professor of Chemistry, B.A. The College of New Jersey; B.S., University of South Alabama; Ph.D., University of South Carolina.

Zupkus, Janet, Professor of Mathematics; B.A., Albertus Magnus College; M.S., University of New Haven.

A complete listing of our adjunct faculty is available through the Human Resources Department.
Adderley, June R.,
Professor, Nursing
Albanese, Nicola,
Professor, Psychology
Andrews, Dorothy,
Admissions Counselor
Arbusto, Joan
Registrar

Batt, Linda,
Associate Professor, English
Beetz, Virginia
Director of I.T.
Benson, Christina,
Professor of Nursing;
Berberian, Karnig A.,
Professor, Mechanical
Engineering Technology
Berman, Marie,
Professor, Business
Bleach, Anthony C.,
Professor, Horticulture Science
Bobko, John R.,
Professor, Computer
Information Systems Technology
Bobrowske, Gerhardt L.,
Associate Professor, Mathematics
Bordonaro, Albert A.,
Associate Professor, Mathematics
Boulay, George E.,
Professor, Computer
Information Systems Technology
Branciforte, James
Professor, Computer-Aided Drafting
Brown Yaworsky, Laura
Professor, Nursing
Bruce, Maureen L.,
Professor, EMT-Paramedic Program
Brunone, Peter P.,
Professor, Mathematics
Buccino, Gaetano S.,
Professor, Chemical Engineering Technology
Butler, Robert J.,
Director, Student Activities
Butler, Rodney
Director of Financial Aid

Cacciatore, Raymond G.,
Professor, English
Calo, Anne R.,
Associate Professor, Accounting
Calo-Rigazio, Deborah
Child Development Assistant Teacher
Cardella, Joseph E.,
Associate Professor, Electrical
Engineering Technology
Caisse, Arthur J., Jr.,
Professor, Electrical Engineering Technology
Cerruto, Noreen,
Associate Director of Admissions
Cicchetti, George J.,
Professor, Psychology
Cipriano, Henry A.
Professor, Computer Information Systems
Cistulli, Joseph V.,
Dean, Learning & Student Development
Colwell, Stephen M.,
Dean, Administration
Crowell, Sandra,
Professor of Nursing
Cyr, Charlotte
Placement Testing Specialist

DeFilippo, John A.,
Assistant Professor, Automated
Manufacturing Engineering Technology
Del Vecchio Rusnak, Elena
Professor of Dance
Denne, Thomas H.,
Registrar
DiGiorgio, Salvatore A.,
Professor of Business Law
Dinto, Elaine
Professor of Mathematics
Donahue, Linda W.,
Professor, English
Donald, Joan White,
Director, Special Programs &
Alumni Affairs
Donihue, Donald D.,
Professor, Sociology & International Studies
Dubois, Arthur, J., Jr.,
Director, Human Resources

Edwards, Diana B.,
Professor, English
Ellin, Isidore,
Associate Professor, Science
Estes, John V.,
Assistant Professor, Electrical
Engineering Technology
Ferrucci, James M.,
Associate Professor, Electronic
Engineering Technology
Fichtel, Douglas A.,
Director of Finance/Administrative Services
Flores, Felipe,
Professor, Mathematics

Generali, Marianne
Director, Child Development Center
Gentile-Renda, Christina
Professor of Biological Services
Gillespie, Stuart P.,
Professor, Music
Ginty, Dona J.,
Associate Professor, Speech
Groman, Barry
Program Director, Fire Technology
and Administration
Guerrero, Diane,
Counselor

Hagymasi, Thomas F.,
Professor, Sociology
Henderson, Robert,
Graphic Specialist
Hendrickson, Diana
Professor, Biology
Herzfeld, Eva,
Professor, History & Geography
Hoodbhoy, Ozden,
Professor, Science
Hoyle, Thomas A.,
Professor, Psychology

Iacobellis, Dante G.,
Associate Professor, Business
Impresa, Robert C.,
Professor, Chemical Engineering Technology
Jacobson, Timothy
Associate Professor, Anthropology and Sociology
Kaminski, Robert R.,
Coordinator, Counseling Center
Kearney, Edward P.,
Professor, Electrical Engineering Technology
Kmetko, Thomas J.,
Professor, Humanities
Koski, Lawrence F.,
Professor, Criminal Justice/Public Safety
Kreske, Walter J.,
Associate Professor, Computer-Aided Drafting/Design Engineering Technology
Krupa, Walter E.,
Director, Business Division

Labet, Michael,
Professor of Accounting
Lebel, Laura Z.,
Professor, Nursing
Levinson, Rosalie C.,
Director, Learning Resources Center
Libron-Green, Dorothy,
Professor, Mathematics
Lippincott, Walter
Professor, Business and Legal Studies
Lito, Robert F.,
Professor, Business
Loiseau, Roger A.,
Professor, Mathematics
Lynott, Robert M.,
Professor, Mathematics

MacEachern, Mary M.,
Assistant Director, Personnel & Contract Administration
Mahler, Norman,
Professor, Electrical Engineering Technology
Malone, Nancy A.,
Professor of English
Mandell, Joseph L.,
Dean, College Services
Manfredonia, Joan,
  Associate Professor, Physical Education
Manka, Mary,
  Professor of Nursing
Manoharan, Arumugam,
  Professor, Mechanical Engineering Technology Program Coordinator
Mattheis, Bernd
  Director of Student Development Services
Mattozzo, Rita
  Associate Registrar
Maxwell, II, James,
  Director, Public Information/Admissions
McCarthy, Daniel F.,
  Professor, Automated Manufacturing Engineering Technology
McCarthy, Eleanor G.,
  Professor, Nursing
McGuigan, Ellsworth E.,
  Professor, Electrical Engineering Technology
McKnack, A. Robert,
  Director, Admissions
Michalowski, Elizabeth E.,
  Professor, Art
Minardo, Diane P.,
  Director of Academic Assessment & Professional Development
Moltz, Alan J.,
  Professor, Electronic Engineering Technology
Myers, Louise,
  Professor/Coordinator of ASD/LD

N
Nackid, Cynthia,
  Professor of Nursing
Newton, Sandra S.,
  Professor of English

O
Okwu, Austine S.O.,
  Director, Behavioral and Social Sciences Division
Olivera, Daniel J.,
  Director, Campus Support Services
Osborn, George E.,
  Assistant Professor of Mathematics
Ottman, Joanne A.,
  Academic Division Director/Allied Health/Nursing/Physical Education

P
Pagano, Justin J.,
  Professor, Mathematics
Palmieri, Ann P.,
  Professor, Business/Cooperative Education Program, Faculty Coordinator/ Tech Prep
Paolillo, Michael
  Associate Professor of Science
Pond, Gloria Dibble,
  Professor, English
Pond, J. Lawrence,
  Professor, Science
Pronovost, James
  Professor / Director Radiologic Technology
Pruchnicki, Anthony S.,
  Professor, Mathematics

R
Raacke, William,
  Professor, Automated Manufacturing Engineering Technology
Reiner, Ilene S.,
  Professor of Art
Ricci, Frederick,
  Professor, Communication Arts
Rich, Dennis,
  Professor, Biological Science
Richardson, Donald V.,
  Assistant Professor, Electrical Engineering Technology
Ricucci, Paul A.,
  Professor, English
Rieger, Samuel L.,
  Professor, Chemistry
Romano, Georgeanne,
  Professor of Nursing
Rusnak, Elena,
  Professor, Dance
Russell, Charles H.,
  Professor, Sociology & Social Science
Russo, Karen Gaulke,
  Professor, Hospitality Management

S
Sabia, Deborah
  Coordinator, Administrative Information Technology
Salerno, John
  Director of Athletics
Sanders, Richard, L.,
  President
Sasso, Ruth M.,
  Professor & Coordinator, Early Childhood Education
Schmitzler, Ronald M.,
  Professor of Science
Schulze, Bonita P.,
  Director, Nursing & Allied Health Continuing Education
Seeley, Jane Jevutis,
  Public Services Librarian
Sharp, Elizabeth,
  Director, Arts & Humanities Division
Shea, John L.,
  Registrar

Simon, Bonnie H.,
  Director, Mathematics/Science Division
Simpson, Estelle W.,
  Professor, English
Skurat, Donna,
  Professor, Nursing
Smotroff, Larry J.,
  Dean of Community and Economic Development
Soucy, Adelard O.,
  Professor, English
Spector, Dennis
  Professor, Marketing
Sullivan, Mary E.,
  Professor, Nursing
Sveda, Lucretia
  Director, Workforce and Transition

T
Talbot, Sandra,
  Professor, Computer
Tatangelo, George A., C.D.P.,
  Professor, Computer Science Information Systems Technology
Troup, James
  Provost and Senior Dean of Administration
Tunila, Roseanne
  Executive Assistant to the President

V
Verespys, Professor, Business
Vitarelli, Anthony P.,
  Professor, Biological Sciences

W
Ward, Joseph
  Professor of Criminal Justice
Wassong, Joseph F.,
  Professor, History & Social Sciences
Weber, Richard,
  Assistant Professor, Automated Manufacturing/Dept Chair
Wick, John,
  Counselor
Williams, Barbara,
  Director of Counseling

Y
Yannielli, Leonard,
  Professor, Biological Sciences

Z
Zagroba, James E.,
  Counselor
Zinych, Ulana,
  Professor, Nursing
Directions to the College

Route 8
Take the Danbury exit onto I-84, then first exit off I-84 (exit 18). Bear left at the fork and take a left at the light. Go to second light for East Entrance and third light for West Entrance.

I-84 West
Take exit 18, bear left at the fork and take a left at the light. Go to second light for East Entrance and third light for West Entrance.

I-84 East
Take exit 18. At light take a right and at next light take a right. Go over bridge and at light take a left onto Chase Parkway. Go to first light for East Entrance and second light for West Entrance.

The first entrance (east entrance) on the right will take you to Founders Hall, Ekstrom Hall and Technology Hall. The second entrance on the right (west entrance) will take you to garage parking, and Kinney Hall, Fine Arts Center, Student Center, Library, as well as Ekstrom Hall.

Directions for Mainstage, Playbox (A302) and Leever Atrium Parking
Take the West Entrance into the College, bear left at the split, follow the road continuing past parking Lot C. At the stop sign, take a right. Take next right into the parking garage. Bear right and park at the end of the garage. (P-2) closest to the areas labeled “A2”. Take last elevator to Plaza Level 3.

Directions for Internal Rooms from Parking Garage
Note: The letter preceding a room number indicates the building the facility is located. See “Locations” section of this map for a complete legend.

Kinney Hall
Take the elevator or stairs to the 5th floor walkway. Take a left. Follow the walkway to Kinney Hall (you will be on level 5). Take elevator or stairs to levels 4, 6 and 7. Information Booth is on level 5.

Ekstrom Hall
Take elevator or stairs to the 5th floor walkway. Take a right. Follow the walkway to the end. Stairs straight ahead, elevator on the right to rooms on levels 3, 4 and 6. For rooms E518-E535, go straight out the doors and take a quick right into southside of the building.

Technology Hall
Take elevator or stairs to the 5th floor walkway. Take a right. Follow the walkway to the end. Go straight through the double doors and walk over the glass-walled bridge.

Cafeteria, Student Center Conference Rooms (S517 and S518), L501
Take elevators in area labeled “A” for Fine Arts Center Rooms, “S” for Student Center Rooms and “L” for Library to the appropriate floor number. Main entrance to the Library is on Level 4.
NVCC Core Values

student centeredness • academic rigor • leadership • accountability
respect • trust • effective communications • human diversity
community outreach • civic engagement • beautiful and positive ideas