A Message from the President

Welcome to Cape Cod Community College. This is your pathway wherever you want your life to go, be it on to higher education, or directly into the workforce as an entrepreneur or as a major contributor to your company's success. Whether you're just beginning, restarting, or returning to finish, there is no place in higher education more committed to putting your needs first.

Courses are taught by caring professionals, and individual attention is the norm, not the exception. Student advising, counseling, and tutoring are equal partners in your academic program. One of your key goals should be to get the most out of your college experience. There is no better place to do that than right here. But, there's more!

We believe that your educational experience is far more than what occurs in the classroom. Our campus is rich with opportunities to explore peoples and cultures from all over the world, and we offer multiple options each year to travel and experience the world as it really is, not simply as it appears on your screen.

We offer courses in a variety of regional locations. Our deeply wooded campus in West Barnstable is a classroom to the natural sciences and a recreation center for hikers and bikers. The Cape's natural beauty is just a short drive away.

Please come and explore just who you can become. There's no better place to begin the rest of your life, or to finish what's already begun, than right here at Cape Cod Community College.

With my personal best wishes for your success,

John L. Cox, Ed.D., CPA
President
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**Information Subject to Change:** This catalog is published as a convenience and source of information for prospective students and for the general public. It should be understood, however, that the College reserves the right to add, revise, or withdraw courses and programs as described herein.
Accreditation
Cape Cod Community College is accredited by the New England Association of Schools and Colleges, Inc. through its Commission on Institutions of Higher Education. Inquiries regarding the accreditation status by the New England Association should be directed to the administrative staff of Cape Cod Community College. Individuals may contact:

Commission on Institutions of Higher Education
New England Association of Schools and Colleges
3 Burlington Woods Drive, Suite 100
Burlington, MA 01803 • 855-886-3272

The Nursing program is accredited by the Accreditation Commission for Education in Nursing (ACEN) and has approval from the Massachusetts Board of Registration in Nursing. Individuals may contact:

Accreditation Commission for Education in Nursing
3343 Peachtree Road NE, Suite 850
Atlanta, GA 30326 • 1-404-975-5000
FAX 404-975-5020 • www.acenursing.org

The program in Dental Hygiene is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of “approval without requirements”. The Commission is a specialized accrediting body recognized by the United States Department of Education.

Commission on Dental Accreditation
211 East Chicago Avenue • Chicago, IL 60611
1-312-440-4653 • www.ada.org/100.aspx

The Criminal Justice program is certified by the Massachusetts Department of Higher Education - Criminal Justice Program Review Committee.

www.mass.edu

The Early Childhood Education program is accredited by the National Association for the Education of Young Children (NAEYC). www.naeyc.org

The Cape Cod Community College Medical Assisting Certificate is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Medical Assisting Education Review Board (MAERB) of the American Association of Medical Assistants Endowment.

Commission on Accreditation of Allied Health Education Programs
1361 Park Street • Clearwater, FL 33756
1-727-210-2350 • www.caahep.org

Academic Calendar
Academic Calendars are located online at www.capecod.edu/web/academics/calendar

The College in Brief

Degrees Offered
The College offers Associate in Arts and Associate in Science degrees, and certificates in a variety of program areas. Advanced degrees are offered in partnership with other colleges and universities. Refer to page 18 for information on Bachelor's and Master's Degrees.

The Students
Approximately 4000 students enroll at the College each semester. Students range in age from 16 to 80, about 62% of the students are female, 21% are students of color, and 46% are 25 years of age or older. 85% of our students matriculate in a degree or certificate program and approximately 71% attend part-time.

The Faculty
Of the 69 full-time faculty members teaching at the College, 65% are women, 17% are educators of color while 29% hold Doctorates and 70% hold Master's degrees in their area of expertise. More than 190 part-time adjunct faculty with specialized knowledge and expertise contribute to the College’s commitment to excellence.

Location
The main campus in West Barnstable is located just off the Mid-Cape Highway, north of Exit 6 (the junction of Routes 6 and 132). The address is 2240 Iyannough Rd., West Barnstable, MA 02668.

The Hyannis Center is located at 540 Main Street, Hyannis, MA 02601.

Connecting to the College
College Web: www.capecod.edu
Online Telephone Directory: www.capecod.edu/directory
Telephone 1-508-362-2131 or Toll Free 1-877-846-3672
Admissions Office ........................................... ext. 4311
Adult Learner Services ........................... ext. 4040, 4345
Advising & Counseling Center ............... ext. 4318
Testing Center ................................................ ext. 4543
Box Office ................................................. ext. 4044
Bookstore .................................................... ext. 4022
Business Office .............................................. ext. 4123
Career Services & Experiential Learning ...... ext. 4688
Children's College ................................. ext. 4164
Coaches & Mentors .................................. ext. 4353
Disability Services (O'Neill Center) ............. ext. 4337
Financial Aid Office ................................. ext. 4393
High School Equivalency Test Center ........ ext. 4450, 4678
Hyannis Center ........................................ ext. 5000
Human Resources ...................................... ext. 4306
LD Support Services ................................. ext. 4317
Library ..................................................... ext. 4342
Life Fitness Center ..................................... ext. 4368
Online Learning .......................................... ext. 4040
Registration ............................................... ext. 4711
Student Immunization Records .................. ext. 4331
Student Life ............................................... ext. 4320
Transfer Counseling .................................... ext. 4316
Tutoring Center ........................................... ext. 4352
Veterans Services........................................ ext. 4478
WERC ..................................................... ext. 5011

Direct Dial
Hyannis Center ................................... 1-508-375-5000
Online Learning ........................................ 1-508-375-5040
Registration Office .................................. 1-508-375-4027
TTY ......................................................... 1-508-375-4027
Weather Hotline ........................................ 1-508-375-4070

FAX: Main Campus .................................. 1-508-375-4020
FAX: Registration ................................. 1-508-375-4084

Información en Español .............. 1-508-375-4091
Informação em Português ............. 1-508-375-4092
Assessment Statement
In keeping with Cape Cod Community College's commitment to excellent educational experiences and high-quality programs for its students, and consistent with practices at other institutions within the state and nationally, Cape Cod Community College routinely engages in the assessment of student learning at the course, program, institution, and system levels. The learning outcomes assessment process may include a variety of methods such as standardized tests, student survey and focus groups, campus developed instruments, and a review of student course and co-curricular work. In circumstances beyond the individual course level, the identity of the student will be protected. The student's name, grade or other identifying information will be removed before the student work is reviewed. Selected student work may be subject to review by a limited cohort of higher educational personnel, primarily faculty. Assessment of student learning is undertaken primarily for the purpose of improving student learning, curriculum development, instructional improvement, and enhancing student academic success. Assessment activities will have absolutely no effect on a student’s grade, academic standing, ability to transfer, or ability to be graduated. Cape Cod Community College will take all necessary steps to ensure the confidentiality of all student records and student work reviewed through this process in accordance with FERPA regulations.

Cape Cod Community College
Mission Statement
Student success is the first priority at Cape Cod Community College. As a teaching and learning community, we provide opportunities and pathways that encourage students to achieve their goals. We enrich our unique region through our work, partnerships and students’ achievements.

Cape Cod Community College
Vision Statement
CCCC will be an innovative center for academic excellence and community enrichment that champions student success.

Mission of the Community Colleges
The fifteen Massachusetts Community Colleges offer open access to high quality, affordable academic programs, including associate degree and certificate programs. They are committed to excellence in teaching and learning and provide academic preparation for transfer to four-year institutions, career preparation for entry into high demand occupational fields, developmental coursework, and lifelong learning opportunities.

Community colleges have a special responsibility for workforce development and through partnerships with business and industry, provide job training, retraining, certification, and skills improvement. In addition, they assume primary responsibility, in the public system, for offering developmental courses, programs, and other educational services for individuals who seek to develop the skills needed to pursue college-level study or enter the workforce.

Rooted in their communities, the colleges serve as community leaders, identifying opportunities and solutions to community problems and contributing to the region’s intellectual, cultural, and economic development. They collaborate with elementary and secondary education and work to ensure a smooth transition from secondary to post-secondary education. Through partnerships with baccalaureate institutions, they help to promote an efficient system of public higher education.

The community colleges offer an environment where the ideas and contributions of all students are respected. Academic and personal support services are provided to ensure that all students have an opportunity to achieve academic and career success. No eligible student shall be deprived of the opportunity for a community college education in Massachusetts because of an inability to pay tuition and fees.

History of the College
Cape Cod Community College was established in 1961, the second institution to open as part of what is now a 15 community college system in Massachusetts that resulted from the efforts of Senator Edward Carleton Stone.

Cape Cod Community College opened under the leadership of its first president, Irving Bartlett, in the building that is now the Barnstable Town Hall. One hundred sixty-six students from thirty-three communities enrolled in the College’s first class. There were five full-time faculty and six part-time instructors to greet them. These students were offered five terminal programs, as well as the transfer program. For the first two years, courses were offered in the evening in cooperation with the Massachusetts Division of University Extension.

In 1963, Cape Cod Community College’s first evening program found one hundred and thirty students enrolled in ten different degree credit courses. In the spring of 1963, the first summer session had enrolled one hundred and forty-five students from fifty colleges and universities.

Outgrowing its first home, in 1970 the College moved to its current location on 116 acres in West Barnstable, making it the first community college in the state to build a new campus. Under the direction of its second president, E. Carleton Nickerson, the College moved into five of the eight buildings designated for the new campus.

In 2006, the College opened the Lyndon P. Lorusso Applied Technology building, a state-of-the-art teaching and learning facility and the first LEED (Leadership in Energy and Environmental Design) certified green building ever built with state dollars.

It might be tempting to say that those first students of 1961 could never have imagined Cape Cod Community College as it is today, but it would not be true. They had a vision which was stated in an unsigned article in the December 1965 issue of the school paper, The Beacon.

"Reputations will be earned, traditions will come, just so long as we don’t lose sight of the dream and the idea. In time, our graduates will earn their place in the Arts, in the Sciences and Industry. In time, we will look back with great pride on the fact that many traditions enjoyed by future enrollees were started by us. In time, Cape Cod Community College will be our greatest pride because we helped to build it."

That vision is the legacy of the students at Cape Cod Community College.
Admissions Policy
Cape Cod Community College admits applicants to degree and certificate programs according to the Massachusetts Department of Higher Education’s “Open Door” philosophy. Each applicant is accepted to the College, on a rolling, first-come basis, if the applicant meets the eligibility requirements, has completed the application procedures, and a vacancy exists in the applicant's elected program of study. This policy does not apply to the College’s selective health programs. Refer to information on the selective health programs on page 6.

Eligibility Requirements for Admission
To be eligible for admission, an applicant must have graduated from an approved secondary school (high school) or received a state-issued high school equivalency certificate (HiSET/GED), prior to enrollment. Applicants who have not graduated or earned a HiSET/GED should contact the Admissions Office to discuss their options.

Three Easy Steps to Enroll in a Degree or Certificate Program
1. Submit a completed application form to the Admissions Office by the priority filing dates of: January 10 for the Spring semester
   August 15 for the Fall semester
2. Submit official high school transcripts/HiSET/GED diploma ONLY if you:
   • Are a current high school senior, or
   • Have not yet completed your HiSET coursework or examinations at the time you submit your application, or
   • Are an applicant to a selective health program (Nursing, Dental Hygiene, Diagnostic Technician, Medical Assisting, and Paramedic), or
   • Are an international applicant requiring an F-1 student visa
3. Submit official transcripts from all colleges or universities ever attended.

Home Schooling Policy: All home schooled students, without a high school diploma or HiSET/GED, are eligible to apply for admission to a degree or certificate program provided they have successfully completed an approved home school program in accordance with Massachusetts General Laws or the laws of their home state.

To determine whether a student has participated in an approved home school program, the student shall submit, with the application for admission, evidence that the home school program was approved by the student’s school district superintendent or school committee. Additionally, if the home schooled student is under the age of compulsory attendance, which is sixteen (16) years old in Massachusetts, a letter from the student’s school district superintendent or school committee is required stating that the student is not considered truant and would not be required to attend further schooling or continue to be home schooled if the student has completed his/her home school program before the age of sixteen (16).

The College reserves the right to limit or deny enrollment of any student under the age of sixteen (16) in a course or program based on a case-by-case consideration of a variety of factors, including but not limited to: the student’s maturity, life experience, placement test scores, prior education, course content, instructional methodology, and potential risks associated with participation in a particular course or program.

Transfer Applicants must submit official transcripts from all colleges and universities ever attended. Previous college performance will not impact admission to non-selective programs. Upon acceptance to the College, the Registrar’s Office will conduct a transfer credit evaluation of previous college-level course work and notify students, in writing, of accepted transfer credit. Refer to page 6 for the College’s transfer credit policy.

Permanent Resident Aliens must include their alien registration number on the Admissions application.

Applicants in the Process of Applying for a Green Card must submit either a Notice of Action form verifying their application for a green card or a letter from an attorney verifying application in process.

International Applicants: Additional documentation, criteria, and deadlines apply to international applicants seeking an I-20 form for an F-1 visa. Please contact the Admissions Office to receive an International Student packet or download the necessary forms at www.capecod.edu/web/admissions/requirements/international. This packet explains the additional admission requirements and contains additional forms that must be completed for consideration. Application deadline dates are June 1 for the Fall semester or November 1 for the Spring semester.

Non-Degree Seeking Students who do not intend to receive a degree or a certificate from Cape Cod Community College do not need to apply for admission. However, financial aid is NOT available to any student who has not applied for admission and enrolled in a degree or a certificate program. Non-degree seeking students can meet with advisors in the Advising and Counseling Center to help select the appropriate courses. Then, students can register for their desired courses at the Registration Office.

Re-admission to the College: Students who had once applied to the College and enrolled, but are no longer “matriculated” due to:
   a. graduation from the College, or
   b. an unenrolled status for two consecutive years, can follow the standard application procedures for re-admission. Re-applicants must check with the Admissions Office to determine whether or not they need to resubmit their high school and college transcripts. If a student is readmitted to the College or changes his/her degree or certificate program, the graduation requirements are those in effect on that date. Students who do not register for classes at the College after two consecutive semesters, exclusive of summer, will be required to see an advisor prior to registration.

Academic Dismissal: Refer to page 30.
Returning to the College after Withdrawing: Students who once officially withdrew from the College, but are still considered "matriculated" may simply register for courses and resume their studies.

Students who once officially withdrew and are no longer considered "matriculated" due to an unenrolled status for over two years may re-apply through the Admissions Office. Re-applicants must check with the Admissions Office to determine whether or not they need to resubmit their high school and college transcripts. If a student is readmitted to the College or changes his/her degree or certificate program, the graduation requirements are those in effect on that date.

Fresh Start Option: Refer to page 31.

Selective Health Program Applicants: Applicants interested in applying to the Nursing, Dental Hygiene, Diagnostic Technology, Medical Assisting, or Paramedic programs at Cape Cod Community College must complete additional requirements and will be considered for their program of choice on a selective basis.

Interested applicants may obtain detailed requirement listings for the Nursing, Dental Hygiene, Medical Assisting, and Paramedic programs in the Admissions Office. Applicants to the Nursing and Dental Hygiene programs are encouraged to attend an information session. Medical Assisting and Paramedic students must attend an information session. Schedules of upcoming information sessions are available at www.capecod.edu/web/admissions/visits. Diagnostic Technology and Tri-level Nursing Assistant / Home Health Aide applicants should call 1-508-362-2131, ext. 4452 to sign up for a required information session.

Criminal Offender Record Information and Sex Offender Registry Information Checks: Refer to Institutional Policies on page 14.

Dual Enrollment Program: High School Students Taking College Courses
Consistent with the mission of the Department of Higher Education, Cape Cod Community College seeks to work closely with area high schools. Qualified high school students can earn both high school and college credits through the Dual Enrollment Program, authorized in the Education Reform Act of 1993. Eligible students will be at least 16 years of age and be recommended by their teacher, guidance counselor or principal. For the past several years Cape Cod Community College has been eligible to participate in the Commonwealth Dual Enrollment Program, administered by the Massachusetts Department of Higher Education. This program provides limited grant funding to pay tuition and fees for one course for a small group of eligible high school students. For further information, contact the Admissions Office at 1-508-362-2131, ext. 4311.

Secondary Post Secondary Career Vocational Technical Education Linkage Consortium (CVTE)
Articulated courses K-12 are high school courses or programs of study which have been reviewed, whether locally at Cape Cod Community College and/or through statewide agreements, and meet the outcomes and demonstrate the rigor of a college course(s). The program of study is delivered at the high school with high school faculty. The student, upon graduation from the high school and enrolling at CCCC, is awarded the credit provided the student has earned a grade of 80 or B in the course or courses that match the articulated course(s) and a 2.0 overall on a 4.00 scale. Courses are then entered on the College transcript. (Contact point for articulated courses is your high school guidance counselor.) Funding for this program provided by allocations to the College from the Massachusetts Department of Elementary and Secondary Education (DESE) through the Carl Perkins Act of 1998. For more information, call 508-362-2131 ext. 4353, visit www.capecod.edu/web/k12/tech_prep or visit the CVTE Linkage, Tech Prep office located in Maureen M. Wilkens Hall, Room 234.

Transfer to Cape Cod Community College
Transfer credit to the College is determined on an individual basis using these guidelines:
• Only comparable course work from an accredited institution or a college which is a candidate for accreditation will be eligible for transfer credit;
• Only grades of C (2.0 on a 4.0 scale) or better will be considered for transfer;
• Transfer credits will be accepted in the number established for that course by the college at which those credits were earned. If the transferring institution uses a credit system different from that of the College, the Registrar of Cape Cod Community College will convert the credits;
• College Level Examination Program (CLEP) credits will be accepted in accordance with College policy;
• Students who score three (3) or better on the College Board Advanced Placement examinations may be granted College credit. An official score report must be sent to the Registrar of the College.
Admissions

- International Baccalaureate Diploma will be recognized for up to 30 semester hours of credit. Higher level examination results with a score of 4 or higher will be granted transfer credit.
- In most cases, credits will be accepted without a time limit from any regionally accredited institution. In certain courses where a program or a department requires that current knowledge is essential, a time limit may be imposed on the applicability of earned credit toward satisfying a degree requirement; such a time limit must be approved by the Curriculum and Programs Committee, and must be indicated in the catalog of the College. If the designated time limit has been exceeded, credit will be granted in either of the following circumstances:
  a. the student successfully passes a CLEP test for the course or, in the absence of a CLEP test, passes a Department Challenge Examination, or
  b. the student submits a waiver request and receives approval from the appropriate department;
- A minimum of 24 credits must be completed at Cape Cod Community College in order to earn a degree.
- MassTransfer students transferring from participating Massachusetts community colleges, state colleges or universities to Cape Cod Community College are guaranteed transfer of credits through MassTransfer, the new transfer program for the state of Massachusetts. Students who complete the 34-credit MassTransfer block (see page 16 for more details about MassTransfer or go to www.mass.edu/masstransfer) at any of the participating institutions with a 2.0 or higher GPA will be guaranteed the full-transfer of those credits into an Associate in Arts degree. The CCCC General Education requirements will be satisfied by the 34-credit MassTransfer block.

Students transferring into an Associate in Science degree will satisfy the 21-23 credits of General Education requirements unless a specific A.S. degree requires coursework that is not in the student’s 34-credit MassTransfer block. MassTransfer block credits that do not satisfy General Education requirements may be used to satisfy general education electives or unspecified elective credits in an Associate in Science degree.

The VALOR Act Academic Credit Evaluation Policy
In accordance with the Valor Act, Cape Cod Community College (College) uses the ACE guide to the Evaluation of Educational Experience in the Armed Services as the primary method for evaluating and awarding academic credit for military experience, training, coursework, and experience. In addition, the College also evaluates CLEP, DANTES Subject Standard Test, and prior learning assessment. Questions related to the transfer of military credits can be directed to the Office of the Registrar or visit the Cape Cod Community College website at www.capecod.edu/web/veterans.

Science Transfer Credits
Students who are transferring in credits for science courses that do not fit the traditional four-credit format (3 credits lecture, 1 credit laboratory) may be permitted to take only the laboratory portion of a Cape Cod Community College science course that closely matches the transferred course. Refer to Laboratory for Transfer Students, page 181, for a detailed description of the conditions that must be met in order to enroll in one of these special laboratory sections.

Basic Skills Assessment
Although Cape Cod Community College has an open admission policy, appropriate skill levels are needed for success in any program of study and are prerequisites to enrollment in many introductory courses at this college. Therefore, the College administers skills assessments in English, reading, and mathematics. Matriculated students are required to take these skills assessments as part of their scheduled assessment/advising/registration appointment prior to their first semester of classes. During this appointment each student meets with an academic advisor to develop an appropriate academic plan. Students are advised to select and schedule appropriate academic courses based on their assessment results and individual circumstances. Students may retest in one or more subject areas (English, Reading, and Math) one time only. Non-matriculated students who wish to enroll in courses that have an identified prerequisite skill level are required to take the skills assessment test before registering for the class. Students may enroll only in courses for which they are able to demonstrate the required entry level competency. Cape Cod Community College will provide appropriate developmental courses and experiences for students who have demonstrated need in English, reading, and mathematics. Developmental education courses, although credit bearing, may not be used to fulfill associate degree requirements.

Test results remain valid for three years. Students are required to re-take the skills assessment unless current (less than three years old), valid, comparable information is available.

The Testing Center is located in the Grossman Commons, Room 204.1-508-362-2131 ext. 4543.

Immunization Requirements - Refer to page 14.
Visit www.capecod.edu/web/academics/policies for the complete policy on Immunization Requirements.
Visit www.capecod.edu/web/registrar/immunization for Immunization FAQ and downloadable forms.
Tuition and Fees

Tuition and Fees Policy
The financial requirements of the College, changing costs, state and legislative action, and other circumstances may require adjustments in the tuition and fees stated. The College reserves the right to make such adjustments in these charges as may from time to time be required by the Department of Higher Education or the Board of Trustees. All obligations to the College must be paid prior to the beginning of classes each semester. Refer to Academic Calendar for due dates. The full-time tuition and fees listed here are based upon 30 credit hours of enrollment per year.

Full-time Tuition and Fees (per year)*
Massachusetts residents $5,265.00
Non-residents $11,445.00

Part-time Tuition and Fees (per credit hour)*
Massachusetts residents $175.50
Non-residents $381.50

Other Fees*
Allied Health students drug test fee $50
Assessment retest fee $7 per test
Books and supplies (estimate) $1200 per year, full-time
Dental Hygiene Program fee $100 per year
EMT/Paramedic fee $150 per year
Facility fee $2.00 per credit
Health Insurance $1536 estimate per year (9 credits or more)
Health Sciences fee $25 per credit
Dental Hygiene, EMT/Paramedic, Medical Assisting, Nursing Nursing Program fee $400 per year
Science Labs fee $25 per course
Other courses may also require special fees

Tuition Waivers
Massachusetts residents may be eligible for tuition waivers under the following categories:
• sixty years of age or older
• a Native American
• a client of the Massachusetts Rehabilitation Commission or the Commission for the Blind
• an active duty service person
• a Veteran of the U.S. military
• an adopted or former foster child through the Department of Social Services (until age 25)
• a recipient of either the Adams Scholarship or the Stanley Koplik Certificate of Mastery for MCAS achievement
• a surviving child or spouse of the September 11, 2001 tragedy.

Tuition waivers cover the amount of tuition only, which is approximately 15% of the class price. Recipients are responsible for all remaining class fees. Applications are available in the Financial Aid Office.

Veteran’s Benefits
Cape Cod Community College is approved by the Department of Veterans’ Affairs to offer educational training to veterans and their dependents including all chapters of the GI Bill. Additionally, the Commonwealth of Massachusetts provides its Veterans, National Guard members, and Active Duty military stationed in Massachusetts with tuition waivers. For Veterans and Active Duty military, the waiver is approximately a 15% discount on each class. MA National Guard members may receive full tuition and fee coverage. Questions regarding educational benefits should be directed to the Office of Military and Veterans Services at 1-508-362-2131 ext. 4478.

Tuition Refund Policy
Students who withdraw from classes may be due a refund of their tuition and fees. Please check with the College Business Office regarding the status of your account. Full refund of tuition is usually allowed before classes start and during the first week of the semester. The complete Tuition Refund Policy can be found online at www.capecod.edu/web/busoff. Financial aid funds will be paid based on the number of days enrolled. Withdrawing during the first nine weeks of the semester will impact the amount of funds available to pay tuition and fees.

Massachusetts National Guard Reimbursements
If you serve in the Massachusetts National Guard, you may be eligible for 100% tuition and fee reimbursement. Request a Certificate of Eligibility online at mro.chs.state.ma.us, then submit it to the Financial Aid Office.

Past due accounts are referred to collection agencies and to the State for tax intercept. Past due accounts will be charged legal fees, plus collection company fees and other costs. Collection costs can be as high as 25% of the past due balance.
Sources of Assistance
Student financial aid provides monetary assistance to help many students pay for educational expenses. There are three basic categories of financial aid available.

- Grants and scholarships—forms of assistance that do not have to be repaid;
- Work Study—part-time employment at the College allows students to earn funds;
- Loans—repayment of most loans begins after the student is no longer enrolled in classes.

The following financial aid programs are available at Cape Cod Community College.

Federal Aid
Federal Pell Grant
Pell Grants are federal funds which do not have to be repaid. The maximum grant for 2015-2016 will be $5975 per academic year. The amount of the grant varies according to federal need calculations and the student’s enrollment.

Federal Supplemental Education and Opportunity Grants (SEOG)
The Financial Aid Office awards SEOG to those students who qualify for the Federal Pell Grant and who demonstrate the greatest financial need. Generally, awards range from $200 to $1000 per year. This grant does not have to be repaid. The limited funds are awarded on a first-come, first-served basis.

Federal Work Study (FWS)
FWS is a federal program which allows students with financial need to work on campus. Students work an average of ten hours per week and in return receive a paycheck every other week. Most students will earn up to $2400 per academic year. Recipients must be enrolled at least half-time.

Federal Direct Stafford Loan Program
This loan program, which requires at least half-time enrollment, is available in two forms: subsidized and unsubsidized. Subsidized loans are dependent upon financial need and are limited to $3500 for students who have earned less than thirty graduation credits (first-year students). Second-year students with thirty or more graduation credits may borrow up to $4500. Subsidized loans have deferred repayment and do not accrue interest while students are enrolled at least half-time and for six months after dropping below half-time status. Unsubsidized loans are also available and provide up to an additional $2000-$6000 to qualifying students. Unsubsidized loans accrue interest while the student is in school. Detailed information on direct loans is available from the Financial Aid Office.

Federal Parent Loan for Undergraduate Students (PLUS)
Parents borrow this education loan on behalf of a child enrolled at least half time. PLUS is available each year for the cost of education less any other financial aid the student receives. Parents begin to repay this loan while the student is in school. For more information on interest rates and credit qualifications, please refer to www.studentloans.gov.

State Aid
MassGrant - The State Office of Student Financial Assistance awards these need-based grants to Massachusetts residents enrolled full-time. Applications must be received by May 1 prior to the start of the school year (May 1, 2015 for the 2015-2016 academic year). This grant of up to $900 per academic year does not have to be repaid.

MA Access Cash Grant - The Financial Aid Office awards these funds to Massachusetts residents, enrolled at least half-time, with financial need. Amounts vary, but will not exceed the cost of tuition and fees. Funds are awarded on a rolling basis. This grant does not have to be repaid.

MA Part-Time Grant - These awards are provided to students who qualify for the Federal Pell Grant and who enroll in 6 to 11 credits per semester. The amounts range from $200 to $400 per year, are awarded on a rolling basis, and do not have to be repaid.

MA Need-Based Tuition Waiver - These funds are for Massachusetts residents who have demonstrated financial need and who are enrolled in state-supported classes (sections 1-39). The Financial Aid Office determines the amount, but the award will not exceed the cost of state tuition. Waivers do not have to be repaid.

Categorical Tuition Waiver - Tuition waivers are available for the categories listed on page 8. Tuition is approximately 15% of the class price. Recipients must reside in Massachusetts for the 12 months prior to the start of school and be maintaining satisfactory academic progress. Recipients cannot be in default on federal or state education loans. Apply in the Financial Aid Office.
Eligibility Requirements
To be considered for the financial aid programs listed here, students must meet all of the requirements below:
• be a United States citizen or eligible non-citizen,
• be accepted into a College degree or qualifying certificate program,
• be enrolled for the appropriate number of credits per semester. Most aid programs require at least half-time enrollment (six credits per semester). Exceptions: some Federal Pell recipients receive the funds for only one class; the MassGrant program requires full-time enrollment (twelve or more credits).
• maintain satisfactory academic progress as outlined on the College's website,
• not be in default or owe a refund on any federal grant or loan programs,
• provide all documentation required to complete the financial aid application, and
• demonstrate financial need for those programs awarded based on need.

Financial Aid
CCC Gap Fund
The College Financial Aid Office awards these funds to needy students who may not qualify for federal or state grants. Award amounts vary and require at least half-time enrollment. To apply, complete the Free Application of Federal Student Aid (FAFSA). The Gap Fund does not require repayment.

College Scholarships and Grants
Each Spring the Cape Cod Community College Educational Foundation awards scholarships to incoming, continuing, and graduating students. Recipients are selected based on criteria established by the scholarship donors and the academic qualifications of the applicants. Applications are available online at www.ccccfoundation.org. The scholarship amounts vary.

Whitehouse Scholarship
This fund is used to provide assistance to the Evening Nursing program and the LPN in Transition course. Apply by completing the Free Application for Federal Student Aid (FAFSA). Other students with exceptional circumstances may receive awards at the discretion of the Financial Aid Director.

Application Procedures
Students must complete the Free Application for Federal Student Aid (FAFSA) for all federal and state grant, work study, and loan programs. The form is available online at www.fafsa.gov in English or Spanish. Complete the form after January 1, 2015, for the 2015-2016 academic year. While the College accepts applications throughout the academic year, students should apply before May 1 for the Fall semester to allow sufficient processing time. The application process takes approximately two to four weeks.

The federal aid processing center selects some students for a process called income verification. The Financial Aid Office contacts these students requesting additional documentation. Some students may also be asked to provide additional information to resolve discrepancies in their aid applications.

Loan programs require that students complete "entrance counseling" and a separate loan promissory note. Details are available in the Financial Aid Office.

Notification of Awards - Students receive an award letter providing the details of their financial aid package once their file is complete. The letter lists the source and amount of each type of assistance for which the student qualifies. Award letters usually begin to be mailed starting in May for the Fall semester.

Disbursement of Funds - Grants, waivers, scholarships, and loans are disbursed toward tuition, fees, and other charges approximately six weeks into the semester. If the total aid exceeds the charges, the Business Office mails a check to the student for the excess funds.

Federal Work Study checks are issued directly to the student every other week according to the number of hours worked.

Withdrawals - If a student withdraws or is reported as absent in all classes, the amount of financial aid disbursed may need to be refunded. Recipients earn financial aid based on the total days attended. Students must attend beyond the 60% point in the semester (beyond 9 weeks) to earn all financial aid.

Veteran’s Benefits (see page 8)
Student Resources

**Academic Support Services**

Students enrolled in credit courses may take advantage of the following services to assist them with the successful completion of their course work.

**eTutoring:** The College participates in an online tutoring program, giving students access to online tutoring every day in math, writing, accounting, statistics, research, and the life sciences. This service is offered free of charge to students enrolled in credit courses. For more information call 1-508-362-2131, ext. 4352 or go to [www.capecod.edu/web/tutoring/etutoring](http://www.capecod.edu/web/tutoring/etutoring).

The Math Learning Center is available to students who want to study in small groups; work on mathematics homework with assistance available; clear up a specific problem; work with a tutor; or, refer to other textbooks covering similar information. The Math Learning Center, located in Science 112, is staffed by learning specialists and peer tutors.

The Reading and Writing Resource Center is staffed with learning specialists and peer tutors, offers drop-in tutoring for students looking for assistance in their writing and reading assignments as well as with MLA, APA, Chicago and other forms of documentation. The Reading and Writing Resource Center is also an active work space for those in the process of writing papers. Writers at all skill levels and at all stages of the writing process are welcome. The Reading and Writing Resource Center is located in Maureen M. Wilkens Hall, Room 108.

The Tutoring Center provides students academic support to help them succeed at Cape Cod Community College. Tutors provide assistance in a variety of subjects in one-to-one and small group settings. The Tutoring Center is located in Maureen M. Wilkens Hall, Room 111. Call 1-508-362-2131, ext. 4352 for more information.

Workshops are conducted on the preparation of research papers, study skills, note taking, time management, overcoming math anxiety, the transfer process, memory and test-taking skills.

**Academic Advising**

Academic advising is an important component of the college experience that contributes significantly to student success. Academic advisors assist students in the development of meaningful educational plans that are compatible with the student’s goals and abilities. In addition to academic planning, advisors inform students about college programs, courses and policies, recommend campus resources, and discuss academic concerns. However, the ultimate responsibility for making academic decisions rests with the individual student. In an effort to help students better reach their goals, all matriculated students are required to meet with their assigned academic advisor prior to registering for classes. Students are assigned to an advisor who may be a faculty member, a professional advisor, or the Advising Center.

The Advising and Counseling Center, located on the second floor of the Grossman Commons Building, Room 203C, is available on a walk-in basis to students who have been assigned to the Center, or to students seeking guidance and support. If you are assigned to the Advising Center, that means you can work with any of the professional advisors that work in the Center. For more information, call 1-508-362-2131 ext. 4318 or [www.capecod.edu/web/advising](http://www.capecod.edu/web/advising).

**Accelerated Career Training**

Introduced to CCCC in 2012 to work with unemployed or underemployed adults, the Accelerated Career Training (ACT) program assists interested students in acquiring training and credentials in specified career disciplines to obtain gainful employment. The stackable specialized training programs lead to certificates in: Medical Receptionist, Medical Coding and Billing, Bookkeeping Clerk, Computerized Accounting, and Administrative Assistant; General Office Administration. The accelerated seven week course format affords students the opportunity to complete all required courses in these stackable certificate programs within a calendar year. College staff will guide participants as they progress towards program completion. Assistance with internship linkages and job placement is provided. Completion of the certificates can also extend to completion of related stackable Associate in Science degrees. For more information contact the ACT Career Advisor at 1-508-362-2131 ext.4662 or the Advising Center at ext. 4318.

**Adult Learner Services**

As many adults return to school, community colleges are tailoring programs and providing support services tailored to their developmental needs. The Adult Learner Center, located in the Maureen M. Wilkens Hall, Room 212 assists adult learners with the transition to college and offers services focused on maximizing their academic experience. The Center provides adult students with academic and career advising; student success workshops; tutoring; peer mentoring; resume preparation assistance; and job placement. To make an appointment visit our web site at [www.capecod.edu/adult-learner](http://www.capecod.edu/adult-learner) or contact the Advising and Counseling Center at 1-508-362-2131 ext. 4318.

**Advantage/TRIO/SSS Program**

The Advantage/TRIO/SSS Program is a Student Support Services program that offers comprehensive services to its students. The staff includes counselors, tutors, and peer mentors who understand academic challenges that college students face when completing an Associates degree. There are eligibility requirements for students to participate in this program. For those students who qualify, free services include: individualized tutoring, career and transfer counseling, academic advising, transfer trips to local universities, specialized workshops, career preparation, academic planning, and cultural events.

For over twenty years, the U.S. Department of Education has awarded Cape Cod Community College a grant to service a select group of students who make up the Advantage/TRIO/SSS Program, and we are honored to serve them. The program helps students adjust to college life and prepares them for academic success. The Advantage/TRIO/SSS Program office is located in Maureen M. Wilkens Hall, Room 221. For more information, call 1-508-362-2131, ext. 4321 or visit [www.capecod.edu/advantage](http://www.capecod.edu/advantage).
Career Services and Experiential Learning

Career Services and Experiential Learning (CSEL), located in the Life Fitness Complex, Room C110, provides a variety of services for students, including career development counseling, for undecided students, and job search preparation; resume and cover letter writing, interviewing skills, networking, and the use of technology and social media in career placement. Internship and co-op information, as well as placement assistance, is also available. CSEL handles coordination of the Prior Learning Assessment (PLA) process, through which students can earn credit for prior learning from life experience. The Student Employment Office also provides drop-in resume critiques and provides opportunities to connect with employers at on-campus events. For more information visit www.capecod.edu/career.

Coaches & Mentors

Coaches & Mentors is a comprehensive student support services program that provides assistance to students from the first day they arrive on campus to the day they graduate. Services include individualized support, academic advising, career counseling, study skills instruction, workshops, and preparation to launch a successful job search. This program is especially beneficial for adult re-entry students, students with disabilities, students with limited English proficiency and for students who were enrolled in a non-college bound concentration in high school.

For over twenty-nine years, Coaches & Mentors has helped students develop a positive connection to community college life. The program prides itself on supporting each student to reach his/her potential through a caring and supportive environment. Funding for this program is provided by allocations to the College from the Massachusetts Department of Elementary and Secondary Education (DESE) through the Carl Perkins Vocational and Technical Education Act of 1998. For more information, call 1-508-362-2131, ext. 4353 or online at www.capecod.edu/web/coaches or visit the Coaches & Mentors office located in Maureen M. Wilkens Hall, Room 234.

First Year Success

First Year Success advising provides students, enrolled for the first time in college, with a comprehensive academic support system to help answer questions and navigate challenges that students face during the first year. Academic advisors assist students with the creation of a personalized plan for academic success. First Year Success helps students discover the varied resources available at the College that support their academic concentration and completion. Services include helping students develop college readiness skills, creating an academic plan, goal setting, career exploration, and other engaging activities. First Year Success is located in the Advising Center in Upper Commons, Room 203. For further information, call 1-508-362-2131 ext. 4905.

Life Fitness Center

The Life Fitness Center provides the opportunity and environment to develop and practice positive health, fitness and recreational behaviors. The Center fosters programming consistent with the stated needs and interests of the student body and the general College community. The Life Fitness Center is located on the lower level of the Life Fitness Center Complex. For more information, call 1-508-362-2131, ext. 4368.

Military and Veterans Services

At Cape Cod Community College, it is our privilege to assist veterans in taking advantage of the numerous educational opportunities available through the GI Bill and other programs. Regardless of whether you are a new student, a returning student or transferring to our campus from another institution, we are here to help you find the resources you need to make the most out of your time at CCCC.

For more information about services for veterans and military family members contact Bill Hunt, Military and Veterans Services Advisor, bhunt@capecod.edu 508-362-2131 ext. 4478 and Sherry Andersen Director, Financial Aid, VA Certifying Official, sanderson@capecod.edu 508-362-2131 ext. 4391 or visit www.capecod.edu/web/veterans. The Veterans Center is located on the 2nd floor of the Wilkens Library, Room 202.

O’Neill Center for Disability Services

The O’Neill Center for Disability Services provides accommodations to qualified students with documented disabilities. The O’Neill Center works collaboratively with faculty and other campus resources to provide a wide range of support services which may include extended time for testing, academic counseling, tutoring, note taking, as well as adaptive computing. Students are encouraged to meet with a disability specialist before the start of their first semester to develop a support service plan. The O’Neill Center is located in the Maureen M. Wilkens Hall, Room 222. For more information, call 1-508-362-2131, ext. 4337.

The Inclusive Concurrent Enrollment (ICE) Program offers an opportunity for public high school students with significant intellectual disabilities to participate in the college experience while still in high school. These students typically have not passed MCAS or have difficulty passing MCAS. Participants have a unique opportunity to enroll in credit or non-credit courses alongside students without disabilities. They can join in college activities and events as well as make use of college facilities. ICE is located in Maureen M. Wilkens Hall, Room 209. For more information call 1-508-362-2131 ext. 4485 or visit www.capecod.edu/ICE.

Starfish Early Alert Retention Program

The Starfish Program is an internal communication tool used by students, instructors and advisors to collect and manage information about individual academic progress. The program is designed to enhance communication between and among students and their instructors, advisors, and support services. Starfish is used to help students reach their academic goals and plan for continuous improvement by having an integrated and efficient way to track academic progress. For more information, call the Advising Center at 1-508-362-2131 ext. 4318.
Testing Center
The Testing Center, located in the Grossman Commons Building, Room 204, administers the College's basic skills assessment program. The Center also schedules and administers: CLEP (College Level Examination Program), GRE (Graduate Record Exams, subject only), and HiSET (High School Equivalency Test). For more information, call 1-508-362-2131, ext. 4543.

Transfer Office
Students who plan to transfer are encouraged to meet with the Transfer Advisor as well as with their assigned advisor, to schedule courses at the College which meet the Freshman and Sophomore requirements of Bachelor’s programs at transfer institutions. The Transfer Advisor is also available to assist students with all facets of transfer, beginning with the exploration of transfer institutions through the application process. The Transfer Advisor is located in the Grossman Commons, Room 206-E and can be reached at 1-508-362-2131 ext. 4316.

Cape Cod Community College participates in the MassTransfer Program. MassTransfer is a single, streamlined policy to simplify the transfer process in the Massachusetts State system, clearing the way for greater student access and success. For more information about MassTransfer, please see page 16.

Wilkens Library
The Frank and Maureen Wilkens Library is an attractive, four-story building located between the Nickerson Administration building and the Maureen M. Wilkens Hall. The Library’s collections include books, reference materials, journals, local and national newspapers, E-resources, video recordings, DVDs, and other audiovisual materials. The William Brewster Nickerson Cape Cod History Archives house an extensive Cape Cod history collection, including ship’s logs, diaries and other manuscript material.

The Wilkens Library provides students access to online indexes and full-text databases, containing articles from thousands of scholarly and professional journals and newspapers in all disciplines. The Library is a Cooperating Collection of the Foundation Center. The facility provides computers, group study rooms, areas for quiet study, and a networked classroom for information literacy instruction. The professional and highly qualified staff are readily available to help library patrons locate materials and information for class assignments and research, access computerized information resources, borrow materials from other libraries, and utilize audiovisual information and equipment. Librarians actively work with faculty to provide information literacy instruction to students and the community.
Absence Due to Religious Beliefs
Under the Massachusetts General Laws, Chapter 151C, any community college student who cannot attend class or take an exam, study or fulfill work requirements on a particular day, due to his/her religious beliefs shall be excused from such obligations. The student must be provided with an opportunity to make up such exam(s), study or work requirements; provided, however, that such make-up exam(s) or work does not create an unreasonable burden upon the institution. The student may not be charged for such make-up opportunities, nor may he/she be subject to adverse or prejudicial effects for availing him/herself of the provisions of the law.

Affirmative Action
Cape Cod Community College is an Affirmative Action/Equal Opportunity employer. We encourage applications from individuals who will enrich and contribute to the cultural and ethnic diversity of our College. Cape Cod Community College does not discriminate on the basis of race, color, national origin, sex, disability, religion, age, veteran status, genetic information or sexual orientation in its programs and activities as required by Title IX of the Educational Amendments of 1972, the Americans with Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964 and other applicable statutes and College policies. Cape Cod Community College prohibits sexual harassment, including sexual violence.

Inquiries concerning the application of anti-discrimination laws may be referred to the Affirmative Action Coordinator, Title IX Coordinator, Coordinator of Disability Services, the Massachusetts Commission Against Discrimination or the United States Department of Education’s Office for Civil Rights. Inquiries may be directed to: Affirmative Action Office • 1-508-362-2131, ext. 4307 O’Neill Center for Disability Services • 1-508-362-2131, ext. 4337 Title IX Coordinator • 1-508-362-2131, ext. 4618

For purposes of filing federal charges of discrimination under Title IX of the 1972 Educational Amendments, Section 508 of the 1973 Rehabilitation Act, or Title VI of the 1964 Civil Rights Act, students may contact: Federal Office for Civil Rights McCormack Post Office and Court House Post Office Square • Boston, MA 02109

Campus Safety Disclosure
In accordance with the Student Right to Know Act (Title 1 of Public Law 101-542), the Campus Safety Report is available online at www.capecod.edu/web/public-safety or upon request from the Department of Public Safety.

Computer Literacy
Students need basic computer literacy to fully benefit from their educational experience at CCCC. Official communication is via student email. Students need to know how to navigate the Internet, use the Campus Web, access the Learning Management System (Moodle), and use computer applications in courses. CCCC offers classes, workshops, and tutoring to help students master working with computers.

Criminal Offender Record Information and Sex Offender Registry Information Checks
In order for a student to be eligible to participate in an academic, community or clinical program that involves potential unsupervised contact with children, the disabled, or the elderly, the student may be required to undergo a Criminal Offender Record Information (CORI) check and/or a Sex Offender Registry Information (SORI) check. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible to participate in such activities. The College is authorized by the Commonwealth’s Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178B, to access CORI records. Sex Offender checks shall be performed pursuant to Massachusetts General Laws, Chapter 6, Sections 178C-178P.

For more information regarding the College’s CORI/SORI check process, please contact the Dean of Enrollment Management and Advising Services at 1-508-362-2131, ext. 4315.

Immigration and Naturalization
Under the Massachusetts General Laws, Chapter 15A, Section 9, public institutions of higher education in the Commonwealth of Massachusetts are required to notify the United States Citizenship and Immigration Services (USCIS) immediately of the name and last known address of any international student requiring a student visa whenever such student does not enroll, enrolls for less than full-time, withdraws or graduates from the institution. The public institutions of higher education shall forward copies of any such USCIS notifications to the Department of Higher Education.

Immunization Requirements for College Students
Under the Massachusetts General Law, 105 CMR 220.600, in order to be registered at an institution of higher learning, every (1) full-time student (12 credits or more) and (2) every full-time or part-time student in a health science program who is in contact with patients, must present a physician’s certificate that such student has received specific immunizations. Visit www.capecod.edu/web/academics/policies for the complete policy on Immunization Requirements.

Sexual Harassment and Sexual Violence
Zero Tolerance Statement
Title IX makes it clear that violence and harassment based on sex and gender is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here: www.capecod.edu/web/campus-safety/.

For more information or to make a report contact: Title IX Coordinator • 508-362-2131, ext. 4618 Title IX Coordinator/Affirmative Action Officer • 508-362-2131, ext. 4307 Director of Campus Police • 508-362-2131, ext. 3333
Institutional Policies page 2 of 2

Student Absences for Pregnancy or Childbirth
In accordance with Title IX of the Education Amendments of 1972, absences due to pregnancy or related conditions, including recovery from childbirth, shall be excused for as long as the student’s doctor deems the absences to be medically necessary. Visit www.capecod.edu/web/academics/policies for the complete policy.

Student Code of Conduct
The Student Code of Conduct can be found in the Student Handbook or at www.capecod.edu/web/studentlife/code-of-conduct. The Student Code of Conduct Officer is the Dean of Learning Resources and Student Success, located in Maureen M. Wilkens Hall, Room 216A and can be reached at 1-508-362-2131 ext. 4345.

Student Grievance
Student Grievance procedures can be found in the Student Handbook or at www.capecod.edu/web/studentlife/student-grievance-procedure. The College’s Student Grievance Officer is the Dean of Learning Resources and Student Success, located in Maureen M. Wilkens Hall, Room 216A and can be reached at 1-508-362-2131 ext. 4345.

Student Records
Confidentiality of Student Records
Cape Cod Community College complies with the Family Educational Rights and Privacy Act of 1974 (Buckley Amendment) which governs access to and release of information contained in student educational records. Students have the right to review their educational records and seek correction of errors they may find in their records. Students have the right to file written complaints with the U.S. Department of Education, Family Policy Compliance Office, concerning alleged violations of this act. Release of Educational Records: Personally identifiable information may be released under certain circumstances, as provided by law. These include but are not limited to the following:

1. College personnel may have limited access to student records for legitimate educational or administrative purposes.
2. Confidential student records may be released pursuant to a court subpoena. However, the Registrar shall use professional judgment in determining which information to release and shall so notify the student in writing prior to releasing the requested information.
3. Medical and counseling records are different from educational records, and access is more limited. Such records will not be released without the student’s prior consent except as provided by law.
4. Information regarding the student, including educational records, may be released to parents of students who are claimed as dependents on their income tax returns.
5. A log or record will be kept for all students documenting release of that student’s records. No entry in the record need be made if access is provided by federal or state law.
6. The College may refuse to release transcripts for such reasons as unpaid financial obligations to the College.
7. The College may refuse to release any personally identifiable information, the disclosure of which may constitute an unwarranted invasion of personal privacy.

Students seeking additional information regarding their rights under the Family Educational Rights and Privacy Act should contact the Registrar’s Office or the Vice President of Academic and Student Affairs Office.

Student Right to Know Disclosure: Transfer and Graduation Rates
The Student Right-to-Know and Campus Security Act (P.L. 101-542) mandates that all institutions participating in Title IV or HEA programs disclose to current and prospective students four-year average graduation and transfer-out rates. In compliance with these mandates, Cape Cod Community College tracks all first-time, full-time, degree or certificate-seeking (FTFTDS) students. Average rates for the last four cohorts of FTFTDS students are as follows: 14% graduated, 19% transferred (without graduating). Rates are based on status at 150% “time-to-credential” (i.e., 1.5 years for certificates, and three years for degrees). These percentages of FTFTDS students represent approximately 10% of our student body.

Student Directory Information
Cape Cod Community College has designated certain types of information as directory information. This includes the student’s name, home town, student ID, email address, earned degrees or certificates, and academic honors. Students may restrict release of this information, if they wish, and this data will not be released except as authorized by law. Requests to restrict the release of directory information shall be made in writing to the Registrar. The College assumes that failure of any student to do so indicates approval for release of the information indicated above.

Notwithstanding the College’s definition of directory information, the Department of Defense, pursuant to the Omnibus Consolidated Appropriations Act of 1998, identifies the following student information as directory information: student names, addresses, and telephone listings; and if known, student ages, levels of education, major. If an eligible student chooses not to exercise his/her aforementioned right to refuse to permit the College to designate some or all of those types of information about the student as directory information, the College will release to the Department of Defense, or an agency thereof, that student information which the Department of Defense has designated as directory information. This may result in the non-consensual release of students personally identifiable information by the College to the Department of Defense. When student information is released pursuant to the Department of Defense request, notice of the request and release of student information in accordance therewith, will be posted in a conspicuous location in the College Registrar’s Office for the period of one academic year. All requests for student directory information shall be made in writing to the Registrar who shall review the request for compliance with all state and federal laws and regulations. The College will not release any student information over the phone or to persons making inquiry in person.

Voter Registration
Under the Massachusetts General Laws, Chapter 51, Section 42E (Section 17 of Chapter 475 of the Acts of 1993) effective January 1, 1995, affidavit of voter registration forms are available at the Registration Office. See the Registrar on the first floor of the Nickerson Administration Building for details.
Transfer Information

Transfer to Other Colleges
Graduates and other former students at the College have been accepted throughout the nation for transfer admission to a full range of bachelor's institutions, and many have continued their education even further in graduate and professional programs.

Students who plan to transfer are encouraged to meet early on in their program with the College's transfer advisor, as well as with their advisor, to schedule courses at the College which meet the Freshman and Sophomore requirements of bachelor’s programs at transfer institutions. Students planning to transfer to highly selective colleges and/or programs are advised to include 200-level and honors courses in their curriculum to make themselves more competitive for admission.

The transfer advisor is available to assist students with all facets of transfer, beginning with the exploration of transfer institutions through the application process. The transfer advisor is located in the Grossman Commons Building, Room 206E.

Department of Higher Education
Massachusetts Articulated System of Transfer (MAST)
Common Transfer Policy
The community colleges of the Commonwealth of Massachusetts, in order to ease and clarify the process of transferring earned credit from one college to another, whether among themselves or from other public or private institutions; to provide standards for the evaluation of alternative sources of credit; to reduce the time and cost of completing a college education; and to increase the opportunities for graduation of their students, established this common transfer policy. This policy respects the academic standards, quality and integrity of each of the Massachusetts community colleges. For details of the Common Transfer Policy, go to: www.capecod.edu/web/transfer.

Pathways to a Baccalaureate Degree at Bridgewater State University
Cape Cod Community College has partnered with Bridgewater State University (BSU) to create pathways to BSU. The Pathways Project has three facets. First, a comprehensive transfer advising program permits academic mentoring, identification of course and career goals, and development of a collegiate vision that incorporates high-impact activities outside of the classroom, such as research, service internships and leadership development experiences. Second, a curriculum alignment team regularly evaluates articulated learning outcomes between the two institutions so that transfer students are well prepared for upper level classes and the social components of life on a campus further from home. Finally, transfer orientation is available to students, including guidance on the process and connections with BSU faculty and staff prior to enrollment. The Pathways Project is located in Grossman Commons, Room 206E. For more information, call 1-508-362-2131 ext. 4319.

MassTransfer*
Students planning to transfer to one of the participating state-supported universities or colleges in Massachusetts are eligible for MassTransfer. MassTransfer provides community college graduates who complete approved associate degrees with the benefits of full transfer and applicability of credit, guaranteed admission (2.5 GPA or higher), and a tuition discount (3.0 GPA or higher). MassTransfer also provides students in the Massachusetts public higher education system the intermediate goal of completing a 34 credit portable general education transfer block which will satisfy the general education/distribution/core requirements at the receiving institution, with the receiving institution able to add no more than six additional credits/two courses, if admitted.

MassTransfer Block

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition/Writing</td>
<td>6</td>
</tr>
<tr>
<td>Behavioral and Social Sciences</td>
<td>9</td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>9</td>
</tr>
<tr>
<td>Natural or Physical Science</td>
<td>7</td>
</tr>
<tr>
<td>Mathematics/Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>34</td>
</tr>
</tbody>
</table>

*CCC students complete 8 credit hours.

Benefits for students who complete an associate degree under MassTransfer are:

<table>
<thead>
<tr>
<th>Minimum Final GPA</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| 2.0 GPA           | • No admission fee or essay  
|                   | • Guaranteed, full transfer of a minimum of 60 credits applied to the bachelor’s degree, if admitted  
|                   | • Automatic satisfaction of the general education/distribution/core requirements at the receiving institution, with the receiving institution able to add no more than six additional credits/two courses, if admitted |
| 2.5 GPA           | Guaranteed admission, plus all of the above benefits**                    |
| 3.0 GPA           | A 33% tuition waiver, plus all of the above benefits**                     |

Stipulations: If students change their major or if the linked baccalaureate program requires a higher grade point average or specific courses which are required of native students, MassTransfer students must meet these requirements. If, because of space or fiscal limitations, the

www.capecod.edu
receiving institution does not admit all qualified applicants to a given major or program, the receiving institution will use the same criteria for MassTransfer applicants as it does for its native students.

**Some institutions are offering a 100% tuition waiver including the UMass system, Bridgewater State University, Massachusetts College of Liberal Arts, Salem State University, and Westfield State University (WSU requires a 3.5 GPA.)**

II. Students completing the MassTransfer Block (without earning a degree) at any state-supported Massachusetts higher education institution with a 2.0 or higher grade point average will earn the 34 credit hours outlined on the previous page, exclusive of developmental coursework.

Benefits for students who complete the MassTransfer Block (without earning a degree):

<table>
<thead>
<tr>
<th>Minimum Final GPA</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 GPA</td>
<td>Automatic satisfaction of the general education/distribution/core requirements at the receiving institution, with the receiving institution able to add no more than six additional credits/two courses, if admitted</td>
</tr>
</tbody>
</table>

Stipulation: Students enrolled in a specific major or degree program may be required to take additional courses if these courses are specifically required for the major or program and are required of native students.

Articulation Agreements

These agreements provide transfer pathways from CCCC to specific bachelor's institutions.

Cape Cod Community College has formal articulation agreements with the following institutions.

- Assumption College – Online - Human Services and Rehabilitation Studies
- Bridgewater State University – Aviation: Flight Training, Communications, Criminal Justice, Early Childhood Care, Elementary Education, Graphic Design, Visual Arts
- Chamberlain College of Nursing – Online – RN-BSN
- Curry College - Information Technology, Management, Psychology, RN-BSN
- Johnson and Wales University – Hotel and Lodging Management; Restaurant, Food & Beverage Management
- Lasell College – General Agreement/Guaranteed Admission
- Massachusetts College of Pharmacy and Health Sciences – Online - ASDH to MS in Dental Hygiene (MSDH) Bridge Program or ADN to MS Nursing Bridge Program
- Massachusetts Maritime Academy - Environmental Protection, Emergency Management
- Nichols College – Business Administration - Online or at Nichols - 3&1
- Southern New Hampshire University - Hospitality Management
- University of Maine – BSET in Surveying Engineering Technology
- University of Massachusetts-Amherst - Online - RN-BSN
- University of Massachusetts-Boston - Online - RN-BSN
- University of Massachusetts-Boston - Online - Reverse Articulation - Vocational Technical Instructor
- University of Massachusetts-Dartmouth - Accounting, Fine Arts, Management, Marketing, Music, Operations Management, Medical Laboratory Science: Health Services Option, RN-BSN (Online), Visual Design
- University of Massachusetts-Lowell - Business Administration, Criminal Justice, History
- University of Wisconsin - Online - RN-BSN
- Vermont Technical College – Online – BS Dental Hygiene
- Western Governors University – General Agreement
- Westfield State University - Online - Business Management (Finance, Management, or Marketing concentration)

*All of the information in this section is subject to change at the discretion of the participating institutions.*

Other articulation agreements are being developed. Check with the Transfer Advisor or go to [www.capecod.edu/web/transfer](http://www.capecod.edu/web/transfer) for the most up to date information.

Cape Cod Community College has also developed more elaborate articulated partnerships through which courses toward Bachelor's degrees and Master's degrees are offered on campus. Please refer to Bachelor's Degree Partnerships and Master's Degree Partnerships.

Students are encouraged to meet with the Coordinator of Transfer and Articulation at Cape Cod Community College to explore all the transfer options available. The Transfer Office is located in the Grossman Commons Building, Room 206E. Phone: 1-508-362-2131, ext. 4316.
Bachelor's and Master's Degrees

Bachelor's Degree Partnerships

University of Massachusetts-Dartmouth
1-508-362-2131 ext. 4504
capecod@umas.edu
Bachelor of Arts in Liberal Arts
Bachelor of Science in Business Management

University of Massachusetts-Boston
1-617-287-6100
undergrad.admissions@umb.edu
Bachelor of Science R.N. to B.S. in Nursing

Master's Degree Partnerships

Boston University
1-617-694-5956
Masters in Clinical Social Work

Lesley University
rrodrig3@lesley.edu or
jgearin@lesley.edu 1-617-349-8339
Masters in Counseling Psychology

University of Massachusetts-Dartmouth
1-508-362-2131 ext. 4504
capecod@umass.edu
Masters in Business Administration

Office of Advanced Studies

Area residents can now earn their Bachelor's or Master's degree right here on Cape Cod. The Office of Advanced Studies is the coordinating center for the Bachelor's and Master's degree programs being offered on-campus by participating colleges and universities. Most courses are held on nights and weekends, and all credits and degrees earned are granted by the participating institutions.

As the host institution, Cape Cod Community College works closely with these other schools to provide programs the Cape's workforce will need. It continues to explore additional programs as area needs are identified. Students are advised to contact the institution granting the degree for details. For more information, please contact the Office of Advanced Studies at 1-508-375-4082.

Cape Cod Center for Graduate Education

The Cape Cod Center for Graduate Education was established in 1992 to provide quality graduate education for the residents of Cape Cod and the Islands. The Center is a non-profit organization, governed by a Board of Directors. Representatives include school superintendents, college officials, and business and community agencies. The purpose of the Center is to provide non-traditional scheduling of graduate programs to meet the needs of working professionals. Selected Master's degree programs are offered on-campus by accredited institutions of higher education; degrees are awarded by those institutions. For more information, call 1-508-375-4082.
Community Resources

Providing its region with access to unique resources is a key mission for Cape Cod Community College. By maintaining close relationships with community leaders, business and industry groups, and local organizations, the College shapes its non-credit course offerings, conferences, workshops, lecture programs, cultural events, and special initiatives to meet community needs.

Academy for Lifelong Learning
For over 25 years, the Academy for Lifelong Learning has been promoting an often overlooked resource on Cape Cod - the skills, wit, and wisdom of our age 50 and over population. It challenges its members to explore new areas of interest in peer-supported learning groups and provides them with an opportunity to maintain intellectual vigor in an educationally supportive environment. For more information, call 1-508-362-2131, ext. 4400 or visit www.allcapecod.org.

ACCCESS
ACCCESS, the Adult Collaborative of Cape Cod for Education and Support Services, provides ESOL (English for Speakers of Other Languages), H.I.S.E.T. (formerly GED) preparation, and college transition programs for adults over the age of sixteen. Workforce Education as well as academic and career counseling are available. There is no charge for these services. The local partners include a variety of local school districts and agencies. Classes are held day and evening at various locations across the Cape. Start times vary. For more information, call 1-508-362-2131 ext. 5000 or visit our web site at www.capecod.edu/cess.

After School Tutoring Program
Cape Cod Community College participates in the America Reads program. The Reading Tutorial Practicum (ETU101) is offered by the Department of Language and Literature, which trains college students as volunteer tutors for students at the elementary school level. Students earn college credit for ETU101 (at no charge) and may be eligible for work/study as well. For more information about the course, call 1-508-362-2131, ext. 4453.

Cape Cod Center for Graduate Education
Refer to page 18.

The Children's College
The Children's College is a small friendly school dedicated to making your child's school experience warm and positive. We provide the structure and program flexibility to meet the needs of your child. Our small size allows us the chance to know you and your child as individuals, allowing for an open communication between home and school. The Children's College is professionally staffed. Children from 2 years 9 months to 6 years of age are eligible for enrollment in the preschool program. The Children's College is open from 7:15am-5:15pm and is located in the Life Fitness Complex, lower level. For more information, call 1-508-375-4164 or 1-508-362-2131, ext. 4164.

Campus Provincetown
The Department of Arts and Communication at Cape Cod Community College partners with Provincetown Art Association and Museum (PAAM) and Truro Center for the Arts at Castle Hill. Students who take courses at PAAM or Castle Hill may present portfolios for evaluation and academic credit at CCCC. For more information contact:

The Museum School of the Provincetown Art Association
460 Commercial Street
Provincetown, MA 02657
1-508-487-1750 • www.paam.org

Truro Center for the Arts
10 Meetinghouse Road
Truro, MA 02666
1-508-349-7511
www.castlehill.org

Community Leadership Institute
The Community Leadership Institute (CLI) was formed to identify and nurture existing and potential leaders, increase their knowledge of community, and develop networks of individuals who can help each other solve community problems. This increased knowledge of community and expanded network of graduates will ensure that the public service/business sector will have trained people able to function as leaders for future community development. For more information, visit www.clicapecod.org.

Community Resources and Facilities Use
The facilities at Cape Cod Community College may be used by community groups on a space-available basis. For more information, visit www.capecod.edu/web/tilden/reservations or call 1-508-362-2131, ext. 4649.

Cotton Center for Real Estate Studies
The Cotton Center for Real Estate Studies, established with a generous contribution of Jack and Ann Marie Cotton, is dedicated to the education and continued professional development of real estate professionals and the mentoring of those new to and seeking to enter the profession. The Center encompasses all of the real estate courses currently offered by the managing department, the Workforce Education Resource Center, and anticipates developing new curriculum as appropriate in such areas as real estate licensing, appraising, sales and marketing, investment analysis, finance, property development and management, and related topics and issues. For further information, please call 1-508-375-5011 or visit www.capecod.edu/werc.
English for Speakers of Other Languages (ESOL)
In addition to resources provided under ACCCESS (page 19), academic opportunities for non-native speakers are available through the College Testing Center, Advising Office, and the Department of Language and Literature. The College aims to provide accurate diagnosis and placement in courses designed for non-native speakers to achieve success in Standard American English. For information, contact the Admissions Office at 1-508-362-2131, ext. 4311. Refer to page 166 for a list of ESOL/EAP courses.

Foreign Film Series/Class
Cape Cod Community College offers a free Foreign Film class at 3:30 each Tuesday afternoon in Lecture Hall A. The class is free and open to the community. Current film titles and details can be found at: www.capecod.edu/web/events/foreign-film-series.

Graduate Degree Partnerships
Refer to Bachelor's and Master's Degrees, page 18.

Higgins Art Gallery
The Higgins Art Gallery, established in 1989, is located in the Tilden Arts Center at CCC. Traditionally there are three exhibitions per semester including an "Artist in Residence," faculty and student shows, and regional interest presentations. The Higgins Art Gallery is dedicated to supporting the academic needs of higher education in the arts. The gallery is open to students, faculty, staff, and the general public.

High School Equivalency Test Center
The Massachusetts Department of Education is now using the HiSET examination to measure high school equivalency. This new test is computer based and registration is completed online. The High School Equivalency Test Center is located in the Grossman Commons Building, Room 204 and offers information on the HiSET Test and test registration procedures. For further information, call 508-362-2131, ext. 4450/4678 or visit www.capecod.edu/web/academics/equivalency. For the most current information on the HiSET examination, including registration and scheduling a test, visit www.hiset.ets.org/test_takers.

Hyannis Center
Conveniently located at 540 Main Street, the Hyannis Center hosts a variety of credit and non-credit classes for adults in transition, professional development, workforce training, and more. In addition to offering courses related to community interest, the Workforce Education and Resources Center (WERC) offers educational and vocational training. The Adult Collaborative of Cape Cod for Education and Support Services (ACCCESS) provides classes for adults looking to improve basic-education skills. For more information about classes and programs offered at the Hyannis Center, call 1-508-375-5000.

International Education Opportunities
The College offers the opportunities for students to take part in high-quality, fully accredited study abroad programs around the world. Consortium agreements allow students to participate in study-abroad programs through organizations such as API or CCIS. Study abroad programs include year-long, semester, and summer courses where students may earn college credit. Study abroad programs are open to Cape Cod Community College full-time and part-time students, to students from other colleges, and often to members of the community.

Cape Cod Community College also offers a variety of short-term courses facilitated by our faculty. Students typically earn one to three credits per course. Short-term courses are offered for audit to members of the community. The College is a member of the Massachusetts Council for International Education (MaCIE), an association which links Massachusetts public institutions of higher education in a common commitment to promote international education among their diverse constituencies. For more information, call 1-508-362-2131, ext. 4456.

PACT Program for Adult College Transition
PACT is designed for ABE and HiSET (formerly GED) graduates to assist in their transition to college. ACCCESS and Plymouth Public Library students are given priority. The program offers courses for college credit, free tuition and books, tutoring and advising and access to many resources at the College. For more information, call 1-508-362-2131 ext. 4995.

Project Forward
Project Forward, a vocational training skills program for students with significant learning difficulties, has received national, state, and local recognition. Recognized as an exemplary school-to-work model by the U.S. Department of Education, Project Forward has also been cited by 4H/University of Massachusetts-Amherst for its Peer Leadership program.

Project Forward provides an exploratory career assessment including course offerings in Animal Care Assisting, Basic Food Preparation, Child Care Assisting, Office Technology, Basic Retail, Maintenance/Landscaping & Horticulture, Mass Communication, Hospitality, Cafe Operations/ Customer Service, and Work-Life Skills.

Second/Third-year students participate in a cooperative work-study experience connecting work-based learning at a local job site with instruction at Cape Cod Community College. Enrichment activities including Art, Chorus, Fitness, Circles, Photography, Writing, Peer Leadership and 4H activities coordinated with Barnstable County 4H/UMass Extension are available at no additional charge to the student. For further information, call 1-508-362-2131, ext. 4763 or visit www.capecod.edu/web/projectforward.
Community Resources

Public Safety
The Cape Cod Community College Public Safety Department is comprised of the Chief of Public Safety and Campus Officers. These college employees are authorized to patrol their jurisdiction which includes the property owned, used, and occupied by Cape Cod Community College.

The Officers and staff are tasked with providing many emergency and non-emergency services for the college community. Although the department’s presence and response to an incident are a critical piece of safety, the department also provides training to faculty, students, and staff. Calls to 911 will automatically be forwarded to the Barnstable Police Department. Public Safety Officers can be contacted by dialing (508) 362-2131 ext. 3333, or by dialing ext. 3333 from an in-house campus telephone. Campus Officers meet state requirements and are trained as Emergency First Responders and are CPR certified. The main Public Safety Office is located in the Grossman Commons Building, room CG6, across from the Cape Cod Café.

Our ultimate goal is to provide a safe learning and working environment, but we cannot do this without your help. All members of Cape Cod Community College should report criminal actions to the Campus Public Safety immediately. Additionally, if you see something, say something. Suspicious activity is just that; please communicate all suspicious activity to our department. The Cape Cod Community College Department of Public Safety is a partner with the entire college community, and we will act to support college policy, uphold local or state laws, and increase safety on campus.

Speakers Bureau
Cape Cod Community College faculty and staff members are a valuable resource of knowledge and insight for the entire region. The College maintains a Speakers Bureau list of individuals and groups within the Institution who are prepared to make presentations and share their expertise on topics of personal and professional interest. A list of current topics and speakers is available through the Office of College Communications at 1-508-362-2131, ext. 4714.

Summer of Science
Cape Cod Community College hosts a hands-on week long science and technology program for students entering grades 6, 7, and 8. Students have the opportunity to discover electricity and magnetism, computer science, and robotics with a team of highly trained and experienced teachers. Students explore real world problem-solving scenarios and work in teams on design challenges. Every day will be packed with opportunities to learn, explore, and make new friends with a similar interest in science and technology!

To learn more about our Summer of Science program visit
www.capecod.edu/summerofscience.

Tilden Arts Center
The Tilden Arts Center, located on the West Barnstable campus, is a visual and performing arts venue for CCCC and the community. The Center houses two art studios, a dedicated music classroom, a black box Studio Theater, Tilden Auditorium, and Higgins Art Gallery. Performing Arts students, together with faculty, staff, and members of the community, stage theatre productions throughout the year. For performance information visit www.capecod.edu/web/arts/theater.

Tilden facilities are available for community groups on a space available basis. For more information about the Tilden Arts Center visit: www.capecod.edu/web/tilden.

Workforce Education Resource Center
The Workforce Education Resource Center (WERC) assesses training needs and designs and delivers custom training to companies and organizations on Cape Cod, Martha’s Vineyard, Nantucket, and Southeastern Massachusetts. The team of instructors, including college faculty, staff and consultants, provide expertise in management, team building, information technologies, customer service and a host of other areas needed for businesses and organizations to succeed in the global economy. On-site training helps meet the specific needs and is convenient for the employees of the local businesses. Credit courses are also provided when the content provided in the course best meets the company objective. WERC has assisted businesses in securing Workforce Training Program Funds to pay for training.

WERC provides on-line training accessible 24/7. Face-to-face courses are offered at the College’s Hyannis Center, West Barnstable campus or other locations convenient to our clients. Courses are designed to provide customized training for businesses and organizations that have one or more employees who need the training.

Certification and continuing education in selected areas are offered including OSHA, Real Estate, Fiber Optics, ServSafe, Home Inspection, and Dental Hygiene. All course listings can be found at www.capecod.edu/werc.

For information, call 1-508-375-5011, e-mail us at werc@capecod.edu or visit www.capecod.edu/werc.

Zammer Hospitality Institute
Cape Cod Community College is proud to be the home to the Linda and William Zammer Institute for Hospitality and Culinary Studies. The Zammer Institute supports on campus activities for students enrolled in Associate of Science degree and certificate programs with a Hospitality Management concentration. It is the pathway for students into well-paying hospitality and culinary careers, and is a catalyst through which the College quickly responds to the ever changing needs of the region's hospitality, tourism and service-based economy.

It seeks to grow the student experience in:
• excellence in hospitality/tourism/culinary services
• internships and cooperative work opportunities
• international cultures and cuisines
• sustainable business and environmental practices

For more information, call 1-508-362-2131, ext. 4404.
A Growing Need for Student Scholarships

As a state institution, CCCC is only partially supported through tax dollars.

State funds now account for approximately 40% of the College’s operating budget. Increasingly, private support to the College is needed to offset reductions in state funding cuts forecasted for the ensuing years.

The percentage of students seeking financial assistance at the College continues to increase. While Cape Cod Community College offers affordable, quality educational opportunities close to home, scholarships are necessary to both attract incoming students and to retain enrolled individuals who would otherwise not afford college. In turn, they often stay in the area after graduation or are able to transfer to four-year institutions.

If you are interested in funding a scholarship, please visit our web site www.ccccfoundation.org and click on the Scholarship tab or call 508-375-4015. Email: foundation@capecod.edu.
Cape Cod Community College provides a variety of resources to assist students in successfully completing their educational objectives. Upon admission to the College, students take skills assessments in English, reading, and mathematics to determine their level of proficiency. Developmental courses are available for students who need to improve their basic skills. Academic advisors assist students in choosing appropriate courses and meeting program requirements based on assessment results and individual circumstances.

Assessment of Student Learning Outcomes
The policy for Assessment of Student Learning Outcomes can be found at www.capecod.edu/web/academics/policies.

Audit
A student may register to audit a course with the permission of the course instructor. Audit forms are available at the Registration Office. Students are required to pay all tuition and fees. Financial aid does not cover the cost of audited classes.

Attendance requirements for audit students shall conform with the instructor’s policy for the class as a whole, unless other arrangements are made between the auditing student and the instructor. Participation in the course is by agreement between the student and the instructor. The student or the instructor has the prerogative to request the agreement be in writing. Upon satisfactory attendance and fulfillment of the agreement between the student and instructor, a status of AU will be recorded; no credit will be awarded. A status of Z (ABS-absent) will be recorded at the end of the course should the attendance and/or agreement not be fulfilled. The student may officially withdraw from the audited course according to the withdrawal policy.

Change of status in a course from audit to credit may be made only during the add period. Change of status in a course from credit to audit may be made only during the first ten weeks of classes subject to the above mentioned requirements.

A course taken for audit does not count toward a student’s full-time status unless the student is required to audit the course with the approval of the Vice President of Academic and Student Affairs. A prerequisite cannot be satisfied by an audit.

Challenge of Courses for Credit
Any student who wishes to earn college credit for prior learning experiences by demonstrating proficiency in the content of a course may request a course challenge through the faculty advisor or counselor according to the following policy. Challenge Exam forms are available at the Registration Office. Please note that Developmental Education courses, independent studies, and courses for which College Level Examination Program (CLEP) tests are available will not be challenged.

1. The student’s request must indicate:
   a. the name and number of the course;
   b. whether the course satisfies a requirement of the major program, satisfies a core requirement, or is an elective; and
   c. the reasons for believing there is already a mastery of the material, appropriate evidence, and supporting documentation.

   This request will be presented, together with an advisor’s recommendation, to the appropriate Academic Dean after payment of a fee.

2. A faculty expert will be identified by the Academic Dean in consultation with Department Chair and/or Program Coordinator.

3. The faculty expert will examine the applicant’s subject matter competence, will choose an appropriate evaluation process, and will make his/her recommendation for credit or no credit.

4. The expert’s recommendation and process of evaluation will then be reviewed by the department at a regularly scheduled meeting to insure uniformity of treatment.

5. After being reviewed by the department, the challenge will be recorded at the end of the term. If successful, the course, its credits, and a “P” for pass will be recorded.

6. Credit for any successfully challenged course will not be included in the College degree requirement that twenty-four credits must be earned at Cape Cod Community College.
CLEP and Advanced Placement Credit
Through the College Level Examination Program (CLEP), credits will be awarded to matriculated students who achieve a predetermined score, up to a maximum of thirty-six (36) credit hours. An official score report must be sent to the Registrar of the College. Cape Cod Community College requires the College Composition CLEP Examination in order to earn three semester hours of credit equivalent to ENL101 English Composition I. The Analyzing and Interpreting Literature examination is required to earn three semester hours of credit equivalent to ENL102 English Composition II. Cape Cod Community College’s academic departments determine which CLEP subject examinations are equivalent to department offerings (required or elective) and the credits awarded for successful completion.

Students who score three (3) or better on the College Board Advanced Placement Examinations may be granted college credit. An official score report must be sent to the Registrar of the College.

For further information, call 1-508-362-2131, ext. 4543 or stop by the Testing Center in Grossman Commons, Room 204. CLEP registration bulletins are available in the Testing Center.

VALOR Act Academic Credit Evaluation Policy
In accordance with the Valor Act, Cape Cod Community College uses the ACE Guide to the Evaluation of Educational Experience in the Armed Services as the primary method for evaluating and awarding academic credit for military occupation, training, coursework and experience. Credit for military experience is treated as transfer credit and is listed as military credit on College transcript(s). Official documentation of military experience must be submitted to the Office of the Registrar. The Army, Coast Guard, Marine Corp and Navy: Active Duty, Reserve and Veterans now use the Joint Service Transcript (JST): jst.doded.mil/. Contact the Registrar at 1-508-362-2131, ext 4383 or visit www.capecod.edu/web/veterans/valor.

Developmental Education
The College recognizes that students come from a variety of backgrounds and experiences, thus making each student’s educational plan different. To assure student success in college-level courses, a variety of developmental courses are available for students to help build skills necessary for college-level work. Developmental education credits cannot be counted in the 60 credits (minimum) required for the A.A. and A.S. Degrees. The Developmental Education policy can be found at www.capecod.edu/web/academics/policies. For information on developmental education courses, refer to pages 161-162.

Directed Study
Credit for completing an existing course. Individualized course of study must be based on the student learning outcomes of the existing course contained in the Departmental syllabus. For the complete policy visit www.capecod.edu/web/academics/policies.

Schedule Adjustment Period
All registered students will be permitted to adjust their schedules during the first seven (7) calendar days of the Fall or Spring semester providing the course has seats available and any prerequisites have been met. Once the course has completed its first class meeting, students must obtain the written permission of the course instructor or, if the instructor cannot be contacted, the appropriate Academic Dean to add into the course. The student is responsible for obtaining any missing course materials.

Change of Schedule forms are available in the Registration Office.

Special Study Offerings
Civic Engagement and Service Learning
Civic Engagement is comprised of multiple approaches. One of the approaches offered is Service Learning. A second approach to Civic Engagement is Debate Across the Curriculum (DAC). DAC is an initiative focused on giving students both the tools and resources to be an engaged citizen beyond our campus.

Service Learning is different from volunteer work in that it asks students to reflect upon their service experiences from an academic perspective. There are two options for earning academic credit for service learning at the College:

1. Service learning designed to be a part of a course
Some classes have service initiatives embedded into the class as a requirement or as an alternative assignment. To participate in service learning, a student must register for the course.

2. Service learning attached to an anchor course
A one-credit add-on option to an anchor course where a student undertakes volunteer work outside of the College. Students simultaneously register for both the anchor course and SLR 101.

Enrolling in this option requires submission of a contract between the student and faculty member of the anchor course. All contracts must be approved by the Service Learning Coordinator and by the Office of the Vice President of Academic and Student Affairs.

For more information visit www.capecod.edu/web/studentlife/civic.
Honors Courses and Options
Honors Program Mission Statement:
The Honors Program provides students with opportunities to enrich their learning experiences at Cape Cod Community College. We offer courses, advisement, scholarships, and support dedicated to the academic success of Honors students. Highly motivated students can pursue independent research, collaborate with faculty and fellow Honors students, develop critical thinking skills, and prepare for advancement to Commonwealth Honors Programs.

Qualified students must complete a minimum of twelve credits in the following distribution: nine hours of Honors course credits (three of those nine hours can be an Honors contract in a regular course) and three hours in the capstone experience - a multi-disciplinary and team taught Colloquium offered in the Spring. The Honors option in a regular course requires a contract between the student and faculty member for additional activities such as independent research, service learning, and/or special projects. All Honors projects must have a written research element. All contracts need approval from the Honors Program Coordinator and the Vice President of Academic and Student Affairs. Successful completion of honors courses and contracts will be noted on students' transcripts with a special notation of distinguished academic work. Opportunities are offered for the presentation of the students’ final Honors work at an annual local reception and at the annual state-wide, undergraduate, research conference at the Commonwealth Honors College in Amherst. A student in the Honors Colloquium must present at the annual undergraduate research conference at the Commonwealth Honors College in Amherst, Massachusetts in order to graduate as a Commonwealth Honors Scholar. For detailed information on the Honors Program, go to www.capecod.edu/honors.

The CCCC Honors program is accredited by the Commonwealth of Massachusetts and is a member of the National Collegiate Honors Council (NCHC). This state-wide program allows community college students to graduate as Commonwealth Honors Scholars and transfer their honors credits directly into the honors programs at four-year state colleges and universities. For further information, call 1-508-362-2131 ext. 4658.

Independent Study
A student may pursue an independent study project for credit. Visit www.capecod.edu/web/academics/policies

Learning Communities
In an effort to provide the best learning environment for college students, several learning communities have been developed. Learning communities differ from traditional course offerings in that students enroll in two or three complementary courses during a single semester. This team-teaching, interdisciplinary approach enables students to transfer and apply the skills learned in one course to the other(s). In addition, learning communities help strengthen the connection of students to the College and one another. For more information, please contact the Advising Center at 1-508-362-2131 ext. 4318.

Online and Blended Learning
www.capecod.edu/online

The Office of Online and Blended Learning provides academic and instructional support for students using the Internet-based learning management system, Moodle™. Depending on the type of class structure (face-to-face, hybrid or online), students can access assignments, lectures, discussion forums, and grades. Online classes may have instructions specific to that course (proctoring, media, subscriptions, etc.). Please refer to the course space for more information.

For fully online courses, the following is required:
• Reliable access to the Internet;
• Use of modern browsers, for example, Chrome, or Firefox;
• Use of tools to support writing papers, creating presentations, and using email.

Students with disabilities: Any student taking online courses or courses with online components is responsible for having reliable access to both the Internet and a computer running Chrome or Firefox. Students with disabilities who believe they need accommodations are advised to contact the O'Neil Center for Disability Services in Maureen M. Wilkens Hall, Room 222, as soon as possible, or call 1-508-362-2131 ext. 4337.

For proctored testing and questions, contact the Online and Blended Learning Office located in the Wilkens Library, Room G13. Phone:1-508-362-2131 ext. 4040.
Degree Requirements

Students who matriculated at Cape Cod Community College follow the requirements in the catalog under which they originally matriculated.

Cape Cod Community College is authorized to award the Associate in Arts, Associate in Applied Science, and Associate in Science degrees. Degree requirements and academic standards, subject to modification, apply to all students.

The College will consider and accept credits, subject to its standards, from other accredited institutions. Refer to Transfer to Cape Cod Community College, page 6, for more information.

All students must file a Declaration of Intent to Graduate with the Registrar by the priority date of the semester in which they expect to complete their requirements. To graduate in May, the priority date to submit the Request for Graduation form is February 1; the priority date for August graduation is June 1; and the priority date for January graduation is October 1. It is the responsibility of the student to originate this request and failure to do so may delay his or her graduation. The responsibility for satisfying requirements rests with the student.

The graduation requirements have been established to enable the graduate of Cape Cod Community College to lead a productive and satisfying life, to function in and contribute to society, and to possess those abilities necessary for further personal and career development. In addition to specific content knowledge, communication skills, critical and creative thinking skills, ethical and civic engagement practices, multicultural and global awareness, quantitative and computational skills, and technological literacy have been integrated throughout the curriculum. Students must complete the requirements as stated in the Associate in Arts, Associate in Applied Science or Associate in Science Degree Requirements.

Prerequisites

Cape Cod Community College is committed to students’ academic success. Prerequisite courses are established to assure students have the necessary knowledge and skills to succeed in a course. Students are required to complete (or be currently enrolled in) prerequisites prior to registering for the next level course.

Integrity of Credit

A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally and contractually established equivalency which reasonably (is) 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 fifteen weeks for one semester or the equivalent amount of work over a different amount of time; or

2) At least an equivalent amount of work as required for other activities, including laboratory work, internships, practica, studio work, and other academic work leading toward the award of credit hours.

Explanation

For example:

1-credit course = 50 (50 minute hour) minutes/week in direct contact with learning activities and an additional 100 (50 minute hour) minutes in additional course related work each week for 15 weeks.

3-credit course = 150 (50 minute hour) minutes/week in direct contact with learning activities and an additional 300 minutes in additional course related work each week for 15 weeks.

4-credit course = 200 (50 minute hour) minutes/week in direct contact with learning activities and an additional 400 minutes in additional course related work each week for 15 weeks.

Associate in Arts Degree Requirements

The Associate in Arts degree is designed for students planning to transfer to a Bachelor’s Degree granting institution.

For the Associate in Arts degree the student must:

1. Have a minimum cumulative average of 2.0,
2. Satisfactorily complete a minimum of 60 credit hours, at least 24 of which must be earned from Cape Cod Community College, excluding developmental education courses,
3. Select 35 general education credits as follows:

   - ENL101 English Composition I 3cr
   - ENL102 English Composition II 3cr
   - Humanities and Fine Arts 9cr
   - Behavioral and Social Sciences 9cr
   - Natural or Physical Science 8cr
   - Mathematics/Quantitative Reasoning 3cr

   Total Credits 35

Refer to General Education courses on page 29.
4. Select the remaining 25 credits as required in the student's concentration.

Note:

1. Students who are recommended to enroll in developmental courses in reading, writing, or mathematics should do so during their first semester. Other courses should be chosen carefully and in many cases these students should not carry a full-time load (12 credit hours or more).
2. Students should complete ENL101, ENL102 and any mathematics requirements within the first 30 credits since communication and quantitative skills are essential for success in many college courses.
3. All students graduating with an Associate in Arts degree automatically satisfy MassTransfer. An associate degree is MassTransfer eligible when the curriculum includes the MassTransfer Block listed on the following page. A limited number of Associate in Science degrees are eligible for some of the MassTransfer benefits.

Go to page 16 for more information about MassTransfer and www.mass.edu/masstransfer for full details about MassTransfer.
Degree Requirements

MassTransfer Block

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition/Writing</td>
<td>6 cr</td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>9 cr</td>
</tr>
<tr>
<td>Behavioral and Social Sciences</td>
<td>9 cr</td>
</tr>
<tr>
<td>Natural or Physical Science</td>
<td>7 cr</td>
</tr>
<tr>
<td>Mathematics/Quantitative Reasoning</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Total Credits: 34

*CCCC requires 8 credits of Natural or Physical Science for an Associate in Arts degree. Total Credits = 35 credit hours.

Associate in Applied Science Degree Requirements

(AAS pending College Meeting approval.)

The Associate in Applied Science Degree programs provide students with course work in general education and a curriculum preparing graduates to seek careers in highly technical fields immediately upon graduation in areas such as aviation maintenance.

The Associate in Applied Science programs are intended to prepare people for employment and thus a majority of the coursework involved may be directly related to occupational skills (Board of Regents of Higher Education Final Report: The Undergraduate Experience, 1989, page 17).

For the Associate in Applied Science degree the student must:
1. Have a minimum cumulative average of 2.0;
2. Satisfactorily complete a minimum of 60 credit hours, at least 24 of which must be earned from Cape Cod Community College, excluding developmental education courses.
3. Select 20 general education credits as follows:
   - ENL101 English Composition I 3 cr
   - Humanities and Fine Arts* 3 cr
   - Behavioral and Social Sciences 3 cr
   - Natural or Physical Science 3/4 cr
   - Mathematics/Quantitative Reasoning (or) 6-8 cr
   - General Education Elective 7/8 cr

Total Credits: 20

Refer to General Education courses on page 29.

4. Complete 37-39+ professional education credits required by a particular program as outlined on page 59.

Second Associate Degree Policy

A second Associate degree shall be awarded to students who have:
1. met all specific degree requirements of the program from which a second Associate degree will be granted.
   (Note: Only one Associate in Arts degree may be earned and in the Associate in Science degrees with multiple concentrations, the student can complete the requirements for only one concentration.)
2. completed the specific courses, as identified and approved by the appropriate individual or committee and at the institutional level, needed to complete the second degree.
3. completed a minimum of fifteen (15) credit hours beyond the first degree requirements. In no case (other than this 15-hour minimum) should it be mandatory for the student to take more credit hours than necessary to meet the requirements of a second degree.

Associate in Science Degree Requirements

The Associate in Science degree programs provide students with general education coursework and professional skills coursework to enter the workforce in their chosen profession.

For the Associate in Science degree the student must:
1. Have a minimum cumulative average of 2.0;
2. Satisfactorily complete a minimum of 60 credit hours, at least 24 of which must be earned from Cape Cod Community College, excluding developmental education courses.
3. Select 21-23 general education credits as follows:
   - ENL101 English Composition I 3 cr
   - Humanities and Fine Arts* 3 cr
   - Behavioral and Social Sciences 6 cr
   - Mathematics/Quantitative Reasoning (or) 6-8 cr
   - General Education Elective 3 cr

Total Credits: 21-23

Refer to General Education courses on page 29.

4. Complete 37-39+ professional education credits required by a particular program as outlined beginning on page 61.

*Programs will, in most cases, include both ENL102 and COM103 resulting in a minimum of 24 General Education credits.
General Education

Students who matriculate at Cape Cod Community College follow the requirements in the catalog under which they originally matriculated.

Associate Degree General Education Requirements

All students graduating with an Associate degree from Cape Cod Community College will complete the following 21-23* credits of common general education requirements:

- ENL101 English Composition I 3cr
- Humanities and Fine Arts 3cr
- Behavioral and Social Sciences 6cr
- Mathematics/Quantitative Reasoning (or) Natural or Physical Science 6-8cr
- General Education Elective 3cr

Total Credits 21-23*

*Associate in Arts degree students take additional general education coursework to satisfy the MassTransfer Block (see page 16).

General Education Requirements

The General Education Courses listed on page 29 satisfy General Education requirements for the Associate in Arts and the Associate in Science degrees. Check the Associate in Arts concentrations (beginning on page 33), Associate in Applied Science programs (beginning on page 59) and the Associate in Science programs (beginning on page 61) for specific requirements. Note: 100-level courses are generally designed for first-year students; 200-level courses are generally designed for second-year students.

General Education Criteria

In order for a course to meet General Education criteria, at least four of the six Institutional Student Learning Outcomes must be assessed within the course.

Institutional Student Learning Outcomes

Communication Skills

The community college graduate will demonstrate the ability to express ideas clearly and cogently, and to read, write, speak, and listen using Standard American English.

Critical and Creative Thinking Skills

The community college graduate will demonstrate the ability to locate and use information for the purpose of examining underlying assumptions and interpreting and evaluating arguments, will create deliberately and independently using skills and knowledge acquired in our classrooms.

Ethical and Civic Engagement Practices

The community college graduate will demonstrate a broad-based knowledge and understanding of ethical concepts and principles, decision-making, and behaviors and will understand the meaning and responsibilities associated with citizenship in the USA and the world community.

Multi-cultural and Global Awareness

The community college graduate will demonstrate the ability to appreciate, analyze and deal constructively with historical or contemporary experiences of diversity in the USA and the world enabling the student to participate effectively in an increasingly complex and diverse world.

Quantitative and Computational Skills

The community college graduate will demonstrate the ability to apply computational methods, generate problem-solving strategies, interpret equations and numerical data from tables, charts, and graphs, and organize, analyze, and present quantitative information.

Technological Literacy

The community college graduate will demonstrate the ability to use current technology to improve his/her creativity, productivity, communication skills, research skills, and information management skills.
Degree Requirements

General Education Courses
The following courses satisfy a general education requirement.

English Composition/Writing
ENL101  English Composition I
ENL102  English Composition II

Behavioral & Social Sciences
ANT107  Introduction to Anthropology
ANT211  Comparative Cultures
ANT215  Peoples and Culture of the Middle East
CRJ105  Criminal Justice: Theory and Practice
ECO117  Principles of Macroeconomics
ECO118  Principles of Microeconomics
ECO155  Emerging Market Economies
ECO157  Global Economics

GOV101  Comparative Politics
GOV102  International Relations
GOV111  American Government

HIS103  U.S. History to 1865
HIS104  U.S. History since 1865
HIS105  U.S. History since 1945
HIS119  World History I
HIS120  World History II
HIS141  History of China
HIS160  European History I
HIS162  European History II
HIS206  Ancient History
HIS207  Medieval History
HIS215  Women in U.S. History
HIS216  History of Japan
HIS217  The Civil War
HIS227  History of the Middle East
HIS228  Women in European History
HIS241  Selected Topics in History
HIS253  Vietnam: America's Longest War
HIS258  African American History
HUS101  Introduction to Human Services
HUS201  The Helping Relationship
PHI130  Introduction to Philosophy

Humanities & Fine Arts
ART100  Drawing I
ART101  Design I
ART103  Painting I
ART105  Visual Language (retired)
ART109  Art Appreciation
ART125  History of Art: Stone Age to Gothic
ART126  History of Art: Renaissance to Modernism (retired)
ART134  Art History: Renaissance to Modernism
ART136  Three-Dimensional Design
ART170  Introduction to Computer Graphics
ART205  Illustration I (Adobe Illustrator)
ART207  Graphic Design I
ART209  Printmaking Techniques
ART214  Digital Imaging I (Adobe Photoshop)
ASL101  American Sign Language I
ASL102  American Sign Language II
COM103  Human Communication
COM105  Survey of Mass Communication
COM120  Introduction to Film
COM201  Interpersonal Communication
COM203  Public Speaking
COM204  Persuasive Communication
COM207  Argumentation and Debate
COM221  American Film
COM222  International Film

ENL102  English Composition II
ENL108  English Composition /Writing

PHI210  Ethics

PSY101  General Psychology
PSY201  Child Psychology
PSY202  Adolescent Psychology
PSY207  Abnormal Psychology

PSY208  Principles of Counseling and Crisis Intervention
PSY212  Human Sexuality
PSY219  Psychology of Women
PSY225  Social Psychology
PSY233  Developmental Psychology: The Life Span
PSY235  Cognitive Psychology
PSY241  Selected Topics in Psychology
SOC106  Principles of Sociology
SOC205  Juvenile Delinquency
SOC208  Race, Gender, and Class in the United States
SOC210  Marriage and Family: Sociology of Family Interaction & Organization
SOC215  Social Problems
SOC230  Peoples & Cultures of Africa

ENL120  Intro. to Children's Literature
ENL131  Technical Writing
ENL135  Short Story & Human Values
ENL150  World Mythologies
ENL161  Journalism I
ENL201  World Literature I
ENL202  World Literature II
ENL203  British Literature through the 18th Century
ENL204  British Literature: Romantic Age - Present
ENL205  American Literature to 1890
ENL206  American Literature since 1890
ENL210  Exploring Modern Poetry
ENL215  World Religions in Literature
ENL217  Exploring the World of Science Fiction
ENL219  Masters of Horror
ENL228  Women Writers
FRN101  Elementary French I
FRN102  Elementary French II
FRN201  Intermediate French I
FRN202  Intermediate French II
GER101  Elementary German I
GER102  Elementary German II
GER201  Intermediate German I
GER202  Intermediate German II
HUM102  Humanities: Perception through the Arts
MUS100  Music Appreciation
MUS101  Music Theory I
MUS102  Music History I
MUS103  Music History II
MUS116  History of Rock Music
MUS202  Music Theory II
PHI131  Logic
PHI160  Three Great Thinkers
PHI201  Existentialism
PHI210  Ethics
SPN101  Elementary Spanish I
SPN102  Elementary Spanish II
SPN105  Elementary Spanish I for Health Professionals
SPN201  Intermediate Spanish I
SPN202  Intermediate Spanish II
THR101  Introduction to Theater
THR103  Acting I
THR113  Rehearsal & Performance

Interdisciplinary Studies
BIO204  Introduction to Public Health
BIT103  Medical Terminology
BIT175  Visual Basic Programming
COL101  The College Experience
COM209  Event Planning
ENR101  Intro to Engineering and Advanced Manufacturing
ENR102  3D Mechanical Design
ENR103  Intro to Robotics
GIT110  Microcomputer Applications Software

Mathematics/Quantitative Reasoning
MAT121  Math for Elementary & Early Childhood Educators II
MAT140  Survey of Mathematics
MAT150  Elementary Statistics
MAT165  Finite Mathematics
MAT171  Precalculus Math I (retired)
MAT175  College Algebra

Natural or Physical Science
AST101  Fundamentals of Astronomy
BIO105  Survey of Human Anatomy and Physiology
BIO109  Survey of Biology
BIO151  General Biology I (formerly BIO101)
BIO152  General Biology II (formerly BIO102)
BIO161  The Microbial World
BIO205  General Ecology
BIO241  Cell Biology (formerly BIO202)
BIO251  Human Anatomy and Physiology I (formerly BIO107)
CHM106  Survey of Chemistry
CHM109  Chemistry for the Health Sciences
CHM151  General Chemistry I (formerly CHM101)
CHM152  General Chemistry II (formerly CHM102)

Interdisciplinary Studies
BIO204  Introduction to Public Health
BIT103  Medical Terminology
BIT175  Visual Basic Programming
COL101  The College Experience
COM209  Event Planning
ENR101  Intro to Engineering and Advanced Manufacturing
ENR102  3D Mechanical Design
ENR103  Intro to Robotics
GIT110  Microcomputer Applications Software

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MAT171  Precalculus Math I (retired)
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BIO205  General Ecology
BIO241  Cell Biology (formerly BIO202)
BIO251  Human Anatomy and Physiology I (formerly BIO107)
CHM106  Survey of Chemistry
CHM109  Chemistry for the Health Sciences
CHM151  General Chemistry I (formerly CHM101)
CHM152  General Chemistry II (formerly CHM102)

ENV118  Introduction to Environmental Science
ESC101  Introduction to Earth Science
ESC105  Fundamentals of Oceanography
HOR101  Plant & Soil Science
PHY106  Survey of Physics
PHY151  Physics I (formerly PHY101)
PHY152  Physics II (formerly PHY102)
PHY211  University Physics I
PHY212  University Physics II

www.capecod.edu
Academic Distinctions
Matriculated students are eligible for the following academic distinctions.

Dean's List
Students who demonstrate superior academic performance are named to the Dean's List at the end of each semester. Students are eligible for the Dean's List in any semester during which they successfully complete 15 or more semester hours of credit with grades no lower than C and with a grade point average of 3.00 or above, or complete 12-14 credit hours with grades no lower than C and with a grade point average of 3.20 or above.

• Non-degree course credit, such as developmental education credits, will not be calculated in determining total semester hour credit for Dean's List eligibility.
• A student with a grade below C is not eligible for the Dean's List in that semester.
• A student with an Incomplete in any course is not eligible for the Dean's List in that semester.

Graduation Honors
Students who demonstrate superior academic performance in earning their Associate degree are recognized with honors at graduation.

• “Honors” are awarded to students with a CGPA of 3.5 to 3.74 inclusive.
• “High Honors” are awarded to students with a CGPA of 3.75 to 4.0.

Credit count for graduation is based on a) credits taken at Cape Cod Community College for courses graded A through D- and P; b) transfer credits (credits transfer; grades do not transfer); c) College Level Exam Program (CLEP) and challenge exam credits.

Academic Standing
A student's academic standing is determined by the cumulative grade point average (CGPA) required to meet minimum academic standards based on the student’s credit count of courses successfully completed at Cape Cod Community College.

<table>
<thead>
<tr>
<th>Hours toward GPA</th>
<th>Good Standing CGPA</th>
<th>Academic Review</th>
<th>Probation CGPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-15 credits</td>
<td>2.0</td>
<td>1.50-1.99</td>
<td>below 1.50</td>
</tr>
<tr>
<td>16-24 credits</td>
<td>2.0</td>
<td>1.75-1.99</td>
<td>below 1.75</td>
</tr>
<tr>
<td>25+ credits</td>
<td>2.0</td>
<td>N/A</td>
<td>below 2.00</td>
</tr>
</tbody>
</table>

*Hours toward GPA (HGPA) are all letter grades (A through F) with exception of developmental courses.

Good Standing
Students with a CGPA of 2.0 or above are considered in Good Academic Standing.

Academic Review
A student is placed on Academic Review when his/her CGPA falls below a 2.0 but above the probationary level as shown in the table above. Students placed on Academic Review will be notified in writing by the Registrar’s Office and be required to meet with an academic advisor prior to enrolling for the next semester.

Academic Probation
A student is placed on Academic Probation if his/her CGPA falls below the designated Probation threshold associated with the HGPA as listed in the table above. Students have two semesters of attendance to raise their CGPA to a level above Probation. Students on Academic Probation will be notified in writing by the Registrar’s Office and are required to meet with an academic advisor every semester before registering for classes in order to create a plan including tutoring, strategic course selection, and other changes in study habits.

Academic Dismissal
A student who has not raised his/her CGPA above Probation after two semesters of attendance will be dismissed for one calendar year. Students will be notified in writing by the Registrar’s Office and may consider the Academic Appeals Procedure described in the Student Handbook online at www.capecod.edu/web/student-handbook. After one year of inactive status, a student may return and will be placed on Probation. After one year of inactive status, the student may choose to take advantage of the Fresh Start Option.
Cumulative Grade Point Average (CGPA)

The student’s cumulative grade point average is computed on the basis of grade number values as follows:

- A = 4;
- A– = 3.67;
- B+ = 3.33;
- B = 3;
- B– = 2.67;
- C+ = 2.33;
- C = 2;
- C– = 1.67;
- D+ = 1.33;
- D = 1;
- D– = 0.67;
- F = 0.

These assigned values are multiplied by the number of credit hours for each course to establish the total quality points.

The following grades are not computed in the CGPA: Z(ABS), AU, I, P, R, W, and WIP*. Grades of F, however, are calculated into the grade point index. Course grades from other colleges are not computed in the Cape Cod Community College cumulative grade point average. Transfer credits for course work from other colleges, however, may be approved and applied to satisfy degree requirements, up to a maximum of 36 credits.

If a student withdraws from a class, an official withdrawal form must be filed with the Registrar to ensure accuracy of student records. If the student fails to officially withdraw, a failing grade could result.

A typical CGPA would be computed as follows (see chart).

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Hours Towards GPA</th>
<th>Quality Points</th>
<th>Total Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition I</td>
<td>A</td>
<td>3</td>
<td>3.67</td>
<td>11.01</td>
</tr>
<tr>
<td>Human Communication</td>
<td>C</td>
<td>3</td>
<td>2.00</td>
<td>6.00</td>
</tr>
<tr>
<td>General Psychology</td>
<td>F</td>
<td>3</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>General Biology I</td>
<td>C+</td>
<td>4</td>
<td>2.33</td>
<td>9.32</td>
</tr>
<tr>
<td>College Reading and Study Skills</td>
<td>P (3)</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

* Z (ABS) = absent; AU=audit; I=incomplete; P=pass; R=repeat; W=withdraw; WIP= work in progress.
** No grade point equivalent, therefore not included in grade point average.

Fresh Start Option

The Fresh Start Option permits a fresh start to a student who has not been enrolled at the College for at least one year and has re-enrolled on probation, has a grade point average below 2.0, or has been academically dismissed. A student may exercise the Fresh Start Option only once.

Within this option, original grades and CGPA will remain on the transcript, but all future calculations of CGPA will include only courses taken after readmission. Prior courses taken at Cape Cod Community College (before the one-year break) will be evaluated according to the current transfer credit policy. Courses meeting the transfer credit policy will be counted as transfer credit. The transcript will identify the selection of this option. The student who wishes to re-enroll under this option may obtain an application and requirements of the Fresh Start Option from the Admissions Office. A student must be matriculated in order to elect the Fresh Start option.

Student Status

Each student who attempts at least 12 semester hours of work is considered a full-time student at the College; a part-time student is one taking 11 semester hours or fewer. To matriculate, a student must submit an admissions application, be accepted, and enroll in a degree or certificate program. Students seeking a degree or certificate should matriculate as early as possible. Contact the Admissions Office for assistance.

If a student changes status at any time, the Registrar must be notified immediately to ensure correct status. Any change made from full-time to part-time status within the first two weeks of a semester may result in a partial refund. Obviously, the reverse is true, and any part-time student who schedules more than 11 semester hours must be considered a full-time student and pay for the added courses.
### Academic and Student Affairs Area

#### Arts and Humanities

Lore Loftfield De Bower, Dean

- Academy for Lifelong Learning International Education
- ACCCESS Program
- Media Advisory Board
- Foreign Film Series
- PACT Program
- Higgins Art Gallery
- Student Media
- Hyannis Center

#### Department of Arts and Communication

Scott Anderson, Chairperson

- Art
- Humanities
- Communication
- Music
- Dance
- Radio and Television
- Film
- Theater

#### Department of Language and Literature

John French, Chairperson

- American Sign Language
- English for Speakers of Other Languages
- Developmental Reading
- Journalism
- Developmental Writing
- Literature
- World Languages

#### Enrollment Management and Advising Services

Christine McCarey, Dean

- Admissions
- Mental Health Counselor
- Adult Learner Services
- Records & Online Registration
- Advising & Counseling
- Student Distress Assessment Team
- Career Services & Experiential Learning
- Testing Center
- Financial Aid
- Transfer Affairs & Articulation
- First Year Success
- Veterans Educational Benefits
- High School Equivalency Test Center

#### Health Sciences, Social Sciences and Human Services

Susan Maddigan, Dean

- Advanced Studies
- Cape Cod Center for Graduate Education
- Early Childhood Center Nursing & Allied Health Resource Center

#### Department of Health Sciences

Barbara A. Murphy, Chairperson

- Allied Health
- Diagnostic Tech
- EMT/Paramedic
- Medical Assisting
- Medical Interpreter
- Tri-level Nursing Assistant/ Home Health Aide
- Dental Hygiene/Clinic

#### Department of Social Sciences, Behavioral Sciences, and Human Services

Sergio Marin, Chairperson

- Anthropology
- Criminal Justice
- Early Childhood Education
- Economics
- Education
- Fire Science
- Geography
- History
- Homeland Security
- Human Services
- Paralegal
- Philosophy
- Political Science & Government
- Psychology
- Religion
- Sociology

#### Learning Resources and Student Success

David Ziembta, Dean

- Advantage/TRIO/SSS
- CVTE
- Civic Engagement and Service Learning
- Perkins
- Coaches & Mentors
- Career Specialist/Advisor
- Non-Traditional by Gender Initiative
- Project Forward
- Services for Students with Disabilities - O'Neill Center
- Inclusive Concurrent Enrollment
- Student Code of Conduct
- Student Grievance
- Student Life & Co-Curricular Programs
- College Experience Course

#### Teaching and Learning Resources and Technology

Jeanmarie Fraser, Dean

- Academic Support Services
- Public Services
- Learning Communities
- Instructional Media
- Math Learning Center
- Reference Service
- Reading & Writing Resource Center
- Information Literacy
- Tutoring Center
- Special Collections
- College Archives
- Technical Services
- Nickerson Cape Cod History Archives
- Serials
- Yvette Raven, Associate Dean of Online and Blended Learning
- Online & Blended Learning
- Teaching & Learning Center

#### Science, Technology, Mathematics, Business, and Workforce Education

Robert Cody, Dean

- Cape Cod Regional STEM Network
- Workforce Education
- Cotton Center for Real Estate Studies
- Resource Center
- Zammer Institute

#### Department of Business

Gail Guarino, Chairperson

- Business Administration
- Management
- Accounting
- Marketing
- Entrepreneurship
- Information Technology
- Hospitality Management/ Culinary Arts

#### Department of Engineering Sciences and Applied Technology

Rick Bsharah, Chairperson

- Aviation
- Engineering
- Construction Technology
- Environmental Technology/Renewable Energy
- Earth Science

#### Department of Mathematics

Minxie Zhang, Chairperson

- Computer Science
- Mathematics
- Developmental Mathematics
- Earth Science

#### Department of Natural Sciences

Lynda Farley-LaRocca, Chairperson

- Astronomy
- Horticulture
- Biology
- Physics
- Chemistry
**The Associate in Arts degree does not indicate a specialized degree in a concentration.**

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- World History Concentration ....................... 58

The Associate in Arts degree is designed for students planning to transfer to a Baccalaureate (4-year) institution. Use the information that follows along with guidance from your advisor, and college or university catalogs and/or web sites to plan your curriculum at Cape Cod Community College.

**Associate in Arts Degree Requirements**
For the Associate in Arts degree the student must:
1. Have a minimum cumulative average of 2.0,
2. Satisfactorily complete a minimum of 60 credit hours, at least 24 of which must be earned from Cape Cod Community College, excluding developmental education courses,
3. Select 35 general education credits as follows:
   - ENL101 English Composition I 3cr
   - ENL102 English Composition II 3cr
   - Humanities and Fine Arts 9cr
   - Behavioral and Social Sciences 9cr
   - Natural or Physical Science 8cr
   - Mathematics/Quantitative Reasoning 3cr
4. Select the remaining 25 credits as required in the student's concentration.

**Note:**
1. Students who are recommended to enroll in developmental courses in reading, writing, or mathematics should do so during their first semester. Other courses should be chosen carefully and in many cases these students should not carry a full-time load (12 credit hours or more).
2. Students should complete ENL101, ENL102 and any mathematics requirements within the first 30 credits since communication and quantitative skills are essential for success in many college courses.
3. All students graduating with an Associates in Arts degree automatically satisfy MassTransfer. An associate degree is MassTransfer eligible when the curriculum includes the MassTransfer block. Go to page 16 for more information about MassTransfer and to [www.mass.edu/masstransfer](http://www.mass.edu/masstransfer) for full details about MassTransfer.

Your academic advisor can assist you in selecting a program that meets your career and educational goals. If you do not have an academic advisor, please contact the Advising and Counseling Center.

Students required to take developmental coursework may need an additional semester(s) to complete their degree requirements.

Students must apply for graduation at the beginning of their final semester at CCCC. See your academic advisor to complete the form.

Any student taking online courses or courses with online components is responsible for having reliable access to both the Internet and a computer running Chrome or Firefox.

Please visit [www.capecod.edu/online](http://www.capecod.edu/online) for more information detailing online course requirements.
Associate in Arts
Communication Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Communication Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning</td>
<td>3 or 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>COM201</td>
<td>Interpersonal Communication</td>
<td>3</td>
<td>COM103 or ENL101</td>
</tr>
<tr>
<td>COM207</td>
<td>Argumentation and Debate</td>
<td>3</td>
<td>COM103 or ENL101</td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM203</td>
<td>Public Speaking</td>
<td>3</td>
<td>COM103 or ENL101</td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concentration elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM204</td>
<td>Persuasive Communication</td>
<td>3</td>
<td>COM103 or ENL101</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concentration elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.
# Associate in Arts
## Computer Science Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to [Degree Requirements](#).

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Computer Science Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>MAT240</td>
<td>Calculus I</td>
<td>4</td>
<td>MAT190 or MAT195</td>
</tr>
<tr>
<td>CSC110</td>
<td>Computer Programming I: Java</td>
<td>3</td>
<td>(MAT030 or MAT035) or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td></td>
<td>Physics*</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>MAT250</td>
<td>Calculus II</td>
<td>4</td>
<td>MAT240 or MAT185</td>
</tr>
<tr>
<td>CSC130</td>
<td>Computer Programming II: Java</td>
<td>4</td>
<td>CSC110</td>
</tr>
<tr>
<td></td>
<td>Physics*</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>CSC210</td>
<td>Systems Software and Assembly Language Programming</td>
<td>4</td>
<td>CSC130</td>
</tr>
<tr>
<td>CSC120</td>
<td>Computer Programming I: C++</td>
<td>4</td>
<td>(MAT030 or MAT035) or satisfactory basic skills assessment score &amp; working knowledge of any programming language</td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSC230</td>
<td>Data Structures</td>
<td>4</td>
<td>CSC120 &amp; CSC130</td>
</tr>
<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning**</td>
<td>3 or 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>65/66</strong></td>
<td></td>
</tr>
</tbody>
</table>
Associate in Arts
Education Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

For students planning to teach in Massachusetts public schools, please refer to the Education Licensure Requirements. Refer to information regarding Criminal Offender Record Information (CORI).

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Education Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td></td>
<td>Elective*</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>PSY202 (or) PSY233</td>
<td>Adolescent Psychology (or) Developmental Psychology***</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
</tr>
<tr>
<td></td>
<td>Elective*</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td>PSY101 &amp; ENL101</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
<tr>
<td>Natural or Physical Science</td>
<td>4</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts**</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
<tr>
<td>Mathematics/Quantitative Reasoning</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
<td>1-3</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>60-62</td>
<td>PSY101 &amp; ENL101</td>
<td></td>
</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.

Overview
This concentration prepares students for transfer to complete their bachelor’s degree and become licensed to teach at the middle and high school level. Candidates for middle or high school licensure are required to minor in middle or high school education and major in the subject area they plan to teach.

Students must graduate with a minimum 2.75 GPA and attain a passing score on the Communication and Literacy Skills (CLST) portion of the Massachusetts Tests for Educators Licensure (MTEL) before their planned entrance to the bachelor institution to be accepted directly into an education program.

Career Outlook
Students completing a bachelor’s degree in middle or high school education will be required to take the MTEL test in the subject area they plan to teach. After passing this test, they will receive initial licensure and be ready to enter the teaching profession. Students must obtain a master’s degree within five years to receive professional licensure. Students will be eligible to teach in public and private schools in grades 5-8, or 8-12, depending on which licensure track they pursue.

* The elective credits may be courses in the intended teaching area, or if you know what bachelor institution you plan to attend, then choosing courses that would satisfy general education requirements at that institution would be beneficial.

** Students should choose a literature or foreign language for this area, depending on the general education requirements of the bachelor institution they plan to attend.

*** Requirement for Bridgewater State University’s Education program.
Education Licensure Requirements
for Students Planning to Teach in MA Public Schools

Students planning to teach in Massachusetts public schools should be aware of the following information as they move forward in their education at Cape Cod Community College.

**Education Licensure in Massachusetts is offered on four levels:**

- **Early Childhood** (Pre-Kindergarten through Grade 2)
- **Elementary Education** (Grade 1 through Grade 6)
- **Middle School** (Grade 5 through Grade 8)
- **High School** (Grade 8 through Grade 12)
- **Special Education** (Pre-Kindergarten through Grade 8 or Grade 5 through Grade 12)

* There are a few teaching areas (Art, Drama, Music, Special Education of students with severe disabilities, plus others) that do not follow these levels and may be researched at the Department of Education website, [www.doe.mass.edu](http://www.doe.mass.edu), or with the CCCC Transfer Advisor.

Students planning to begin their education at CCCC and then transfer to a bachelor's institution to complete a course of study leading to licensure to teach in Massachusetts public schools should choose their course of study at CCCC based on the following guidelines:

- **Early Childhood** - A. S., Early Childhood Education Program - Transfer Compact (Students not wishing to become licensed to teach in the public schools, or who want to teach at the preschool level, may also choose the A.S. degree in Early Childhood Education.)
- **Elementary Education** - A. A., Elementary Education Transfer Compact Concentration
- **Middle or High School** - A. A., Education Concentration

**Requirements to be accepted into a licensing program at a bachelor's institution:**

- Entry into Education programs at the bachelor's level requires students have a minimum grade point average of not less than 2.75 (At their discretion, individual institutions may require a higher grade point average).
- All students are required to pass the Communication and Literacy Skills Test (CLST), one of the Massachusetts Tests for Educator Licensure (MTEL). The CLST is usually taken before admission to an education program at the bachelor's institution. Students should plan to take this test sometime after the completion of English Composition II, and before entering the bachelor's institution, but it may also be taken earlier. The CLST may be taken after entering the bachelor's institution but students must receive a passing score before being admitted to an education program.
- Some bachelor's institutions require that students pass all the required MTEL tests before acceptance into an Education program.

**Requirements to obtain initial licensure to teach:**

- Students planning to teach Early Childhood, Elementary Education, or Special Education are required to double major in early childhood education or elementary education and a liberal arts and science major while in attendance at the bachelor's institution. The choices for the liberal arts and science major depend on the bachelor's institution students attend.
- Students planning to teach middle school or high school are required to major in their subject area and minor in middle or high school education while in attendance at the bachelor's institution.
- All students are required to pass an (MTEL) Academic subject matter test.
- Students seeking licensure in Early Childhood Education, Elementary Education, or Special Education must also pass the (MTEL) Foundations of Reading Test.

Teaching Licensure is administered by the Massachusetts Department of Education. Requirements for licensure are subject to change. Students should check the Department of Education's web site, [www.doe.mass.edu](http://www.doe.mass.edu), or call 1-781-338-6600, for the most current information.

Information about MTEL can be found at the Department of Education website, or by going directly to [www.mtel.nesinc.com](http://www.mtel.nesinc.com).

Students are also encouraged to visit the Transfer Office at Cape Cod Community College to find out more information, and/or explore the College catalog or web site of their intended transfer institution.
### Associate in Arts

#### Elementary Education Transfer Compact Concentration

For students planning to teach in Massachusetts public schools, please refer to the Education Licensure Requirements. Students interested in this concentration are encouraged to meet with the CCCC Transfer Advisor. Refer to information regarding Criminal Offender Record Information (CORI). Students who complete this concentration will satisfy the requirements of MassTransfer. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Elementary Education Transfer Compact Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>EDU101</td>
<td>Foundations of Education</td>
<td>3</td>
<td>ENL010 &amp; ENL050 or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>PSY201</td>
<td>Child Psychology</td>
<td>3</td>
<td>PSY101</td>
</tr>
<tr>
<td>HIS103</td>
<td>U.S. History to 1865</td>
<td>3</td>
<td>None; ENL020 &amp; ENL050 strongly recommended</td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENL120</td>
<td>Introduction to Children’s Literature</td>
<td>3</td>
<td>ENL101</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral &amp; Social Sciences*</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural or Physical Science (Biological)***</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT120</td>
<td>Mathematics for Elem/EC Educators I</td>
<td>3</td>
<td>MAT035 or satisfactory basic skills assessment scores and EDU100 or ECE100</td>
</tr>
<tr>
<td>Elective****</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective****</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT121</td>
<td>Mathematics for Elem/EC Educators II</td>
<td>3</td>
<td>MAT120</td>
</tr>
<tr>
<td>Natural or Physical Science (Physical)***</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts (Literature)**</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective****</td>
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<td></td>
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</tr>
<tr>
<td>Elective****</td>
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<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.

Students are encouraged to meet with the Cape Cod Community College Transfer Advisor.

### Overview

Students must graduate with a minimum 2.75 GPA and attain a passing score on the Communication and Literacy skills (CLST) portion of the Massachusetts Tests for Education Licensure (MTEL) to be accepted directly into an education program. If students do not meet the criteria above, they may be admitted to the required academic (second) major on initial acceptance to the bachelor's institution. Elementary Education students must pass two additional MTEL tests: General Curriculum and Foundations of Reading before beginning their education coursework at the bachelor's level.

**Career Outlook**

Students completing a bachelor's degree in Elementary Education receive initial licensure to teach and are ready to enter the teaching profession. Students are eligible to teach in public and private schools in grades 1-6. Students must obtain a master's degree to receive professional licensure.

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*Behavioral & Social Sciences

GEO104 Geography; Culture & Environment

GOV111 American Government

HIS119 World History I

**Humanities & Fine Arts

ENL201 World Literature I

ENL202 World Literature II

ENL203 British Literature through the Eighteenth Century

ENL204 British Literature from the Romantic Age to the Present

ENL205 American Literature to 1890

ENL206 American Literature since 1890

*** Natural or Physical Science

A Biological Science is any 4-credit course from the Natural Science or Physical Science general education list (with a lab) with the prefix BIO, ENV, or HOR; all other 4-credit Natural Science or Physical Science courses (with a lab) are considered Physical Sciences.

****Elective

These courses fulfill requirements for the academic (second) major required for Elementary Education. Elementary Education curriculum through the bachelor's degree has very few open electives. Making course choices outlined here and in conjunction with a bachelor's institution curriculum assure that most students meet the required coursework in 120 credits.
Associates in Arts
English: Literature Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the English: Literature Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td>ENL101</td>
</tr>
<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning</td>
<td>3</td>
<td>ENL101</td>
</tr>
<tr>
<td></td>
<td>Modern Language I</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL102</td>
</tr>
<tr>
<td>ENL108</td>
</tr>
<tr>
<td>ENL150</td>
</tr>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral &amp; Social Sciences</td>
</tr>
<tr>
<td>Natural or Physical Science</td>
</tr>
<tr>
<td>Literature Survey I</td>
</tr>
<tr>
<td>COM205 (or) HUM102</td>
</tr>
<tr>
<td>Oral Interpretation/Readers Theater (or) Humanities: Perception through the Arts</td>
</tr>
<tr>
<td>Concentration Elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural or Physical Science</td>
</tr>
<tr>
<td>Elective</td>
</tr>
<tr>
<td>Literature Survey II</td>
</tr>
<tr>
<td>Concentration Elective</td>
</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.

Overview
The English: Literature concentration is for students who plan to transfer as a junior to a bachelor's degree program.

Career Outlook
Students planning to attend graduate school select from a broad range of humanistic courses to prepare for advanced study. Career fields include education, law, publishing, advertising, public relations, personnel management, administration, writing, and library services.

Concentration Electives
ENL135 Short Story & Human Values
ENL207 Shakespeare
ENL210 Exploring Modern Poetry
ENL214 The Contemporary Novel
ENL215 World Religions in Literature
ENL217 Exploring the World of Science Fiction
ENL218 The Arthurian Legend
ENL219 Masters of Horror
ENL228 Women Writers
Modern Language – Intermediate I
Modern Language – Intermediate II

Literature Survey Courses
ENL201 World Literature I
ENL202 World Literature II
ENL203 British Literature through the 18th Century
ENL204 British Literature from the Romantic Age-Present
ENL205 American Literature to 1890
ENL206 American Literature since 1890
Associate in Arts

English: Writing Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the English: Writing Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modern Language I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENL108</td>
<td>Critical Reading &amp; Thinking</td>
<td>3</td>
<td>ENL020 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>ENL161</td>
<td>Journalism I</td>
<td>3</td>
<td>ENL101</td>
</tr>
<tr>
<td></td>
<td>Modern Language II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HUM102</td>
<td>Humanities: Perception through the Arts</td>
<td>3</td>
<td>ENL101</td>
</tr>
<tr>
<td></td>
<td>Literature Survey I</td>
<td>3</td>
<td>ENL102</td>
</tr>
<tr>
<td>ENL163</td>
<td>Journalism II</td>
<td>3</td>
<td>ENL161</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concentration Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Literature Survey II</td>
<td>3</td>
<td>ENL102</td>
</tr>
<tr>
<td>ENL131</td>
<td>Technical Writing</td>
<td>3</td>
<td>ENL101</td>
</tr>
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<td><strong>Total Credits</strong></td>
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<tr>
<td></td>
<td></td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.

Overview

The English: Writing concentration prepares students for transfer to Bachelor of Arts programs in writing, critical thinking, journalism, and/or communication. Students who select this option may also transfer to Bachelor of Fine Arts programs in creative writing.

Career Outlook

Excellent employment opportunities abound for students whose critical thinking and writing skills enable them to communicate effectively and clearly, participate in decision making, and learn autonomously. Career fields include education, journalism, public relations, resource management, sales, information management, and customer relations.

Concentration Electives

- ENL200 Cape Cod Literature
- ENL209 Creative Writing
- ENL213 Poetry Writing
- ENL216 Advanced Research Report Writing
- Modern Language – Intermediate I
- Modern Language – Intermediate II

Literature Survey Courses

- ENL201 World Literature I
- ENL202 World Literature II
- ENL203 British Literature through the 18th Century
- ENL204 British Literature from the Romantic Age-Present
- ENL205 American Literature to 1890
- ENL206 American Literature since 1890
Associate in Arts  
Environmental Studies Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Environmental Studies Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
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<tr>
<td>BIO15</td>
<td>General Biology I (formerly BIO101)</td>
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<td>(MAT030 or MAT035), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
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<td></td>
<td>Mathematics/Quantitative Reasoning*</td>
<td>3 or 4</td>
<td></td>
</tr>
<tr>
<td>ENV101</td>
<td>Survey of Environmental Technology</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td>CHM151</td>
<td>General Chemistry I (formerly CHM101)</td>
<td>4</td>
<td>(MAT040 or MAT045) &amp; ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO152</td>
<td>General Biology II (formerly BIO102)</td>
<td>4</td>
<td>A grade of C or higher in BIO101 or BIO151</td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>CHM152</td>
<td>General Chemistry II (formerly CHM102)</td>
<td>4</td>
<td>A grade of C or higher in CHM101 or CHM151</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHM251</td>
<td>Organic Chemistry I (formerly CHM201)</td>
<td>5</td>
<td>A grade of C or higher in CHM102 or CHM152</td>
</tr>
<tr>
<td>Mathematics/Quantitative Reasoning*</td>
<td>3 or 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHM252</td>
<td>Organic Chemistry II (formerly CHM202)</td>
<td>5</td>
<td>A grade of C or higher in CHM201 or CHM251</td>
</tr>
<tr>
<td>Environmental elective**</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>62/64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.

Overview
Students who aim toward a four-year undergraduate program in Environmental Studies can undertake the first two years at the College. In addition to the natural science and mathematical courses, students choose from a variety of environmental electives. Articulation agreements with the Massachusetts Maritime Academy are in the process of being updated. Consult the transfer advisor concerning the details of these articulation agreements.

Career Outlook
This option provides students with a sound basis for further study in environmental engineering, environmental studies, natural resources management, environmental education, and environmental management.

Program Outcomes
Upon successful completion of the Environmental Studies Concentration, students are able to:
- Communicate and discuss current issues in environmental science.
- Demonstrate the ability for further study in environmental engineering, environmental studies, natural resources management, environmental education, and environmental management.

* Mathematics courses chosen from:
  - MAT150  Elementary Statistics
  - MAT195  Precalculus with Trigonometry

** Environmental electives should be carefully chosen from the list of Environmental Technology courses.
Associate in Arts
General Studies Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the General Studies Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electives</td>
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<td></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electives</td>
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<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits** 60

The Associate in Arts degree does not indicate a specialized degree in a concentration.

Electives may be a combination of credits which combined are greater than or equal to that stated in the credits column above.
Associate in Arts: Art & Design Transfer Foundation
Graphic Design Concentration

Students who complete this concentration satisfy the requirements of MassTransfer. For complete information regarding MassTransfer, go to www.mass.edu/masstransfer.

Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Graphic Design Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL0102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>ART170</td>
<td>Introduction to Computer Graphics (Adobe Photoshop, Illustrator, InDesign)</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>ART101</td>
<td>Design I</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>ART100</td>
<td>Drawing I</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>ART205</td>
<td>Illustration I (Adobe Illustrator)</td>
<td>3</td>
<td>ART170</td>
</tr>
<tr>
<td>ART214</td>
<td>Digital Imaging I (Adobe Photoshop)</td>
<td>3</td>
<td>ART170</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART207</td>
<td>Graphic Design I</td>
<td>3</td>
<td>ART170</td>
</tr>
<tr>
<td>ART210</td>
<td>Graphic Production and Layout I (Adobe InDesign)</td>
<td>3</td>
<td>ART101 &amp; ART170</td>
</tr>
<tr>
<td>ART103</td>
<td>You Can Design!</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
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<tr>
<td>ART218</td>
<td>Typography</td>
<td>3</td>
<td>ART170</td>
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<tr>
<td>ART208</td>
<td>Graphic Design II</td>
<td>3</td>
<td>ART207</td>
</tr>
<tr>
<td>ART137</td>
<td>History of Graphic Design</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<td></td>
<td>60</td>
</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.
Associate in Arts
Health Education / Exercise Science / Recreation Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Health Education / Exercise Science / Recreation Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>MAT150</td>
<td>Elementary Statistics</td>
<td>3</td>
<td>(MAT035 or MAT040) or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>BIO151</td>
<td>General Biology I (formerly BIO101)</td>
<td>4</td>
<td>(MAT030 or MAT035), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FIT117</td>
<td>Personal Fitness</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td>BIO152</td>
<td>General Biology II (formerly BIO102)</td>
<td>4</td>
<td>A grade of C or higher in BIO101 or BIO151</td>
</tr>
<tr>
<td>HEA132</td>
<td>Advanced First Aid and Emergency Care / Basic Life Support / First Responder</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO251</td>
<td>Human Anatomy and Physiology I (formerly BIO107)</td>
<td>4</td>
<td>A grade of C or higher in CHM109 or (BIO101 or BIO151) or (CHM101 or CHM151)</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>PSY233</td>
<td>Developmental Psychology: The Life Span</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
</tr>
<tr>
<td></td>
<td>Life Fitness elective</td>
<td>3</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO252</td>
<td>Human Anatomy and Physiology II (formerly BIO108)</td>
<td>4</td>
<td>A grade of C or higher in BIO107 or BIO251</td>
</tr>
<tr>
<td></td>
<td>Life Fitness elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education elective</td>
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<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>61</td>
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<td></td>
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</tbody>
</table>
Associate in Arts
Health Sciences Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Health Sciences Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL02 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>Behavioral &amp; Social Sciences (PSY101 or SOC106)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral &amp; Social Sciences (PSY101 or SOC106)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural or Physical Science (CHM109 or CHM101 or CHM151)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT103</td>
<td>Medical Terminology</td>
<td>3</td>
<td>ENL020 &amp; ESL050 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>Natural or Physical Science (BIO107 or BIO251 or BIO105)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY233</td>
<td>Developmental Psychology: Life Span</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ESL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
</tr>
<tr>
<td>Health Sciences elective**</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
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<tr>
<td>Health Sciences elective**</td>
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</tr>
<tr>
<td>Health Sciences elective**</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts (COM201)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics/Quantitative Reasoning (MAT150)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Sciences elective**</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Sciences elective**</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPN100 (or PRT100) Conversational Spanish (or) Conversational Brazilian Portuguese</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL050 or satisfactory basic skills assessment score (or) ENL050 or satisfactory basic skills assessment score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong>                                                                62</td>
<td>The Associate in Arts degree does not indicate a specialized degree in a concentration.</td>
<td></td>
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</tr>
</tbody>
</table>

Overview
This concentration is designed for the student who is interested in establishing the groundwork for a health career or is interested in pursuing an A.A. degree, and/or planning to transfer to a 4-year college. To optimize the student’s experience and success, the student is encouraged to work with an advisor or transfer counselor to select the appropriate elective courses for the career the student wishes to pursue. Successful completion of this concentration is not a guarantee of admission into a selective health program.

Career Outlook
Health career roles continue to be in high demand in our service area and beyond. This concentration provides the student with a strong basic education on which to build knowledge for the specific healthcare profession of choice.

Program Outcomes
With advisor consultation and upon successful completion of selected courses, the students are able to:
- Achieve the prerequisites and basic course knowledge to design a schedule to meet the requirements for a variety of health career educational programs at Cape Cod Community College and for transfer.
- Demonstrate basic knowledge in the social and natural sciences.
- Communicate effectively.
- Apply information literacy.
- Demonstrate an appreciation for art and culture.
- Discuss ethical issues.

*BIO105 Survey of Anatomy and Physiology will not fulfill the prerequisite for the CCCC Nursing or Dental Hygiene programs and may not transfer to a medically-oriented bachelor program.

** Health Sciences Electives
- BIO252 Human Anatomy & Physiology II (formerly BIO108)
- BIO281 Microbiology (formerly BIO201)
- CNA117 Tri-level Nursing Assistant/Home Health Aide (6 credits)
- HEA120 Stress Management for Optimal Health
- HEA130 Standard First Aid & Basic Life Support (1 credit)
- HEA201 Nutrition
- MTC135 Intro to Complementary Healing Practices
- NUR100 Pharmacology Calculations (1 credit)
Associate in Arts
Human Services Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Human Services Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>MAT150</td>
<td>Elementary Statistics</td>
<td>3</td>
<td>(MAT035 or MAT40) or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td>HUS101</td>
<td>Introduction to Human Services</td>
<td>3</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>PSY208</td>
<td>Principles of Counseling &amp; Crisis Intervention</td>
<td>3</td>
<td>PSY101</td>
</tr>
<tr>
<td>PSY201</td>
<td>Child Psychology (or)</td>
<td>3</td>
<td>PSY101 (or) PSY101 &amp; ENL101</td>
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<tr>
<td>PSY202</td>
<td>Adolescent Psychology (or)</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
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<tr>
<td>PSY233</td>
<td>Developmental Psychology</td>
<td>3</td>
<td>PSY101 &amp; ENL101</td>
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<tr>
<td>BIO109</td>
<td>Survey of Biology (or)</td>
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<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td>BIO151</td>
<td>General Biology I</td>
<td>3</td>
<td>(MAT030 or MAT035), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
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<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
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<tr>
<td>HUS206</td>
<td>Human Services Practicum</td>
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<td>By perm. of Human Services Coord., PSY101, HUS101, PSY208</td>
</tr>
<tr>
<td>HUS229</td>
<td>Introduction to Social Welfare</td>
<td>3</td>
<td>PSY101 or SOC106</td>
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<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY209</td>
<td>Group Dynamics in Human Services</td>
<td>3</td>
<td>PSY101 or SOC106</td>
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<tr>
<td></td>
<td>Elective*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HUS207</td>
<td>Advanced Human Services Practicum</td>
<td>4</td>
<td>By perm. of Human Services Coord., ENL101, HUS202, PSY209, Co-requisites: HUS230, HUS231</td>
</tr>
<tr>
<td></td>
<td>Elective*</td>
<td>2-3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 60-61

The Associate in Arts degree does not indicate a specialized degree in a concentration.
Associate in Arts
Liberal Arts Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Liberal Arts Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>1-3</td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concentration Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Third Semester</td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concentration Elective</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Concentration Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concentration Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Fourth Semester</td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concentration Elective</td>
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<td></td>
<td>Concentration Elective</td>
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<tr>
<td></td>
<td>Concentration Elective</td>
<td>3</td>
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</tr>
<tr>
<td></td>
<td>Elective (if needed to earn 60 credits)</td>
<td>1-3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 60

The Associate in Arts degree does not indicate a specialized degree in a concentration.

Overview
The Liberal Arts concentration is designed for students who have not yet chosen a concentration. It prepares students to transfer to a baccalaureate degree-granting college or university as a junior. Students are encouraged to take electives in disciplines in which they may major at a four-year institution. Specific course choices should be made in consultation with an academic advisor and requirements of the transfer institutions.

Career Outlook
Potential careers will vary depending upon the chosen major. A bachelor’s degree is usually the minimum requirement for entry into many fields, and additional graduate work may be necessary as well.

Liberal Arts Concentration Electives
Choose up to 7 classes (21 credits) from courses with the following prefixes.

- ANT
- ARB
- ART
- ASL
- AST
- BIO
- CHM
- COL
- COM
- CSC
- DAN
- ECO
- ENL
- ESC
- ENV
- FRN
- GEO
- GER
- GOV
- HIS
- HON
- HUM
- ITL
- LAT
- MAT
- MUS
- PHI
- PHY
- PRT
- PSY
- REL
- SOC
- SPN
- THR

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## Associate in Arts
### Media Studies Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to [Degree Requirements](#).

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years. A candidate for the Media Studies Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>COM113</td>
<td>Radio Broadcasting</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td>ART101</td>
<td>Design I (or)</td>
<td>3</td>
<td>ENL020 &amp; ENL040 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>ART130</td>
<td>You Can Design!</td>
<td>1</td>
<td>ENL020 &amp; ENL040 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>COM105</td>
<td>Survey of Mass Communication</td>
<td>3</td>
<td>ENL010 or satisfactory reading comprehension score on the basic skills assessment</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concentration elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COM114</td>
<td>Radio Production (or)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COM131</td>
<td>Introduction to Video Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
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<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>1-3</td>
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</tr>
<tr>
<td></td>
<td><strong>Total Credits:</strong> 60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.

### Overview

The Media Studies concentration provides flexibility by providing fundamental courses that result in a solid foundation for transfer to a four-year institution. Alternatively, it is a skills oriented degree designed to improve the student’s skill and ability to operate broadcast technology in a professional setting.

### Career Outlook

This degree introduces the student to career-oriented fields such as radio broadcasting, radio production, and broadcast journalism. Job growth in the industry is based on strong demand from the public for media. Employment is constantly changing based on new technologies and includes film/video/television editors, camera operators, directors and producers, film critics and script writers, as well as teachers, set designers, production assistants, and props or location managers. Students may complete their degree and transfer to a four-year degree or they may immediately enter the field.

### Concentration Electives

- ART137 History of Graphic Design
- ART170 Introduction to Computer Graphics
- ART205 Illustration I (Adobe Illustrator)
- ART207 Graphic Design I
- ART208 Graphic Design II
- COM100 Voice and Diction
- COM120 Introduction to Film
- COM203 Public Speaking
- COM204 Persuasive Communication
- COM207 Argumentation and Debate
- COM208 Broadcast Writing and Presentation
- COM209 Event Planning
- COM221 American Film
- COM222 International Cinema
- COM224 Documentary Film
- COM231 Advanced Radio Production
- COM262 Mass Communication Cooperative Work Experience
- ENL161 Journalism I
- THR117 Introduction to Theater Design
- THR119 Stagecraft
- THR125 Stage Movement
- THR205 Directing for Theater
- THR207 Acting on Camera
- THR208 Acting on Camera II
## Associate in Arts

### Modern Language Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Modern Language Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>HIS160</td>
<td>European History I</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>4</td>
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<tr>
<td></td>
<td>(Elementary Language I)</td>
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</tr>
<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning</td>
<td>3/4</td>
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</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>HIS162</td>
<td>European History II</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
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<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
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<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>4</td>
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<tr>
<td></td>
<td>(Elementary Language II)</td>
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<tr>
<td>ART126</td>
<td>History of Art: Renaissance to Romanticism (or)</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score (or)</td>
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<tr>
<td>MUS100</td>
<td>Music Appreciation</td>
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<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
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<td><strong>Third Semester</strong></td>
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<td>ENL201</td>
<td>World Literature I</td>
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<td>ENL102</td>
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<td>Humanities &amp; Fine Arts</td>
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<tr>
<td></td>
<td>(Intermediate Language I)</td>
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<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>4</td>
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</tr>
<tr>
<td></td>
<td>(Elementary Second Language I)</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<td></td>
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</tr>
<tr>
<td>ENL202</td>
<td>World Literature II</td>
<td>3</td>
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<tr>
<td></td>
<td>(Intermediate Language II)</td>
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<tr>
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<td>Humanities &amp; Fine Arts</td>
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</tr>
<tr>
<td></td>
<td>(Elementary Second Language II)</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<td><strong>62/63</strong></td>
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</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.

### Overview

Students seeking a bachelor's degree may major or minor in a modern language or world literature. Language study empowers students to communicate in a language other than their own, to compare what they know and experience at home, to make personal connections to the world community, as well as to use language with greater effectiveness in their lives.

### Career Outlook

Social scientists consider that communication across cultural boundaries is a core competency of the twenty-first century. Students who demonstrate effective functioning in diverse cultures and climates are attractive to global employers. Job applicants with second and third language skills have an advantage over monolingual candidates.

**Note:** A student who plans to study abroad has various options available; refer to International Studies.
# Associate in Arts

## Performing Arts Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to [Degree Requirements](#).

A candidate for the Performing Arts Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
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<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foundation Course</td>
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<td></td>
<td>Elective</td>
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<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO105</td>
<td>Survey of Anatomy and Physiology</td>
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<td>MAT020 or MAT025, ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
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<td>PSY101</td>
<td>General Psychology</td>
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<td>Foundation Course</td>
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<td>Concentration Elective</td>
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<td></td>
<td>Practicum Electives</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
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<td></td>
<td>Foundation Course</td>
<td>3</td>
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</tr>
<tr>
<td></td>
<td>Concentration (or) Practicum Elective</td>
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<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Natural or Physical Science</td>
<td>4</td>
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<td>Behavioral and Social Science</td>
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<tr>
<td>Concentration (or) Practicum Elective</td>
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<tr>
<td>Elective</td>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.

### Overview

The Performing Arts curriculum offers instruction in theory, practice and history. These three areas of study provide the foundation needed to begin a career in the performing arts or to prepare for admission to a four-year college or university music, theater, dance or performance studies program.

### Career Outlook

Students with a strong performing arts background may pursue degrees and careers in performance, choreography, directing, technical theater, radio/TV production, dance/drama/music therapy, and/or instruction, broadcast media and more.

Students must earn 9 credits chosen from the following:

- Foundation Courses
  - THR101 Introduction to Theater* (or)
  - THR102 Page to Stage: Planning Play Production
  - THR120 Stagecraft & Theater Technologies
  - MUS101 Music Theory I*
  - MUS102/103 Music History I* (or) Music History II*

Students must earn 6 credits chosen from the following:

- Concentration Electives
  - DAN101 Musical Theater Dance
  - DAN120 Modern Dance I*
  - DAN221 Modern Dance II
  - THR101 Introduction to Theater* (or)
  - THR102 Page to Stage: Planning Play Production
  - THR103 Acting I*
  - THR125 Stage Movement
  - THR203 Acting II
  - THR209 Audition Techniques & Portfolio Preparation
  - THR262 Theater Cooperative Work Experience
  - MUS102 Music History I*
  - MUS103 Music History II*
  - MUS116 History of Rock*
  - MUS202 Advanced Music Theory*

Students must earn 6 credits chosen from the following:

- Practicum Electives
  - THR104 Intro to Stage Management (1 credit)
  - THR105 Intro to Theatrical Makeup (1 credit)
  - THR113 Rehearsal & Performance (1 credit)
  - MUS113 Select Chorus (1 credit)
  - MUS123 Jazz Combo (1 credit)
  - MUS120 Applied Music (1 credit)
  - MUS121 Advanced Applied Music (2 credits)
  - MUS122G/P Beginning Guitar/Piano (1 credit)
  - MUS124G/P Guitar II/Plano II (1 credit)

* Fulfills the Humanities & Fine Arts General Education Requirement. Students must select 6 credits from courses listed above with * to satisfy the Humanities & Fine Arts General Education requirement.
## Associate in Arts
### Philosophy Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Philosophy Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>PHI130</td>
<td>Introduction to Philosophy</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td>ANT107</td>
<td>Introduction to Anthropology</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>HIS160</td>
<td>European History I</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
</tr>
</tbody>
</table>

### First Semester

**ENL102** English Composition II 3 A grade of C- or higher in ENL101

**PHI160** Three Great Thinkers 3 ENL101 and a previous philosophy course

**HIS162** European History II 3 ENL020 & ENL050 or satisfactory basic skills assessment score

**Mathematics/Quantitative Reasoning** 3/4 Humanities & Fine Arts(Literature) 3

### Second Semester

**REL122** Concepts of Western Religion 3 None

**PHI201** Existentialism 3 ENL101 or PHI130

**Natural or Physical Science** 4

**Mathematics/Quantitative Reasoning** 3/4 Humanities & Fine Arts 3

### Third Semester

**REL123** Concepts of Eastern Religion 3 None

**PHI210** Ethics 3 ENL101 or PHI130

**Natural or Physical Science** 4

**Physics/Quantitative Reasoning** 3/4 Humanities & Fine Arts 3

### Fourth Semester

**REL123** Concepts of Western Religion 3 None

**PHI210** Ethics 3 ENL101 or PHI130

**Natural or Physical Science** 4

**PHI131** Logic 3 PHI130 or ENL101

**Humanities & Fine Arts** 3

| Total Credits | 62/64 |

The Associate in Arts degree does not indicate a specialized degree in a concentration.

---

**Overview**

The Philosophy concentration provides an intense and focused program on thinking and writing about the most basic intellectual activities in the human experience, including a broad range of historical, religious, social and ethical considerations.

**Career Outlook**

The Philosophy concentration provides a solid base from which a student could continue in a bachelor's program in any of the social sciences or liberal arts. The Philosophy concentration is also an excellent long-range preparation for graduate work in any area of specialization, particularly in law or in medical school.

*For the mathematically adept or for the scientifically inclined, this should be Precalculus. For the individual less interested in these subjects, this should be Elementary Statistics.

**For the scientifically inclined, this should be Physics I, II; University Physics I, II; General Chemistry I, II; or Concepts in Biology I.

For the individual less interested in science, this should be Survey of Physics; Survey of Chemistry; Intro to Environmental Science; or Introduction to Earth Science.

**Note:** Some transfer colleges require proficiency in a modern language at the intermediate level.
Associate in Arts
Political Science Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Political Science Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>COM105</td>
<td>Survey of Mass Communication</td>
<td>3</td>
<td>ENL010 or satisfactory reading comprehension score on the basic skills assessment</td>
</tr>
<tr>
<td>GOV111</td>
<td>American Government</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective*</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**First Semester**

**Second Semester**

ENL102   | English Composition II              | 3       | A grade of C- or higher in ENL101                |
GEO104   | Geography: Culture and Environment | 3       | None; ENL020 & ENL050 or satisfactory basic skills assessment scores recommended |
GOV110   | The American Presidency             | 3       | None                                              |
          | Humanities & Fine Arts              | 3       |                                                   |
          | Elective*                           | 3       |                                                   |

**Third Semester**

<table>
<thead>
<tr>
<th>Course #</th>
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<td>GOV101</td>
<td>Comparative Politics</td>
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<td>None</td>
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<td>Natural or Physical Science</td>
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**Fourth Semester**

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<th>Prerequisites</th>
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</thead>
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<td>GOV102</td>
<td>International Relations</td>
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<td>ENL050 or satisfactory basic skills assessment score</td>
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<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective*</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 62

The Associate in Arts degree does not indicate a specialized degree in a concentration.

Overview

The student who is interested in studying political science is exposed to a broad range of courses which cover not only the structure and operation of national governmental institutions, but also more generally political thought, governments other than our own, and international relations. Students who complete this concentration are prepared for transfer to a bachelor’s program.

Career Outlook

This concentration is for students interested in any level of government, or political involvement, the Foreign Service, the law profession, teaching, public administration, or in the liberal arts. Students should note that entry-level job requirements in these areas almost always call for a minimum of a bachelor’s degree, and knowledge of a foreign language is recommended.

*Suggested Electives

COM203 Public Speaking
COM204 Persuasive Communication
COM207 Argumentation and Debate
COM213 Advanced Debate
ECO117 Principles of Macroeconomics
ECO118 Principles of Microeconomics
HIS103 U.S. History to 1865
HIS104 U.S. History since 1865
HIS119 World History I
HIS120 World History II
PHI130 Introduction to Philosophy
PSY101 General Psychology
REL122 Concepts of Western Religion
REL123 Concepts of Eastern Religion
SOC106 Principles of Sociology
## Associate in Arts
### Psychology Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to [Degree Requirements](#).

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Psychology Concentration must complete the courses shown below.

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</tr>
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<td></td>
<td></td>
</tr>
<tr>
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<td>English Composition I</td>
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<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
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<tr>
<td>COM103</td>
<td>Human Communication</td>
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</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
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<tr>
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<tr>
<td>BIO101</td>
<td>General Biology I (formerly BIO101)</td>
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<td>(MAT030 or MAT035), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores (or) (MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
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<tr>
<td>BIO109</td>
<td>Survey of Biology</td>
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<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
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<tr>
<td>Elective</td>
<td>Behavioral &amp; Social Sciences (Psychology)</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>Natural or Physical Science</td>
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<td>Behavioral &amp; Social Sciences</td>
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<tr>
<td>Mathematics/Quantitative Reasoning*</td>
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<td></td>
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<td><strong>Fourth Semester</strong></td>
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<td>Elective</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</tr>
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</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.

### Overview
A student interested in studying psychology and/or transferring into a four-year undergraduate program in the liberal arts can take the first two years of study at Cape Cod Community College.

### Career Outlook
This suggested course of study provides basic curriculum for those considering a career in psychology, counseling, social work, employee assistance work, human resource work or any profession requiring an in-depth understanding of human behavior.

*MAT150 Elementary Statistics recommended.

**Note:** In choosing electives, some transfer colleges require proficiency in a modern language at the intermediate level. In that case, the student may need to elect a four-semester sequence.
## Associate in Arts

### Science, Mathematics, and Pre-Engineering Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Science, Mathematics, and Pre-Engineering Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>Mathematics/Quantitative Reasoning</td>
<td>3/4</td>
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</tr>
<tr>
<td>Natural or Physical Science*</td>
<td>4</td>
<td></td>
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</tr>
<tr>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>Mathematics/Quantitative Reasoning</td>
<td>3/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural or Physical Science*</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural or Physical Science**</td>
<td>3/4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics/Quantitative Reasoning</td>
<td>3/4</td>
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<tr>
<td>Computer Science</td>
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<td><strong>Fourth Semester</strong></td>
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<tr>
<td>Humanities &amp; Fine Arts</td>
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<tr>
<td>Behavioral &amp; Social Sciences</td>
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</tr>
<tr>
<td>Natural or Physical Science**</td>
<td>3/4</td>
<td></td>
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<tr>
<td>Mathematics/Quantitative Reasoning</td>
<td>3/4</td>
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<tr>
<td>Humanities &amp; Fine Arts</td>
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<tr>
<td>Total Credits:</td>
<td>62/68</td>
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</tbody>
</table>

NOTE: BIO151 is formerly BIO101; BIO151 is formerly BIO102; CHM151 is formerly CHM101; CHM152 is formerly CHM102; CHM251 is formerly CHM201; CHM252 is formerly CHM202; PHY151 is formerly PHY101; PHY152 is formerly PHY152

### Overview

Students in the Science, Mathematics, and Pre-Engineering concentration learn to solve problems and work in teams to analyze, conduct, and report on scientific experiments. Students generally focus on mathematics or one of the natural sciences, while completing the general education requirements that satisfy MassTransfer. An emphasis on science and mathematics is recommended for students interested in pursuing other degrees such as engineering, medical (including nursing), law, and economics.

### Career Outlook

Most students in the Science, Mathematics, and Pre-Engineering concentration continue their studies at a four-year school. Students who have chosen a particular field should check the requirements of the transfer institution. Students may pursue various careers in biology, chemistry, physics, engineering, environmental science, medicine, dentistry, optometry, veterinary science, naturopathy, pharmacy, alternative medicine, chiropractic, and mathematics.

*The student who pursues a Biology Field should select:
BIO151 General Biology I & BIO152 General Biology II
CHM151 General Chemistry I & CHM152 General Chemistry II
CHM251 Organic Chemistry I & CHM252 Organic Chemistry II
MAT150 Elementary Statistics

*The student who pursues a Chemistry Field should select:
CHM151 General Chemistry I & CHM152 General Chemistry II
CHM251 Organic Chemistry I & CHM252 Organic Chemistry II
PHY151 Physics I & PHY152 Physics II
MAT240 Calculus I, MAT250 Calculus II, & MAT260 Calculus III
MAT150 Elementary Statistics

*The student who pursues a Physics Field should select:
PHY151 Physics I & PHY152 Physics II (or)
PHY211 University Physics I & PHY212 University Physics II
CHM151 General Chemistry I & CHM152 General Chemistry II
MAT240 Calculus I, MAT250 Calculus II, & MAT260 Calculus III
MAT245 Linear Algebra
MAT270 Differential Equations

**The student who pursues a Mathematics Field may select Mathematics courses instead of a Natural Science course.
## Associate in Arts
### Sociology / Anthropology Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Sociology / Anthropology Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>HIS103 (or) GOV111</td>
<td>U.S. History to 1865 (or) American Government</td>
<td>3</td>
<td>None; ENL020 &amp; ENL050 recommended (or) None</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td></td>
<td>General Education elective</td>
<td>3</td>
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<tr>
<td><strong>Second Semester</strong></td>
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<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
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<tr>
<td>ANT107</td>
<td>Introduction to Anthropology</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td>HIS104 (or) HIS162</td>
<td>U.S. History since 1865 (or) European History II</td>
<td>3</td>
<td>None; ENL020 &amp; ENL050 recommended (or) ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
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<tr>
<td></td>
<td>Humanities &amp; Fine Arts</td>
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<tr>
<td>SOC215</td>
<td>Social Problems</td>
<td>3</td>
<td>SOC106</td>
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<td><strong>Third Semester</strong></td>
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<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MAT150</td>
<td>Elementary Statistics</td>
<td>3</td>
<td>(MAT035 or MAT040) or satisfactory basic skills assessment scores</td>
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<tr>
<td>SOC210</td>
<td>Marriage and Family</td>
<td>3</td>
<td>SOC106</td>
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<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
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<td></td>
<td>Humanities &amp; Fine Arts</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>SOC208</td>
<td>Race, Gender and Class in the U.S.</td>
<td>3</td>
<td>SOC106</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
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<td></td>
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<tr>
<td>PHI130</td>
<td>Introduction to Philosophy</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>62</strong></td>
<td></td>
</tr>
</tbody>
</table>
Associate in Arts
U.S. History Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the U. S. History Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>HIS103</td>
<td>U.S. History to 1865</td>
<td>3</td>
<td>None; ENL020 &amp; ENL050 strongly recommended</td>
</tr>
<tr>
<td>GEO104</td>
<td>Geography: Culture and Environment</td>
<td>3</td>
<td>None; ENL020 &amp; ENL050 strongly recommended</td>
</tr>
<tr>
<td>MAT150</td>
<td>Elementary Statistics</td>
<td>3</td>
<td>(MAT035 or MAT040) or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>HIS104</td>
<td>U.S. History since 1865</td>
<td>3</td>
<td>None; ENL020 &amp; ENL050 strongly recommended</td>
</tr>
<tr>
<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts</td>
<td></td>
<td>3</td>
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</tr>
<tr>
<td>ENL205</td>
<td>American Literature to 1890</td>
<td>3</td>
<td>ENL102</td>
</tr>
<tr>
<td>HIS211</td>
<td>The Civil War</td>
<td>3</td>
<td>ENL101</td>
</tr>
<tr>
<td>GOV111</td>
<td>American Government</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td>Natural or Physical Science</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENL206</td>
<td>American Literature since 1890</td>
<td>3</td>
<td>ENL102</td>
</tr>
<tr>
<td>HIS215</td>
<td>Women in United States History</td>
<td>3</td>
<td>ENL101</td>
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<tr>
<td>Natural or Physical Science</td>
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<td>4</td>
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<tr>
<td>Elective</td>
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<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

The Associate in Arts degree does not indicate a specialized degree in a concentration.

Overview
This concentration is designed to give students a broad understanding of the history of the United States, its diverse people and its government. This interdisciplinary approach promotes active and informed citizenship as well as an appreciation for our past. A student who completes this concentration will be prepared for transfer to a bachelor's program.

Career Outlook
The U. S. History concentration gives a student a strong foundation for further studies in the areas of education, law, historic preservation, museum studies, journalism, government and non-profit work, and positions involving research in the Social Sciences and Humanities. Students should note that entry-level job requirements in these areas always call for a minimum of a bachelor’s degree and often knowledge of a foreign language.

Suggested Electives
ANT107 Introduction to Anthropology
ANT211 Comparative Cultures
COM103 Human Communication
COM221 American Film
ECO117 Principles of Macroeconomics
ECO118 Principles of Microeconomics
GEO101 American Geography
GOV101 Comparative Politics
GOV102 International Relations
GOV110 The American Presidency
HIS119 World History I
HIS120 World History II
HIS160 European History I
HIS162 European History II
HIS253 Vietnam: America’s Longest War
HIS258 African-American History
MUS116 History of Rock Music
SOC208 Race, Class & Gender in the United States
PHI130 Introduction to Philosophy
REL122 Concepts of Western Religion
Associate in Arts: Art & Design Transfer Foundation

Visual Arts Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to Degree Requirements.

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the Visual Arts Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>ART101</td>
<td>Design I</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>ART100</td>
<td>Drawing I</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td></td>
<td>Mathematics /Quantitative Reasoning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>ART200</td>
<td>Drawing II</td>
<td>3</td>
<td>ART100</td>
</tr>
<tr>
<td>ART201</td>
<td>Design II</td>
<td>3</td>
<td>ART101</td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART109</td>
<td>Art Appreciation</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>ART209</td>
<td>Printmaking Techniques</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>ART103</td>
<td>Painting I</td>
<td>3</td>
<td>ART100</td>
</tr>
<tr>
<td>ART130</td>
<td>You Can Design! (or) Art Elective*</td>
<td>1 (or) 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>ART136</td>
<td>Three Dimensional Design</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
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<td></td>
<td>Natural or Physical Science</td>
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</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
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<td></td>
<td>Art Elective*</td>
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</tr>
<tr>
<td>ART229</td>
<td>Painting II</td>
<td>3</td>
<td>ART103</td>
</tr>
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<td><strong>Total Credits</strong></td>
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<tr>
<td></td>
<td></td>
<td>60</td>
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</tr>
</tbody>
</table>

Overview
The Visual Arts Concentration provides necessary fundamental courses resulting in a quality portfolio of artwork ready for transfer and articulates precisely with the University of Massachusetts-Dartmouth Fine Arts 2D Painting or 3D Sculpture. Students may also choose to transfer to other colleges or universities to continue their Bachelor of Fine Art (BFA) or Bachelor of Arts studies.

Career Outlook
Careers in the Visual Arts are constantly changing but could include electronic imaging, graphic design, illustration, teaching, museum and gallery work, display, advertising, and industrial design, as well as the areas of painting, printmaking, sculpture and performance art. It is recommended that students complete this concentration and transfer to complete a bachelor’s degree.

It is recommended that students check with the Transfer Advisor for other transfer options.

Articulation Agreements
Upon completion of this concentration as outlined, students are guaranteed the transfer of credits to:
- Bridgewater State University
  Art Program
- University of Massachusetts-Dartmouth
  Fine Arts - 2D Painting
  Fine Arts - 3D Sculpture

For details regarding these Articulation and Transfer Agreements and others, please visit www.capecod.edu/web/transfer.

* Art Electives
ART135 Fashion, Textile and Fiber Art
ART139 Digital Photography
ART140 Introduction to Silkscreen Printing
ART225 Book Arts and Paper Making
ART226 Printmaking II
ART216 Life Drawing

The Associate in Arts degree does not indicate a specialized degree in a concentration.
## Associate in Arts
### World History Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students are encouraged to meet with the Cape Cod Community College Transfer Advisor. Students should consult with an advisor about the general education course requirements. For additional information pertaining to degree requirements, please refer to [Degree Requirements](#).

The table below specifies a full-time course load, per semester, for students planning to complete their degree in two years.

A candidate for the World History Concentration must complete the courses shown below.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201</td>
</tr>
<tr>
<td>HIS119</td>
<td>World History I</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>MAT150</td>
<td>Elementary Statistics</td>
<td>3</td>
<td>(MAT035 or MAT040) or satisfactory basic skills assessment score</td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts (Modern Language)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>HIS120</td>
<td>World History II</td>
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<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
</tr>
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<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
</tr>
<tr>
<td>GEO104</td>
<td>Geography: Culture and Environment</td>
<td>3</td>
<td>None; ENL020 &amp; ENL050 or satisfactory basic skills assessment scores recommended</td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts (Modern Language)</td>
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</tr>
<tr>
<td>Elective</td>
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</tbody>
</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO157</td>
<td>Global Economics</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td>ENL201</td>
<td>World Literature I</td>
<td>3</td>
<td>ENL102</td>
</tr>
<tr>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
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</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
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</tbody>
</table>

**Fourth Semester**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL202</td>
<td>World Literature II</td>
<td>3</td>
<td>ENL102</td>
</tr>
<tr>
<td>Natural or Physical Science</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 61

The Associate in Arts degree does not indicate a specialized degree in a concentration.

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**Overview**

A student who chooses the World History concentration will develop intercultural competencies and modern language skills. Courses address learning needs related to the global realities of the twenty-first century. A student who completes this concentration will be prepared for transfer to a bachelor’s program.

**Career Outlook**

The World History concentration gives a student a strong foundation for further studies in the areas of government, diplomacy, international law or business, political science, research and teaching within the humanities or social sciences. Students should note that entry-level job requirements in these areas almost always call for a minimum of a bachelor’s degree.

**Concentration Electives**

- ANT107 Introduction to Anthropology
- ANT108 World Archaeology
- ANT211 Comparative Culture
- ART125 History of Art: Stone Age to Gothic
- ART126 History of Art: Renaissance to Romanticism
- COM222 International Cinema
- ECO117 Principles of Macroeconomics
- ENE150 World Mythologies
- GOV101 Comparative Politics
- GOV102 International Relations
- HIS103 US History to 1865
- HIS104 US History since 1865
- HIS141 History of China
- HIS160 European History I
- HIS162 European History II
- HIS206 Ancient History
- HIS207 Medieval History
- HIS216 History of Japan
- HIS228 Women in European History
- MUS102 Music History I
- MUS103 Music History II
- REL122 Concepts in Western Religion
- REL123 Concepts in Eastern Religion
- SOC235 Sociology of Gender
The Associate in Applied Science programs are intended to prepare people for employment and thus a majority of the coursework involved may be directly related to occupational skills (Board of Regents of Higher Education Final Report: The Undergraduate Experience, 1989, page 17) (AAS pending College Meeting approval.)

**Associate in Applied Science Degree Requirements**

For the Associate in Applied Science degree the student must:

1. Have a minimum cumulative average of 2.0.
2. Satisfactorily complete a minimum of 60 credit hours, at least 24 of which must be earned from Cape Cod Community College, excluding developmental education courses,
3. Select 20 general education credits as follows:
   - ENL101 English Composition I 3 credits
   - Humanities and Fine Arts 3 credits
   - Behavioral and Social Sciences 3 credits
   - Mathematics/Quantitative Reasoning (or) 3/4 credits
   - Natural or Physical Science
   - General Education Elective 7/8 credits
   
   **Total Credits** 20 credits

   Refer to General Education courses on page 29.

4. Complete the professional education credits required by a particular program as outlined in the following pages of this catalog.

   Each Associate in Applied Science program has specific course requirements listed on the following pages.

   To graduate with an Associate in Applied Science degree, a student must follow the curriculum as they appear in the following pages. To graduate, all of those courses must be taken although not necessarily in the order listed. Many of these courses have prerequisites, and some courses are not offered each semester.

   Your academic advisor can assist in the scheduling of your classes. If you do not have an academic advisor, please contact the Director of Advising and Counseling Services.

   **Students who are interested in continuing their education at the baccalaureate level can refer to the list of articulations on page 17 and are encouraged to speak to their advisor, the CCCC transfer advisor, the receiving institution's office of admissions, and/or relevant college catalogs or web sites.**

   **Students must apply for graduation at the beginning of their final semester at CCCC. See your academic advisor to complete the form.**

   Any student taking online courses or courses with online components is responsible for having reliable access to both the Internet and a computer running Chrome or Firefox. Please visit [www.capecod.edu/online](http://www.capecod.edu/online) for more information detailing online course requirements.
To graduate in the Aviation Maintenance Technology Program, a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td>Fall, Spring, Summer</td>
<td></td>
</tr>
<tr>
<td>MAT150</td>
<td>Elementary Statistics (or)</td>
<td>3</td>
<td>MAT035 or MAT040 or satisfactory basic skills assessment score</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td>MAT175</td>
<td>College Algebra (or)</td>
<td>4</td>
<td>MAT045 or satisfactory basic skills assessment score</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td>MAT180</td>
<td>Applied Calculus</td>
<td>4</td>
<td>MAT171 or MAT175</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td>*MAT240</td>
<td>Calculus I</td>
<td>4</td>
<td>MAT190 or MAT195</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
<td>Fall, Spring, Summer</td>
<td>Fall, Spring, Summer</td>
<td></td>
</tr>
<tr>
<td>PHY151</td>
<td>Physics I</td>
<td>4</td>
<td>MAT040 or MAT110 or MAT035, ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Science</td>
<td>3</td>
<td>*ECO117 recommended</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Science</td>
<td>3</td>
<td>*PHI131 recommended</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total General Education Credits</td>
<td>22/23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMT101</td>
<td>AMT General Module 1 (5 weeks)</td>
<td>6</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td>AMT102</td>
<td>AMT General Module 2 (5 weeks)</td>
<td>6</td>
<td>A grade of C or higher in AMT101</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td>AMT201</td>
<td>AMT Airframe Module 1 (9.5 weeks)</td>
<td>9</td>
<td>A grade of C or higher in AMT102</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td>AMT202</td>
<td>AMT Airframe Module 2 (9.5 weeks)</td>
<td>9</td>
<td>A grade of C or higher in AMT201</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td>AMT203</td>
<td>AMT Powerplant Module 1 (9.5 weeks)</td>
<td>9</td>
<td>A grade of C or higher in AMT102</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td>AMT204</td>
<td>AMT Powerplant Module 2 (9.5 weeks)</td>
<td>9</td>
<td>A grade of C or higher in AMT203</td>
<td>Fall, Spring Summer</td>
<td>Fall, Spring Summer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Aviation Program Credits</td>
<td>48</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total General Education &amp; Aviation Program Credits</td>
<td>70/71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overview
The Associates of Applied Science (AAS) degree fosters student responsibility, and accountability, and management skills. The degree requires a total of 70/71 credits for completion. The Airframe and Powerplant program is 48 credits. Each student will require an additional 22/23 credits of general education. The additional credits can be earned at any time the student wants to pursue this pathway.

Career Outlook
Labor market data show a strong need for aviation industry education targeting occupations like aviation maintenance technicians, avionics, engineering & operating technicians, inspectors, aircraft structures, rigging & systems assemblers, aviation managers, and directors of maintenance. The degree program prepares students for careers as aviation technicians in maintenance and repair. The AAS degree will allow growth for the technician and a pathway to management roles in the industry.

Program Outcomes
Upon successful completion of the Associates of Applied Science degree, students are able to:
- Demonstrate knowledge of aviation maintenance and increase opportunities in an aviation career field.
- Excel in management, responsibility and leadership roles.
- Provide organizational influence and direction in aviation operations.

The Aviation modules are divided into three main categories of instruction identified by the Federal Aviation Administration.
- AMT General Modules consist of 400 lab and lecture hours
- AMT Airframe Modules consist of 750 lab and lecture hours
- AMT Powerplant Modules consist of 750 lab and lecture hours

In order to complete 1900 hours of lab and lecture, the AMT curriculum is offered eight hours a day for five days a week 12 months a year.

Students must pass:
- 400 hours of AMT101-102 to sit for the FAA General Maintenance certification exam.
- 400 hours of AMT101-102 and 750 hours of AMT201-202 to sit for the FAA Airframe certification exam.
- 400 hours of AMT101-102 and 750 hours of AMT203-204 to sit for the FAA Powerplant certification exam.

NOTE: *MAT240 Calculus I, PHI131 Logic and ECO117 Principles of Macroeconomics are required for Bridgewater State University but can be completed at Bridgewater State University upon transfer.
The Associate in Science programs provide students with general education and professional skills coursework to enter the workforce in their chosen profession. The Business Transfer and Early Childhood Education-Transfer Compact Programs are also designed for transfer.

**Associate in Science Degree Requirements**

For the Associate in Science degree the student must:

1. Have a minimum cumulative average of 2.0,
2. Satisfactorily complete a minimum of 60 credit hours, at least 24 of which must be earned from Cape Cod Community College, excluding developmental education courses,
3. Select 21-23 general education credits as follows:

   - **ENL101 English Composition I** 3cr
   - **Humanities and Fine Arts** 3cr
   - **Behavioral and Social Sciences** 6cr
   - **Mathematics/Quantitative Reasoning (or) Natural or Physical Science** 6-8cr
   - **General Education** 3cr

   **Total Credits 21-23**

   Refer to General Education courses on page 29.

4. Complete 37-39+ professional education credits required by a particular program as outlined in the following pages of this catalog.

   *Programs will, in most cases, include both ENL102 and COM103 resulting in a minimum of 24 General Education credits.*

Each Associate in Science program has specific course requirements listed on the following pages. To graduate with an Associate in Science degree, a student must follow the curriculum as they appear in the following pages. To graduate, all of those courses must be taken although not necessarily in the order listed. Many of these courses have prerequisites, and some courses are not offered each semester.

Your academic advisor can assist in the scheduling of your classes. If you do not have an academic advisor, please contact the Director of Advising and Counseling Services.

**Students who are interested in continuing their education at the baccalaureate level can refer to the list of articulations on page 17 and are encouraged to speak to their advisor, the CCCC transfer advisor, the receiving institution’s office of admissions, and/or relevant college catalogs or web sites.**

**Students must apply for graduation at the beginning of their final semester at CCCC. See your academic advisor to complete the form.**

*Any student taking online courses or courses with online components is responsible for having reliable access to both the Internet and a computer running Chrome or Firefox. Please visit www.capecod.edu/online for more information detailing online course requirements.*
## Associate in Science
### Business Administration Program - Accounting Concentration

To graduate in the Business Administration Program - Accounting Concentration a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL02 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Application Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS100</td>
<td>Introduction to Business</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral &amp; Social Sciences</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC111</td>
<td>Accounting I with Computer Applications*</td>
<td>3</td>
<td>(MAT020 or MAT025) &amp; ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECO117</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>BUS120</td>
<td>Business Law I</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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</tr>
<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning (or)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>3 (or) 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ECO118</td>
<td>Principles of Microeconomics</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC112</td>
<td>Accounting II with Computer Applications</td>
<td>3</td>
<td>(MAT030 or MAT035) or satisfactory basic skills assessment score &amp; ACC111 or ACC101</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC202</td>
<td>Managerial Accounting</td>
<td>3</td>
<td>ACC201 or (ACC111 &amp; ACC112)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning (or)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural or Physical Science</td>
<td>3 (or) 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business elective</td>
<td>3</td>
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<tr>
<td>ACC110</td>
<td>Personal &amp; Small Business Taxes</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business elective</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>GIT125</td>
<td>Spreadsheet Applications for Business</td>
<td>3</td>
<td>GIT110 &amp; (ACC111 or ACC201)</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS261</td>
<td>Business Administration Cooperative Work Experience (or)</td>
<td>3</td>
<td>Approval by the Business internship coordinator (or) ACC101 or ACC111 or ACC201 ; Co-requisite: ACC110</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC263</td>
<td>VITA Practicum</td>
<td>3</td>
<td></td>
<td>Spring</td>
<td></td>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60/62</td>
<td></td>
</tr>
</tbody>
</table>

Note: Students intending to transfer to a bachelor program should discuss options with a professor in the Accounting concentration.

* Students may take ACC201 in lieu of ACC111 and ACC112. This requires an additional 3 credit Business elective.

**Business Electives:** Any course with an ACC, BIT, BUS, CUL, ENT, GIT, HRM or MKT designation.
Associate in Science
Business Administration Program - Accounting Concentration

Business Administration Program Overview
Students in the Associate in Science Business Administration program acquire a wide range of
to know how to prepare them for various positions in the business arena. Concentrations in
Accounting, Hospitality Management, Management, and Marketing provide an in-depth education.

Career Outlook
Currently, there is an excellent opportunity for students desiring to enter the field of management
to have the career of their choice. Students completing a concentration in the A. S. degree in
Business Administration are prepared for many exciting entry-level management positions.

Accounting Overview
Students in the Accounting concentration acquire a solid background in the areas of cost
accounting, general accounting practices, and tax accounting.

Career Outlook
Students completing the Accounting concentration are prepared for a variety of career options
requiring a two-year degree in business, non-profit, and public accounting firms.

Program Outcomes
Upon completion of the Accounting concentration, students are able to:

- Use financial statements in decision making.
- Create and maintain computerized accounting records for a business entity.
- Work effectively at an entry-level accounting position.
- Analyze and record basic accounting transactions for proprietorships, partnerships and
corporations.
- Understand the accounting cycle for service, merchandising and manufacturing
businesses.
- Prepare, analyze and interpret financial statements.
- Evaluate tax situations and apply appropriate tax law for informed and responsible moral
choices.
- Identify situations in accounting that demonstrate the importance of ethical behavior by the
accountant to ensure accounting information is accurate, complete, relevant and reliable.
- Describe the basic elements of budgeting process, its objectives, and its impact on human
behavior.
- Apply quantitative reasoning to evaluate capital investment and budgeting decisions.
# Associate in Science

## Business Administration Program - Hospitality Management Concentration

To graduate in the Business Administration Program – Hospitality Management Concentration a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS100</td>
<td>Introduction to Business</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM140</td>
<td>Intro to Hospitality Management</td>
<td>3</td>
<td>ENL020 or satisfactory basic skills assessment score</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CUL150</td>
<td>Fundamentals of Professional Cooking</td>
<td>4</td>
<td>Co-requisite: HRM111</td>
<td>Fall, Spring</td>
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<tr>
<td>HRM111</td>
<td>Foodservice Sanitation</td>
<td>1</td>
<td>None</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM130</td>
<td>Food and Beverage Management</td>
<td>3</td>
<td>(MAT020 or MAT025) or satisfactory basic skills assessment score</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CUL220</td>
<td>Advanced Culinary Arts</td>
<td>4</td>
<td>HRM140 or HRM150/CUL150</td>
<td>Fall, Spring</td>
<td></td>
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</tr>
<tr>
<td>HRM215</td>
<td>Lodging Operations</td>
<td>3</td>
<td>HRM140</td>
<td>Fall</td>
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<tr>
<td>HRM230</td>
<td>Hospitality Marketing</td>
<td>3</td>
<td>HRM140 &amp; ENL101</td>
<td>Spring</td>
<td></td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>BUS120</td>
<td>Business Law I</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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</tr>
<tr>
<td>ACC111 (or) ACC201</td>
<td>Accounting I with Computer Applications (or) Financial Accounting**</td>
<td>3</td>
<td>(MAT020 or MAT025) &amp; ENL020 or satisfactory basic skills assessment scores (BUS100 or HRM140), GIT110, (MAT030 or MAT035), &amp; ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>CUL210</td>
<td>Dining Room Operations and Service</td>
<td>4</td>
<td>CUL150 or HRM140; Co-requisite: CUL220</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>61/63</strong></td>
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</table>

* Any student intending to transfer should take a college-level math reflecting the requirement of the transfer college.
** Students planning on transfer should take either ACC111 and ACC112 or ACC201.

**Hospitality/Culinary Electives:** Any HRM or CUL courses that are not currently program requirements.
Associate in Science
Business Administration Program - Hospitality Management Concentration

Overview
Students in the Hospitality Management concentration acquire a wide range of management theory and practical training to prepare them for a career in the hospitality industry: restaurant production and management, hospitality accounting, marketing, law, and lodging.

Career Outlook
Currently, there is a strong demand for well-trained competent workers in the hospitality field. Students completing this concentration are prepared for a career in the hospitality field in a supervisory or middle-management position.

Program Outcomes
Upon completion of the Hospitality Management concentration, students are able to:

- Demonstrate skills in planning, organizing, leading and controlling that are necessary to coordinate and manage the component parts of the hospitality industry and to effectively communicate with employees, guests, suppliers and other related groups.
- Perform technical skills necessary for operating a successful hospitality business.
- Perform administrative skills in basic bookkeeping procedures, business cost controls, and planning and coordinating hotel restaurant operations.
- Recognize and apply interpersonal skills needed in hospitality management, including team building, group decision making and providing quality guest services.
Associate in Science
Business Administration Program - Management Concentration

To graduate in the Business Administration Program – Management Concentration a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
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<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
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</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BUS100</td>
<td>Introduction to Business</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
<td></td>
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<tr>
<td><strong>Second Semester</strong></td>
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<tr>
<td></td>
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<td>3</td>
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<tr>
<td>BUS107</td>
<td>Human Resource Management</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BUS103</td>
<td>Supervision (or)</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENT108</td>
<td>Intro. to Entrepreneurship</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ACC201</td>
<td>Financial Accounting**</td>
<td>3</td>
<td>(BUS100 or HRM140), GIT110, (MAT030 or MAT035) &amp; ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning* (or)</td>
<td></td>
<td>Natural or Physical Science</td>
<td>3 (or) 4</td>
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<td><strong>Third Semester</strong></td>
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<tr>
<td>BUS120</td>
<td>Business Law I</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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</tr>
<tr>
<td>MKT100</td>
<td>Marketing</td>
<td>3</td>
<td>ENL020 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ACC202</td>
<td>Managerial Accounting</td>
<td>3</td>
<td>ACC201 or (ACC111 &amp; ACC112)</td>
<td>Fall, Spring, Summer</td>
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<td>Mathematics/Quantitative Reasoning* (or)</td>
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<td>3 (or) 4</td>
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<tr>
<td>BUS201</td>
<td>Business Finance</td>
<td>3</td>
<td>ACC202 or ACC105</td>
<td>Fall, Spring, Summer</td>
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<td></td>
<td>Business elective</td>
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<tr>
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<td>Information Technology elective***</td>
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<tr>
<td>BUS214</td>
<td>Management</td>
<td>3</td>
<td>ENL101 &amp; BUS100</td>
<td>Fall, Spring, Summer</td>
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</tr>
<tr>
<td>BUS261</td>
<td>Business Administration Cooperative Work Experience</td>
<td>3</td>
<td>Approval by the Business internship coordinator</td>
<td>Fall, Spring, Summer</td>
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<tr>
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<td></td>
<td>60/62</td>
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</tbody>
</table>

*Choose from the following:
MAT150  Elementary Statistics
MAT165  Finite Math

**Students may take ACC111 and ACC112 in lieu of ACC201.

***Any course with a GIT, BIT, or CSC course designation.

**Business Electives**: Any course with an ACC, BIT, BUS, CUL, ENT, GIT, HRM, or MKT designation.
Associate in Science
Business Administration Program - Management Concentration

Overview
Students learn managerial, financial, supervisory and communication theory and practices. Teamwork and project management are also emphasized within this concentration.

Career Outlook
Students completing the Management concentration are prepared for a variety of positions including, but not limited to: first line supervisor, managerial assistant, small business owner, agency director, or management trainee.

Program Outcomes
Upon completion of the Management concentration, students are able to:
• Apply management theories in a dynamic and multicultural world.
• Make decisions through the use of technology.
• Demonstrate competency in the analysis and synthesis of the components of management using written and oral communication.
• Assume entry-level management positions.
• Engage in critical thinking by reading, writing and analyzing issues related to management.
• Recognize and analyze ethical issues as they relate to business.
• Apply quantitative problem solving techniques to evaluate management decisions.
• Work well with teams in a business setting.
# Associate in Science
## Business Administration Program - Marketing Concentration

To graduate in the Business Administration Program – Marketing Concentration a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
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<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
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</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BUS100</td>
<td>Introduction to Business</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
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<tr>
<td>MKT100</td>
<td>Marketing</td>
<td>3</td>
<td>ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BUS103</td>
<td>Supervision</td>
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<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ACC201</td>
<td>Financial Accounting*</td>
<td>3</td>
<td>(BUS100 or HRM140), GIT110, (MAT030 or MAT035) &amp; ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning (or)</td>
<td>3 (or 4)</td>
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<tr>
<td></td>
<td>Natural or Physical Science</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>BUS120</td>
<td>Business Law I</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<td>MKT103</td>
<td>Advertising</td>
<td>3</td>
<td>ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>MKT106</td>
<td>Consumer Behavior</td>
<td>3</td>
<td>MKT100 (formerly MKT205)</td>
<td>Fall, Spring</td>
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<td>Mathematics/Quantitative Reasoning (or)</td>
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<td>Natural or Physical Science</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>MKT112</td>
<td>Customer Service Concepts &amp; Applications</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<td></td>
<td>Business elective</td>
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<tr>
<td></td>
<td>Information Technology elective **</td>
<td>3</td>
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<tr>
<td>BUS214</td>
<td>Management</td>
<td>3</td>
<td>ENL101 &amp; BUS100</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BUS261</td>
<td>Business Administration Cooperative Work Experience</td>
<td>3</td>
<td>Approval by the Business internship coordinator</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>60/62</strong></td>
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</tbody>
</table>

*Students may take ACC111 and ACC112 in lieu of ACC201.

**Any course with a GIT, BIT, or CSC designation.

**Business Electives:** Any course with an ACC, BIT, BUS, CUL, ENT, GIT, HRM, or MKT designation.
Overview
Students gain the understanding of customer service and consumer behavior and their interaction with business.

Career Outlook
The profit and non-profit sectors have a high demand for managers who have a strong understanding of the customers. A variety of positions are available to the student who completes this course of study in merchandising, marketing and customer service.

Program Outcomes
Upon completion of the Marketing concentration, students are able to:
- Read, write, discuss and think critically about topics and ideas in marketing.
- Utilize planning strategies within the marketing mix.
- Identify and evaluate the uses of target marketing.
- Synthesize theories from consumer behavior, customer service and communications to develop marketing plans and solve marketing issues.
- Assume entry-level positions in sales and marketing.
- Recognize and analyze ethical issues as they relate to marketing.
- Work well with teams in a marketing setting.
# Associate in Science
## Business Transfer Program

To graduate in the Business Transfer Program, a student must complete the following required course of study. This program is a MassTransfer eligible program.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
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<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
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</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Application Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BUS100</td>
<td>Introduction to Business</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td></td>
<td>Behavioral &amp; Social Sciences</td>
<td>3</td>
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<td><strong>Second Semester</strong></td>
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<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ACC201</td>
<td>Financial Accounting</td>
<td>3</td>
<td>(BUS100 or HRM140), GIT110, (MAT030 or MAT035) &amp; ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ECO117</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>MKT100</td>
<td>Marketing</td>
<td>3</td>
<td>ENL020 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<td>Mathematics/Quantitative Reasoning **</td>
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<tr>
<td>ECO118</td>
<td>Principles of Microeconomics</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ACC202</td>
<td>Managerial Accounting</td>
<td>3</td>
<td>ACC201 or (ACC111 &amp; ACC112)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BUS120</td>
<td>Business Law</td>
<td>3</td>
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<td>Fall, Spring, Summer</td>
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<td>Humanities &amp; Fine Arts</td>
<td>3</td>
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<td></td>
<td>Natural or Physical Science</td>
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<tr>
<td>BUS201</td>
<td>Business Finance</td>
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<td>ACC202 or ACC105</td>
<td>Fall, Spring, Summer</td>
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<td></td>
<td>Information Technology elective***</td>
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<td>Natural or Physical Science</td>
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<tr>
<td>BUS214</td>
<td>Management</td>
<td>3</td>
<td>ENL101 &amp; BUS100</td>
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<td><strong>Total Credits</strong></td>
<td></td>
<td></td>
<td>62/63</td>
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</tbody>
</table>

**NOTE:** Please refer to page 2 for * explanations.
Associate in Science
Business Transfer Program

*Go to www.mass.edu/masstransfer for complete information about MassTransfer.

**Each transfer college or university has their own Mathematics requirement for a Business/Management bachelor’s degree. Students are encouraged to research the business curriculum at the colleges/universities they would like to apply to, to see what is the appropriate mathematics course to take at CCCC.

The Mathematics course to take at CCCC to prepare for transfer to some of our state universities is below.

- University of Massachusetts-Dartmouth requires MAT165 Finite Mathematics.
- Bridgewater State University, Westfield State University, University of Massachusetts-Boston, and University of Massachusetts-Lowell prefer MAT175 College Algebra as a minimum requirement (more may be required when you transfer).
- University of Massachusetts-Amherst requires MAT180 Applied Calculus at CCCC for acceptance into the Isenberg School of Management.

*** Each transfer college or university has their own Information Technology requirement for a Business/Management bachelor’s degree. Students are encouraged to research the business curriculum at the colleges/universities they would like to apply to, to see what is the appropriate information technology course to take at CCCC. Students may use any course with a GIT, BIT, or CSC designation. Recommended courses include:

- BIT112 Information Technology Foundations
- BIT113 Microcomputer Hardware
- BIT115 Operating Systems
- BIT175 Visual Basic Programming
- BIT187 Networking Essentials
- GIT180 Introduction to the Internet
- GIT183 Web Site Design & Scripting

Overview
The student in this concentration acquires a strong business and a solid general education foundation. It is designed to enhance a students’ articulation to a four year institution.

Career Outlook
The student completing this option is encouraged to transfer to a four-year institution to earn a bachelor’s degree in Accounting, Information Systems, Management, Marketing and Public Administration.

Some four-year institutions of Business require Business Calculus I (Applied Calculus) and Business Calculus II, Finite Mathematics, and Statistics. Course requirements at transfer institutions vary greatly and need to be carefully considered with an advisor.

Program Outcomes
Upon completion of the A. S. Business Transfer Program, students are able to:

- Transfer to a four year institution with a concentration in business.
- Apply management theories in a dynamic and multicultural world.
- Make decisions through the use of technology.
- Recognize and analyze ethical issues as they relate to business.
- Apply quantitative problem solving techniques to evaluate management decisions.
## Associate in Science
### Criminal Justice Program

To graduate in the Criminal Justice Program, a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ101</td>
<td>Substantive Criminal Law</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ105</td>
<td>Criminology, Theory &amp; Practice</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ125</td>
<td>Contemporary Policing</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
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</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td></td>
<td>Mathematics/Quantitative Reasoning (or)</td>
<td></td>
<td>Natural or Physical Science</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>3 (or) 4</td>
<td></td>
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<tr>
<td></td>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CRJ102</td>
<td>Procedural Criminal Law</td>
<td>3</td>
<td>None</td>
<td>Spring</td>
<td></td>
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<tr>
<td>CRJ116</td>
<td>Introduction to Corrections</td>
<td>3</td>
<td>None</td>
<td>Spring</td>
<td></td>
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<tr>
<td></td>
<td>Criminal Justice elective</td>
<td>3</td>
<td></td>
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<tr>
<td>BIO105</td>
<td>Survey of Human Anatomy &amp; Physiology</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or higher in ENL101</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
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<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td></td>
<td></td>
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<tr>
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<td></td>
<td>3 (or) 4</td>
<td></td>
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<tr>
<td></td>
<td><strong>Third Semester</strong></td>
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</tr>
<tr>
<td>CRJ206</td>
<td>Principles of Investigation I</td>
<td>3</td>
<td>All Level I CRJ courses</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ210</td>
<td>Ethical Issues in Criminal Justice</td>
<td>3</td>
<td>All Level I CRJ courses</td>
<td>Fall</td>
<td></td>
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<tr>
<td></td>
<td>Criminal Justice elective</td>
<td>3</td>
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<tr>
<td>HIS104</td>
<td>U.S. History since 1865</td>
<td>3</td>
<td>None; ENL020 &amp; ENL050 strongly recommended</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>3 (or) 4</td>
<td></td>
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<tr>
<td></td>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>CRJ207</td>
<td>Principles of Investigation II</td>
<td>3</td>
<td>CRJ206 &amp; all Level I CRJ courses</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ240</td>
<td>Selected Issues in Criminal Justice</td>
<td>3</td>
<td>All Level I CRJ courses</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ261</td>
<td>Criminal Justice Cooperative Work Experience*</td>
<td>3</td>
<td>All Level I CRJ courses</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td></td>
<td></td>
<td>61/62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*CRJ261 Criminal Justice Cooperative Work Experience can be completed in the fall, spring, or summer semesters. Please refer to the policy statement of Criminal Offender Record information and Sex Offender Registry Information checks.

**Criminal Justice Electives**
- CRJ130 Criminal Evidence
- CRJ135 Terrorism
- CRJ220 Crisis Intervention for Criminal Justice Professionals
- CRJ221 Juvenile Justice
Overview
Any student whose career plans include probation, corrections, or law enforcement requires not only a broad understanding of the criminal justice system, but also a fundamental knowledge of the social and behavioral sciences.

Career Outlook
The Criminal Justice program prepares students who intend to enter the fields of Law Enforcement, Corrections, or the Court System.

Program Outcomes
Upon completion of the Criminal Justice program, students are able to:
- Read, write, discuss, and think critically about topics and ideas in criminal justice.
- Analyze ethical issues in criminal justice.
- Apply ethical principles to the performance of roles and responsibilities in criminal justice careers.
- Synthesize information from the diversity literature in sociology, psychology, history, and criminal justice to determine sensitive and effective interactions with people encountered in criminal justice settings.
- Assume positions in a variety of criminal justice careers.
- Transfer to professional baccalaureate programs.
## Associate in Science
### Dental Hygiene Program

To graduate in the Dental Hygiene Program, a student must complete the following required course of study.

**Note:** The following course must be completed before entering the Dental Hygiene Program:
- CHM151 General Chemistry I* (or) CHM109 Chemistry for the Health Sciences

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<td><strong>First Semester</strong></td>
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<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
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<tr>
<td>BIO251**</td>
<td>Human Anatomy &amp; Physiology I</td>
<td>4</td>
<td>A grade of C or higher in CHM109 or (BIO101 or BIO151) or (CHM101 or CHM151)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEN101</td>
<td>Oral Tissues I</td>
<td>2</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores &amp; CHM109</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEN103</td>
<td>Principles of Oral Radiology</td>
<td>3</td>
<td>CHM109</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>DEN121</td>
<td>Dental Hygiene I</td>
<td>2</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores &amp; CHM109</td>
<td>Fall</td>
<td></td>
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</tr>
<tr>
<td>DEN126</td>
<td>Clinical Dental Hygiene I</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td></td>
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<tr>
<td><strong>Second Semester</strong></td>
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</tr>
<tr>
<td>BIO252**</td>
<td>Human Anatomy &amp; Physiology II</td>
<td>4</td>
<td>A grade of C or higher in BIO107 or BIO251</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEN102</td>
<td>Oral Tissues II</td>
<td>2</td>
<td>DEN101</td>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>DEN123</td>
<td>Dental Hygiene II</td>
<td>2</td>
<td>DEN121</td>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>DEN128</td>
<td>Clinical Dental Hygiene II</td>
<td>4</td>
<td>DEN121 &amp; DEN126</td>
<td></td>
<td>Spring</td>
<td></td>
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<tr>
<td>DEN205</td>
<td>Oral Pathology</td>
<td>3</td>
<td>DEN121 &amp; DEN126</td>
<td></td>
<td>Spring</td>
<td></td>
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<tr>
<td>DEN200</td>
<td>Pharmacology for Dental Hygiene</td>
<td>3</td>
<td>DEN121</td>
<td></td>
<td>Spring</td>
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<tr>
<td><strong>Summer Session</strong></td>
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<tr>
<td>HEA201</td>
<td>Nutrition</td>
<td>3</td>
<td>CHM109 &amp; (BIO107 or BIO251)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BIO281**</td>
<td>Microbiology (formerly BIO201)</td>
<td>4</td>
<td>A grade of C or higher in (CHM101 or CHM151) or CHM109 &amp; (BIO101 or BIO151) or (BIO107 or BIO251)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
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<tr>
<td>DEN209</td>
<td>Dental Materials</td>
<td>3</td>
<td>DEN101 &amp; CHM109</td>
<td></td>
<td>Fall</td>
<td></td>
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<tr>
<td>DEN211</td>
<td>Periodontics</td>
<td>2</td>
<td>DEN123 &amp; DEN128</td>
<td></td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>DEN230</td>
<td>Dental Hygiene III</td>
<td>2</td>
<td>DEN123 &amp; DEN128</td>
<td></td>
<td>Fall</td>
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</tr>
<tr>
<td>DEN236</td>
<td>Clinical Dental Hygiene III</td>
<td>4</td>
<td>DEN123 &amp; DEN128</td>
<td></td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>DEN237</td>
<td>Pain Management in DH Practice</td>
<td>2</td>
<td>DEN123 &amp; DEN128</td>
<td></td>
<td>Fall</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>DEN105</td>
<td>Community Dental Health</td>
<td>2</td>
<td>DEN123 &amp; DEN128</td>
<td></td>
<td>Spring</td>
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<tr>
<td>DEN232</td>
<td>Dental Hygiene IV</td>
<td>2</td>
<td>DEN230</td>
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<td>Spring</td>
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<tr>
<td>DEN238</td>
<td>Clinical Dental Hygiene IV</td>
<td>4</td>
<td>DEN230 &amp; DEN236</td>
<td></td>
<td>Spring</td>
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<td></td>
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<td>3</td>
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<td><strong>Total Credits</strong></td>
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<td></td>
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<td>75</td>
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</tbody>
</table>

* CHM151 (formerly CHM101) & CHM109 meet the General Education requirements (effective Fall 2010).
** Course renumbered: BIO251 is formerly BIO107; BIO252 is formerly BIO108; BIO281 is formerly BIO201.
The Dental Hygiene Program provides selected individuals from various experiential and educational backgrounds the opportunity for education in dental hygiene. Graduates are awarded the Associate in Science degree and are eligible for the Commission on Dental Competency Assessments/ADEX Examination and the National Board Dental Hygiene Examination.

The program in dental hygiene is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of “approved without reporting requirements.” The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at 312-440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611-2678. The Commission’s web address is www.ada.org/100.aspx

Dental Hygiene applicants are accepted only for the FALL SEMESTER.

SPECIAL REQUIREMENTS FOR STUDENTS ENROLLED IN THE DENTAL HYGIENE PROGRAM

Applicants must submit the following credentials by February 1:
- Completed Cape Cod Community College Application for Admission.
- Official high school transcript or GED diploma.
- Official transcript(s) for all colleges and universities ever attended, (if applicable).
- Letter and/or resume indicating reasons for selecting the Dental Hygiene program, related experiences, motivation and other pertinent data.

Dental Hygiene Information Sessions: Attendance at an information session is strongly recommended for all applicants to the Dental Hygiene program. The Coordinator of Admissions and the Dental Hygiene Program Coordinator will share up-to-date information about the program and answer questions about the curriculum, clinical assignments, support services and the admissions process. Information sessions are held each fall and winter. Appointments may be scheduled by contacting the Admissions Office.

Criteria for admission includes:
- Satisfactory performance in the most recent educational experiences.
- Successful completion of chemistry with a lab within the last five years. Chemistry for the Health Sciences I (CHM109)* or equivalent completed no later than the summer prior to enrollment in Oral Tissues I (DEN101); earlier completion of this course is recommended.

The preferred applicant will present:
- An overall Grade Point Average (GPA) of 3.0 or better (on a 4.0 scale).
- An overall GPA of 3.0 or better in mathematics and science courses. Priority will be given to the candidate who has taken additional courses to fulfill the core requirements.
- Admission decisions are based upon a review of all candidates.

Wait List: Once the incoming class has been selected, a wait list will be formulated with the following criteria:
- An overall GPA of 2.8
- An overall GPA of 2.8 in mathematics or science courses.
- The Wait List is maintained in chronological order until the first week of Fall semester.
- Completion of courses required by English and elementary algebra skills assessments prior to registration for dental hygiene courses.

Additional Program Information/Requirements:
- Students who are required to study developmental education courses should anticipate a three-year program of study.
- The Dental Hygiene program is a sequential course of study. Upon acceptance into the Dental Hygiene program, the student must maintain a grade of 75 or better and a satisfactory clinical evaluation in each Dental Hygiene course in order to proceed to the next Dental Hygiene course. Students who fail a course may apply for re-entry in accordance with the Dental Hygiene Program Re-Entry Policy.
- Due to the rigorous nature of the Dental Hygiene program, completion of additional science and general education courses outlined in the Dental Hygiene program are recommended prior to acceptance.
- Each Dental Hygiene student must undergo a complete physical examination and meet the physical and mental abilities required to achieve the clinical objectives; complete all required tests and immunizations as indicated on the Cape Cod Community College Report of Physical Examination form; have completed all Hepatitis B immunizations prior to the September of the year the student is entering the Dental Hygiene program. In addition, each Dental Hygiene student is required to maintain current CPR certification at the Health Care Provider (AHA) level or Professional Rescuer (Red Cross) level, and carry malpractice and health insurance.
- Please refer to the policy statement of Criminal Offender Record Information and Sex Offender Registry Information checks. CORI/SORI checks will be required throughout the program.
- As in any health care environment, students in the Dental Hygiene program may have risks of exposure to infectious diseases. The Dental Hygiene program adheres to all state and federal regulations to reduce the risk of health care associated infections. Individuals who disclose the presence of bloodborne infectious diseases will be shown the same consideration as non-infected individuals and will be offered reasonable accommodation. Information regarding health status of an individual is considered confidential and protected by the Family Education Rights and Privacy Act of 1974.
- Applicant must be able to meet the physical and behavioral capabilities outlined in the Dental Hygiene Program Technical Standards at www.capecod.edu/web/dental.
Associate in Science
Dental Hygiene Program

Overview
This full-time degree program prepares the student to become a dental hygienist who is a preventive oral health professional prepared to provide educational, clinical and therapeutic services to the public. This degree also prepares the student for more advanced educational opportunities in the health care field.

Career Outlook
Employment opportunities are available as an entry-level Dental Hygienist in private general and specialty dental practices, community dental health centers, and public health agencies/facilities.

Program Outcomes
The Dental Hygiene program at Cape Cod Community College provides students with the theory, knowledge, and experience necessary to obtain competency in the practice of dental hygiene in a variety of settings. Upon completion of the program, the dental hygiene graduates are able to meet the following learning outcomes:

- Integrate knowledge from the basic, psychosocial, dental, and dental hygiene sciences into the dental hygiene process of care.
- Communicate effectively with individuals and groups from diverse populations.
- Utilize critical thinking, problem solving, and evidence-based decision making in the practice of dental hygiene.
- Apply a professional code of ethics while adhering to appropriate legal and regulatory measures when providing oral health services.
- Utilizing risk assessment and health promotion strategies, integrate the goals, values and beliefs of diverse populations in the promotion of health, wellness, and the prevention of disease.
- Safely perform the dental hygiene process of care (assessment, dental hygiene diagnosis, planning, implementation, evaluation, documentation) for all patients and community-based oral health programs.
- Continually perform self-assessment to maintain professional standards and encourage life-long learning.
- Value the need for personal and professional growth through participation in professional activities and associations.
- Demonstrate an awareness of the variety of career options within the dental hygiene profession.
# Associate in Science
## Early Childhood Education Program - Career Option

To graduate in the Early Childhood Education - Career Option program, a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
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<tr>
<td>ECE100</td>
<td>Intro. to Early Childhood Education</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
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<td>Fall, Spring, Summer</td>
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<td>ENL102</td>
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<td>A grade of C- or higher in ENL101</td>
<td>Fall, Spring, Summer</td>
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<td>ECE105</td>
<td>Intro. to Children with Special Needs</td>
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<tr>
<td>ECE201</td>
<td>Preschool Curriculum Planning</td>
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<td>ECE100 or PSY201</td>
<td>Fall, Spring</td>
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<td>ENL120</td>
<td>Introduction to Children’s Literature</td>
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<td>ENL101</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ECE202</td>
<td>Advanced Curriculum Development: Creative Experiences for Early Childhood Education</td>
<td>3</td>
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<td>Fall, Spring</td>
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<td>ECE206</td>
<td>Field Experience in Early Childhood Education</td>
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<td>Fall, Spring</td>
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<td>ECE221</td>
<td>Classroom Management: Skills &amp; Strategies for EC Teachers</td>
<td>3</td>
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<td>ECE291</td>
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<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
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<tr>
<td>SOC210</td>
<td>Marriage and Family (or) Social Problems</td>
<td>3</td>
<td>SOC106 (or) SOC106 (or) SOC106</td>
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<td>SOC215</td>
<td>Race, Gender, and Class in the US</td>
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<tr>
<td>ECE230</td>
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<td>6</td>
<td>ECE105, ECE201, PSY201, (EC200 or ECE202) &amp; a minimum 2.0 GPA in ECE courses</td>
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<td></td>
<td>Early Childhood Education Elective</td>
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</table>

* Please refer to the policy statement of Criminal Offender Record Information and Sex Offender Registry Information checks.
Associate in Science
Early Childhood Education Program – Career Option

The National Association for the Education of Young Children (NAEYC) has awarded the Early Childhood Education Program at Cape Cod Community College full seven-year accreditation, the first such award in the state of Massachusetts and among the very first Associate Degree programs in the entire country to receive such recognition. The NAEYC Early Childhood Associate Degree Accreditation system sets a national standard of excellence for early childhood programs that prepare teachers at the associate degree level.

Overview
This program is designed for students who are interested in working with young children. Graduates of the program may work in a variety of child care settings in both private and public schools.

Career Outlook
Upon completion of this program, the student is qualified to work in a licensed child care facility. Graduates also work in summer camps and as assistants in public schools. The program meets the requirements of the Massachusetts Office of Child Care Services.

Program Outcomes
Upon completion of the Early Childhood Education program, students are able to:
• Promote child development and learning.
• Build family and community relationships.
• Observe, document, and assess in support of young children and families.
• Build meaningful curriculum.
• Become a professional.

Early Childhood Education Electives
ECE115  Literacy and the Young Child
ECE200  Teaching Infants and Toddlers
ECE211  Curriculum Strategies for Teaching Math and Science to Young Children
ECE242  Selected Topics in Early Childhood Education
## Associate in Science
### Early Childhood Education Program - Transfer Compact

Students who complete this concentration will satisfy the requirements of MassTransfer. For students planning to teach in Massachusetts public schools, please refer to the Education Licensure Requirements.

To graduate in the Early Childhood Education Program - Transfer Compact a student must complete the following required course of study. Students interested in this program are encouraged to meet with the CCCC Transfer Advisor.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tbody>
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<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
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<tr>
<td>ECE100</td>
<td>Intro. to Early Childhood Education</td>
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<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
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<td>PSY101</td>
<td>General Psychology</td>
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<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>SOC106</td>
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<td>ECE105</td>
<td>Intro. to Children with Special Needs</td>
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<tr>
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<td>A grade of C- or higher in ENL101</td>
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<td>Preschool Curriculum Planning</td>
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<td>Child Psychology</td>
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<tr>
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<td>Natural or Physical Science (Physical)*</td>
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<td>ECE202</td>
<td>Advanced Curriculum Development: Creative Experiences for Early Childhood Education</td>
<td>3</td>
<td>ECE201</td>
<td>Fall, Spring</td>
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<td>Fall, Spring</td>
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<td>Marriage and Family</td>
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<td>SOC106 (or)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>SOC215</td>
<td>Social Problems</td>
<td>(or)</td>
<td>SOC106 (or)</td>
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<td>SOC208</td>
<td>Race, Gender, and Class in the US</td>
<td>(or)</td>
<td>SOC106</td>
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<td>COM103</td>
<td>Human Communication</td>
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<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<td>Mathematics/Quantitative Reasoning</td>
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<td>ECE230</td>
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</table>
The National Association for the Education of Young Children (NAEYC) has awarded the Early Childhood Education Program at Cape Cod Community College full seven-year accreditation, the first such award in the state of Massachusetts and among the very first Associate Degree programs in the entire country to receive such recognition. The NAEYC Early Childhood Associate Degree Accreditation system sets a national standard of excellence for early childhood programs that prepare teachers at the associate degree level.

**Overview**

Students must graduate with a minimum 2.75 GPA and attain a passing score on the Communication and Literacy Skills (CLST) portion of the Massachusetts Tests for Educator Licensure (MTEL) before their planned entrance to the bachelor institution to be accepted directly into an education program. If students do not meet the criteria above, they may be admitted to the required academic (second) major on initial acceptance to the bachelor’s institution.

**Career Outlook**

Students completing a bachelor’s degree in Early Childhood Education will be required to take two additional MTEL tests: Early Childhood and Foundations of Reading. After passing these tests, they will receive initial licensure to teach and be ready to enter the teaching profession. Students must obtain a master’s degree within five years to receive professional licensure. Students will be eligible to teach in public and private schools, grades Pre-K through Grade 2.

---

* Natural or Physical Science: A Biological Science is any 4-credit course from the Natural or Physical Science list (with a lab) with the prefix BIO, ENV, or HOR; all other 4-credit Natural or Physical Science courses (with a lab) are considered Physical Sciences.

** ART125, MUS100, or THR101 are recommended.

*** Please refer to the policy statement of Criminal Offender Record Information and Sex Offender Registry Information checks.
# Associate in Science
## Engineering and Advanced Manufacturing

To graduate in the Engineering and Advanced Manufacturing Program, a student must complete the following required course of study.

### First Semester

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tr>
<td>ENL101</td>
<td>English Composition I</td>
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<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
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<tr>
<td>CHM151</td>
<td>General Chemistry I</td>
<td>4</td>
<td>(MAT040 or MAT045) ENL020, ENL050 or satisfactory basic skills assessment scores</td>
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<tr>
<td>ENR101</td>
<td>Introduction to Engineering and Advanced Manufacturing</td>
<td>4</td>
<td>ENL020 and ENL050 or satisfactory basic skills assessment scores</td>
<td>Varies</td>
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<tr>
<td>MAT195</td>
<td>Precalculus with Trigonometry</td>
<td>4</td>
<td>MAT175</td>
<td>Fall, Spring, Summer</td>
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### Second Semester

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<th>Credits</th>
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<th>Semester Taken</th>
<th>Grade Earned</th>
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<tbody>
<tr>
<td>COM103</td>
<td>Human Communication</td>
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<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENR102</td>
<td>3D Mechanical Design I</td>
<td>4</td>
<td>MAT030, ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Varies</td>
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<tr>
<td>MAT240</td>
<td>Calculus I</td>
<td>4</td>
<td>MAT190 or MAT195</td>
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### Third Semester

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<tr>
<td>PHY211</td>
<td>University Physics I</td>
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<td>MAT195; co-requisite: MAT240</td>
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<td>MAT250.</td>
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<td>MAT240 or MAT185</td>
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<tr>
<td>CSC120</td>
<td>Computer Programming I: C++</td>
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<td>MAT030 or MAT035 or satisfactory basic skills assessment score and working knowledge of any programming language</td>
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<tr>
<td>ENR201</td>
<td>Statics</td>
<td>3</td>
<td>ENR101, co-requisite: MAT250</td>
<td>Varies</td>
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### Fourth Semester

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<th>Credits</th>
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<th>Semester Taken</th>
<th>Grade Earned</th>
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<td>PHY212</td>
<td>University Physics II</td>
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<td>Varies</td>
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<td>ENR103</td>
<td>Introduction to Robotics</td>
<td></td>
<td>MAT260 Calculus III</td>
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<td>ENR104</td>
<td>3D Mechanical Design II</td>
<td></td>
<td>MAT270 Differential Equations</td>
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<td>ENR105</td>
<td>Circuit Theory and Analysis</td>
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<td>CHM152 General Chemistry II</td>
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<td>ENR206</td>
<td>Quality Manufacturing</td>
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<td>BIO151 General Biology I</td>
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<tr>
<td>MAT245</td>
<td>Linear Algebra</td>
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<td>BIO152 General Biology II</td>
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### Engineering and Manufacturing Electives

- ENR103 Introduction to Robotics
- ENR104 3D Mechanical Design II
- ENR105 Circuit Theory and Analysis
- ENR206 Quality Manufacturing
- MAT245 Linear Algebra
- MAT260 Calculus III
- MAT270 Differential Equations
- CHM152 General Chemistry II
- BIO151 General Biology I
- BIO152 General Biology II

**Total Credits: 62/63**
Overview
The Engineering and Advanced Manufacturing Associate in Science program of study is designed to give students the core skills and knowledge needed to be successful in acquiring a Bachelor of Science degree in engineering. The program is structured to be completed within two years and with careful advisor assisted selection of the engineering, mathematics, and science electives a student can be prepared to transfer to almost any college or university offering a baccalaureate in engineering or manufacturing program. Furthermore, the student should be able to complete remaining Bachelor of Science requirements within 2 to 3 years.

Students learn the advanced math, physics, and computer-aided design concepts that underlie modern engineering/manufacturing processes and procedures. They hone their critical thinking skills and become versed in the processes needed to systematically solve problems and to develop an idea into a finished product. Direct hands-on experience in the application and use of state-of-the-art engineering and manufacturing equipment is gained through laboratory sessions that are associated with the majority of the program specific courses. Students take calculus and other advanced math courses as they will be applying high levels of math to the rest of their engineering program education.

Pursuing the Engineering and Advanced Manufacturing Associate in Science program at Cape Cod Community College provides students access to a full suite of prerequisite and remedial courses when course pre-requirements need to be met, additionally a smaller class size with more individualized attention will generally be found, and there is a significantly lower price point than that at most four year institutions.

Career Outlook
The Engineering and Advanced Manufacturing Associate in Science degree provides the skills for an entry level general engineering/manufacturing technician or draftsperson. Graduates work as automation specialists, manufacturing technicians, design technicians, CAD designers, engineering aides, field service technicians, technical representatives, and maintenance technicians. It will open employment doors to many jobs that require multidisciplinary competencies. Employment of engineering technicians is projected to grow 5 percent from 2012 to 2022.

This occupational profile is provided by O*NET.  
www.onetonline.org/find/quick?s=engineering

Program Outcomes
Upon completion of the Engineering and Advanced Manufacturing program, students are able to:

- Work as part of a team to plan, design, and fabricate an electro-mechanical device.
- Describe and follow the engineering analysis and design process.
- Organize, schedule, and complete an engineering design project that may require one to collect and interpret technical data as well as exhibit proficiency in software programming.
- Reverse engineer the design of an existing product or service.
- Test and evaluate an engineering design against a set of requirements, design and conduct experiments, interpret results, and apply results to improve processes.
- Use a variety of instruments and software for taking measurements and or solving problems.
- Be effective communicators in written, oral and graphical communications, and in documentation of work.
- Conduct research from a variety of sources and have an ability to identify and incorporate appropriate technical literature.
- Apply mathematical methods for problem-solving and analyze working models of basic engineering systems to solve open-end problems.
- Demonstrate the skills and behaviors of engineering professionals, including lifelong learning, professional development, ethics, teamwork, quality improvement, and a respect for diversity; and a commitment to apply them to their work.
To graduate in the Environmental Technology Program, a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tr>
<td></td>
<td><strong>First Semester</strong></td>
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<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>CHM106</td>
<td>Survey of Chemistry</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
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<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENV118</td>
<td>Intro. to Environmental Science</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<td><strong>Second Semester</strong></td>
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<tr>
<td>ENL102</td>
<td>English Composition II</td>
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<tr>
<td>ESC101</td>
<td>Intro to Earth Science</td>
<td>4</td>
<td>(MAT030 or MAT035), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
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<td>ENV101</td>
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<td>None</td>
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<td>ENV115</td>
<td>Environmental Chemistry</td>
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<td>ENV105</td>
<td>Quantitative Methods for Environmental Analysis (or)</td>
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<td>(MAT030 or MAT035) or satisfactory basic skills assessment score (or)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>MAT150</td>
<td>Elementary Statistics</td>
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<td>(MAT035 or MAT040) or satisfactory basic skills assessment score</td>
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<td>ENV125</td>
<td>Coastal Ecology</td>
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<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENV163</td>
<td>Geographic Information Systems (GIS) I</td>
<td>3</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
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<tr>
<td></td>
<td>Environmental Tech elective*</td>
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<td>Environmental Tech elective*</td>
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<tr>
<td>ENV158</td>
<td>Occupational Health and Safety (OSHA) through Hazardous Waste Management</td>
<td>3</td>
<td>None</td>
<td>Spring</td>
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<tr>
<td>ENV201</td>
<td>Environmental Instrumentation</td>
<td>4</td>
<td>ENV105 &amp; ENV115</td>
<td>Spring</td>
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<td>Environmental Tech elective*</td>
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<td>Environmental Tech elective*</td>
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<td></td>
<td>Environmental Tech elective*</td>
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<tr>
<td>ENV260</td>
<td>Internship**</td>
<td>3</td>
<td>ENVI18 or ENV170 &amp; permission of the instructor</td>
<td>Fall, Spring, Summer</td>
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<td></td>
<td><strong>Total Credits</strong></td>
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<td>67</td>
<td></td>
</tr>
</tbody>
</table>

* Environmental Technology Electives: Refer to page 2 for the list of Environmental Technology electives.

** To be taken during the summer or during the third or fourth semester.
Associate in Science
Environmental Technology Program

Overview
This program emphasizes the cognitive and technical skills needed to enter and advance in environmental technology careers in both the private and public sectors. This is a career field that utilizes the principles of science, engineering, communication and economics to protect and enhance safety, health and natural resources. Students who are interested in pursuing a four-year undergraduate program in Environmental Studies should refer to the Associate in Arts Environmental Studies concentration.

Career Outlook
Graduates will be trained at the technical level for fields such as hazardous waste clean-up, site assessment, water quality, air quality, wastewater management, environmental compliance, solid waste management, coastal zone management, use of computerized mapping and pollution prevention.

Program Outcomes
Upon completion of the Environmental Technology program, students are able to:

- Communicate and discuss current environmental topics and be able to provide an overview of environmental technology
- Apply scientific, technical, and communication skills and knowledge to specific tasks
- Be proficient at using state-of-the-art scientific instrumentation to perform air, water, and soil analysis
- Be certified in 40-hour OSHA for hazardous waste
- Conduct monitoring in the field and demonstrate the ability to analyze the data in a laboratory setting
- Be proficient in a discipline of environmental technology, including coastal zone management, hazardous waste site assessment, geographic information systems, wastewater management, water quality, energy efficiency and/or renewable energy.

* Environmental Technology Electives
CON130 Computer Aided Drafting I
CON135 Computer Aided Drafting II
ENV122 Process of Environmental Management & Decision Making
ENV135 Coastal Zone Management
ENV140 Intro to Water
ENV142 Industrial Wastewater Treatment
ENV145 Wastewater Treatment Plant Operation
ENV146 Water Supply
ENV152 Air Pollution Issues
ENV163 GIS I
ENV164 GIS II
ENV170 Renewable Energy Sources
ENV171 Energy Efficiency and Conservation Methods
ENV172 Commercial Energy Audits
ENV173 Intro to Solar Energy
ENV177 Intro to Wind Energy
ENV178 Photovoltaic Installation
ENV179 Solar Thermal Installation
ENV180 Small Wind Installation
ENV181 Intro to Green Building
GIT110 Microcomputer Applications Software
HOR101 Plant and Soil Science
HOR102 Entomology and Plant Diseases
HOR103 Woody Plant Identification and Culture
HOR104 Turf Management
HOR201 Herbaceous Plant Identification and Culture
## Associate in Science
### Fire Science Program - Emergency Medical Services Option

Students who wish to major in Fire Science must select either the Fire Science Option or Emergency Medical Services Option. Professional education courses are offered evenings only. To graduate in the Fire Science program – Emergency Medical Services option, a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>BIO105</td>
<td>Survey of Anatomy and Physiology</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>FSC150</td>
<td>Principles of Emergency Services (replaces FSC100)</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Varies</td>
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<tr>
<td>EMS101</td>
<td>Emergency Medical Technician: EMT</td>
<td>5</td>
<td>None</td>
<td>Fall, Spring</td>
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<td><strong>Second Semester</strong></td>
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<tr>
<td>CHM106</td>
<td>Survey of Chemistry</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores (or) (MAT030 or MAT035), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>EMS201</td>
<td>Advanced Pre-Hospital Training Program: Paramedic I</td>
<td>7</td>
<td>ENL020 &amp; (MAT020 or MAT025) or satisfactory basic skills assessment scores</td>
<td>Fall</td>
<td></td>
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<tr>
<td>FSC114</td>
<td>Fire Company Management</td>
<td>3</td>
<td>FSC150 or FSC100</td>
<td>Varies</td>
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<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score (or) ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
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<td><strong>Third Semester</strong></td>
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<tr>
<td>EMS202/</td>
<td>Advanced Pre-Hospital Training Program: Paramedic II/</td>
<td>8</td>
<td>EMS201</td>
<td>Spring</td>
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<td>EMS602</td>
<td>Paramedic Clinical Field Experience</td>
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<tr>
<td>FSC105</td>
<td>Hazardous Materials</td>
<td>3</td>
<td>CHM106 or (CHM101 or CHM151) or CHM109</td>
<td>Varies</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>ENL102</td>
<td>English Composition II</td>
<td>3</td>
<td>A grade of C- or better in ENL101 (or) ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3 (or 4)</td>
<td>Mathematics/Quantitative Reasoning (or) Natural or Physical Science</td>
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<tr>
<td>FSC103</td>
<td>Fire Fighting Tactics and Strategy</td>
<td>3</td>
<td>FSC150 or FSC100</td>
<td>Varies</td>
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<tr>
<td>Fire Science Elective</td>
<td>3</td>
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<tr>
<td>Fire Science Elective</td>
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<tr>
<td>General Education Elective*</td>
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</tbody>
</table>

* GIT110 Microcomputer Software Applications is recommended. ** Please refer to the policy statement of Criminal Offender Record Information and Sex Offender Registry Information checks. Refer to page 2 for Fire Science Electives.
Associate in Science
Fire Science Program - Emergency Medical Services Option

Overview
This program is designed to expand the educational development of the Emergency Medical Services. Material covered in this program will expand the skill and education of persons working in the field or in administrative areas of Emergency Medical Services.

Career Outlook
This program is designed to provide professional training for students interested in careers in the Emergency Medical Services field with opportunities in municipal, state, and federal agencies, industry, insurance companies, hospitals and various medical offices.

Applicants for the Fire Science Program – Emergency Medical Services Option must be able to meet the physical demands and satisfy the behavioral capabilities as outlined in the Program’s Technical Standards.

Program Outcomes
Upon completion of the Fire Science Program - Emergency Medical Services Option, students are able to:

- Apply principles and current practices of fire protection techniques.
- Use effective communication skills to build relationships with co-workers, supervisors, and members of the community.
- Perform the role of a fire protection officer using established standards, guidelines, and regulations.
- Observe, analyze, assess, and implement an effective operation plan in fire protection and emergency medical service situations.
- Apply principles and practices of specialized technical operations teams.
- Integrate leadership principles to perform roles of increasing responsibility within fire protection and emergency medical service organizations.

Fire Science Electives
FSC152  Fire Protection Systems  *(replaces FSC102)*
FSC107  Hydraulics for the Fire Service
FSC108  Fire Investigation and Evidence
FSC109  Fire Department Management and Planning
FSC110  Fire Codes & Ordinances
FSC115  Technical Rescue
FSC120  Intro to Incident Management
FSC130  Shipboard Firefighting
FSC151  Fire Prevention
FSC152  Fire Protection Systems
FSC153  Building Construction for the Fire Protection
FSC154  Principles of Fire & Emergency Services Safety & Survival
FSC155  Fire Behavior and Combustion
# Associate in Science
## Fire Science Program – Fire Science Option

Students who wish to major in Fire Science must select either the Fire Science Option or Emergency Medical Services Option. Professional education courses are offered evenings only.

To graduate in the Fire Science Program - Fire Science Option, a student must complete the following required course of study.

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<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<td>Fall, Spring, Summer</td>
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<td>CHM106 or CHM109</td>
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<td>Fall, Spring, Summer</td>
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<td>FSC150</td>
<td>Principles of Emergency Services (replaces FSC100)</td>
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<td>ENL020 and ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<td>FSC151</td>
<td>Fire Prevention (replaces FSC101)</td>
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<td>Co-requisite: FSC150 or FSC100</td>
<td>Fall, Spring, Summer</td>
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<td>Mathematics/Quantitative Reasoning (or) Physical or Natural Science</td>
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<td>FSC114</td>
<td>Fire Company Management</td>
<td>3</td>
<td>FSC150 or FSC100</td>
<td>Fall, Spring, Summer</td>
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<td>FSC152</td>
<td>Fire Protection Systems (replaces FSC102)</td>
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<td>Co-requisite: FSC150 or FSC100</td>
<td>Fall, Spring, Summer</td>
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<td>ENL102 or COM103</td>
<td>English Composition II (or) Human Communication</td>
<td>3</td>
<td>A grade of C- or higher in ENL101 (or) ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<td>FSC153</td>
<td>Building Construction for Fire Protection (replaces FSC104)</td>
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<td>Co-requisite: FSC150 or FSC100</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>FSC155</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
<td>Co-requisite: FSC150 or FSC100</td>
<td>Fall, Spring, Summer</td>
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<td>Fire Science elective</td>
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<tr>
<td>PSY101 or SOC106</td>
<td>General Psychology (or) Principles of Sociology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score (or) ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>Behavioral &amp; Social Sciences</td>
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<tr>
<td>FSC154</td>
<td>Principles of Fire &amp; Emergency Services Safety and Survival</td>
<td>3</td>
<td>FSC150 or FSC100</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>FSC103</td>
<td>Firefighting Tactics and Strategy</td>
<td>3</td>
<td>FSC150 or FSC100</td>
<td>Fall, Spring, Summer</td>
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<td>Fire Science elective (2)</td>
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</tbody>
</table>
Overview
This program offers the technical and educational requirements to assist in the development of knowledge required to succeed in the fire protection field. This program is centered on municipal fire protection. Aspects of fire protection in the private sector are also presented.

Career Outlook
Students who plan a career in firefighting or fire safety technology should select this program which is based on the premise that in-service personnel need to study technical improvement and that new recruits must be better qualified to enter fire and safety careers. The coursework in the Fire Science program may be helpful in succeeding in the entrance and promotional exams for the fire service. A sound foundation is provided for continuing into a four-year fire degree program.

Applicants for the Fire Science Program must be able to meet the physical demands and satisfy the behavioral capabilities as outlined in the Program’s Technical Standards.

Program Outcomes
Upon completion of the Fire Science program, students are able to:
- Apply principles and current practices of fire protection techniques.
- Use effective communication skills to build relationships with co-workers, supervisors, and members of the community.
- Perform the role of a fire protection officer using established standards, guidelines, and regulations.
- Observe, analyze, assess, and implement an effective operation plan in fire protection and emergency medical service situations.
- Apply principles and practices of specialized technical operations teams.
- Integrate leadership principles to perform roles of increasing responsibility within fire protection and emergency medical service organizations.

Fire Science Electives
EMS101 Emergency Medical Technician: EMT
EMS201 Advanced Pre-Hospital Training Program: Paramedic I
EMS202 Advanced Pre-Hospital Training Program: Paramedic II
FSC105 Hazardous Materials
FSC107 Hydraulics for the Fire Service
FSC108 Fire Investigation and Evidence
FSC109 Fire Department Management and Planning
FSC110 Fire Codes and Ordinances
FSC130 Shipboard Firefighting
FSC120 Introduction to Incident Management
FSC200 Special Topics in Fire Science
# Associate in Science Information Technology Program

To graduate in the Information Technology Program, a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tbody>
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<td><strong>First Semester</strong></td>
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<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
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</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>GIT110</td>
<td>Microcomputer Application Software*</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BUS100</td>
<td>Introduction to Business</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BIT113</td>
<td>Microcomputer Hardware</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
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<tr>
<td><strong>Second Semester</strong></td>
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<tr>
<td>ACC111 (or) ACC201</td>
<td>Accounting I with Computer Applications (or) Financial Accounting</td>
<td>3</td>
<td>(MAT020 or MAT025) &amp; ENL020 or satisfactory basic skills assessment scores (or) (BUS100 or HRM140), GIT110, (MAT030 or MAT035) &amp; ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
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<td>BIT187</td>
<td>Networking Essentials</td>
<td>3</td>
<td>Co-requisite: BIT115</td>
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<tr>
<td>BIT115</td>
<td>Operating Systems</td>
<td>3</td>
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<td>Fall, Spring</td>
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<tr>
<td>Behavioral and Social Sciences</td>
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<tr>
<td>GIT183</td>
<td>Web Site Design and Scripting</td>
<td>3</td>
<td>GIT110</td>
<td>Fall, Spring</td>
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<tr>
<td>BIT150</td>
<td>Database Applications</td>
<td>3</td>
<td>GIT108 or GIT110 or equivalent skill level in Windows</td>
<td>Fall, Spring</td>
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<td><strong>Fourth Semester</strong></td>
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<td>Fall, Spring, Summer</td>
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<tr>
<td>BIT261 (or) BIT262</td>
<td>IT Cooperative Work Experience (or) Advanced IT Elective****</td>
<td>3</td>
<td>Completion of at least 2 semesters of business &amp; IT courses and/or comparable practical work experience. Permission of IT Coordinator</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>60/61</strong></td>
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</tr>
</tbody>
</table>
Associate in Science
Information Technology Program

Overview
Students in the A. S. Information Technology program acquire a wide range of technical skills that prepare them for various positions in the information technology field. Since many technology clusters are available in the IT field, the IT program provides a foundation in software development, database administration, networking, and web development.

Career Outlook
Currently, there is a strong demand for well-trained, competent workers in information technology. Students completing the general degree program are prepared for entry-level positions in the IT field. Students who desire to advance in the field are encouraged to select advanced IT courses in a concentration.

Program Outcomes
Upon completion of the Information Technology program, students are able to:

• Read, write, discuss and think critically about topics and ideas in information and/or office technology.
• Analyze ethical issues and apply ethical standards in the performance of responsibilities in a variety of information and office technology careers.
• Synthesize information from communications, information technology, office technology, and business to provide customer service and solve business problems.
• Assume positions in a variety of information and office technology careers.
• Work well with teams in a information or office technology setting.
• Transfer to baccalaureate programs.

* If challenged or waived, an Information Technology elective may be substituted.

** BIT175 Visual Basic Programming, CSC110 Computer Programming I: Java, or CSC120 Computer Programming I: C++

*** Any course with a GIT, BIT, or CSC designation or HSC104.

**** CSC130 or a 200-level course with a GIT, BIT or CSC course designation.
# Associate in Science
## Information Technology Program
### Administrative Assistant Concentration - General Track

To graduate in the Information Technology Program – Administrative Assistant Concentration – General Track, a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<td>ENL101</td>
<td>English Composition I</td>
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<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BUS100</td>
<td>Introduction to Business</td>
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<td>None</td>
<td>Fall, Spring, Summer</td>
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<td>GIT101</td>
<td>Typing I*</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
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<tr>
<td><strong>Second Semester</strong></td>
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</tr>
<tr>
<td>ACC111 (or) ACC201</td>
<td>Accounting I with Computer Applications (or) Financial Accounting</td>
<td>3</td>
<td>(MAT020 or MAT025) &amp; ENL020 or satisfactory basic skills assessment score (or) BUS100 or HRM140, GIT110, (MAT030 or MAT035) &amp; ENL020 or basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<td>BUS120</td>
<td>Business Law I</td>
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<tr>
<td>GIT150</td>
<td>Database Applications</td>
<td>3</td>
<td>GIT108 or GIT110 or equivalent skill level in Windows</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>GIT220</td>
<td>Advanced Word Processing Applications</td>
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<td>GIT110</td>
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<td>GIT105 (or) BUS102</td>
<td>Office Communication Systems (or) Business Communication</td>
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<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score (or) ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<td>MKT112 (or) BUS214</td>
<td>Customer Service: Concepts &amp; Applications (or) Management</td>
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<td>ENL101 &amp; BUS100</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>BIT202</td>
<td>Standard Office Procedures</td>
<td>3</td>
<td>GIT110</td>
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<tr>
<td>GIT125</td>
<td>Spreadsheet Applications for Business</td>
<td>3</td>
<td>GIT110 &amp; (ACC111 or ACC201)</td>
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<tr>
<td>Behavioral and Social Sciences</td>
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</table>

www.capecod.edu
Information Technology Program - Administrative Assistant Concentration - General Track Overview

Students in the Administrative Assistant concentration acquire a wide range of computer, communication, and organizational skills that prepare them for support positions in a modern office setting. Students enrolled in this concentration choose from the General or Medical tracks.

Career Outlook
Currently, there is a strong demand for well-trained, competent workers in the computerized office. Students completing the Administrative Assistant concentration are prepared to be secretaries, administrative and executive assistants in a variety of computerized office settings.

Administrative Assistant Concentration - General Track Overview

Students in this option learn to keyboard, write and format business documents; use a variety of information processing tools; administer and organize an automated office; and apply correct office procedures in various situations.

Career Outlook
Students completing the General Administrative Assistant track are trained to provide administrative or executive support in small to large office settings including but not limited to banks, insurance, technology, and real estate.

Program Outcomes
Upon completion of the Information Technology Program – Administrative Assistant Concentration – General Track, students are able to:

- Read, write, discuss and think critically about topics and ideas in information and/or office technology.
- Analyze ethical issues and apply ethical standards in the performance of responsibilities in a variety of information and office technology careers.
- Synthesize information from communications, information technology, office technology, and business to provide customer service and solve business problems.
- Assume positions in a variety of information and office technology careers.
- Work well with teams in an information or office technology setting.
- Transfer to baccalaureate programs.

* If waived, must be replaced with a Business course.

** Cooperative Work Experience is recommended.

Business Electives: Any course with an ACC, BIT, BUS, CUL, ENT, GIT, HRM or MKT designation.
Associate in Science
Information Technology Program
Administrative Assistant Concentration - Medical Track

To graduate in the Information Technology Program – Administrative Assistant Concentration - Medical Track, a student must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
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<td><strong>First Semester</strong></td>
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<td>ENL101</td>
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<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>BUS100</td>
<td>Introduction to Business</td>
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<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>GIT101</td>
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<td><strong>Second Semester</strong></td>
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<tr>
<td>ACC111 (or)</td>
<td>Accounting I with Computer Applications (or)</td>
<td>3</td>
<td>(MAT020 r MAT025) &amp; ENL020 or satisfactory basic skills assessment score (or) BUS100 or HRM140, GIT110, (MAT030 or MAT035) &amp; ENL020 or satisfactory basic skills assessment scores</td>
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<td>ACC201 (or)</td>
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<td>BIT103</td>
<td>Medical Terminology</td>
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<tr>
<td>BIO105</td>
<td>Survey of Human Anatomy &amp; Physiology</td>
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<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>GIT220</td>
<td>Advanced Word Processing Applications</td>
<td>3</td>
<td>GIT110</td>
<td>Spring</td>
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<td><strong>Third Semester</strong></td>
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<tr>
<td>GIT105 (or)</td>
<td>Office Communication Systems (or)</td>
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<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
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<td>BUS102 (or)</td>
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<tr>
<td>BIT207</td>
<td>Medical Coding and Billing</td>
<td>3</td>
<td>BIT103</td>
<td>Fall, Spring</td>
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<tr>
<td>GIT150</td>
<td>Database Applications</td>
<td>3</td>
<td>GIT108 or GIT110 or equivalent skill level in Windows</td>
<td>Fall, Spring</td>
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<tr>
<td>BIT202 (or)</td>
<td>Standard Office Procedures (or)</td>
<td>3</td>
<td>GIT110 (or) Completion of at least 2 semesters of business &amp; IT courses and/or comparable practical work experience. Permission of IT Coordinator</td>
<td>Spring</td>
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<td>BIT261 (or)</td>
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<td>Medical Office Procedures</td>
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<td>GIT110 &amp; BIT103</td>
<td>Spring</td>
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<td></td>
<td>Behavioral and Social Sciences</td>
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<td>Business elective</td>
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</tbody>
</table>
Associate in Science
Information Technology Program
Administrative Assistant Concentration - Medical Track

Information Technology Program - Administrative Assistant Concentration Overview
Students in the Administrative Assistant concentration acquire a wide range of computer, communication, and organizational skills that prepare them for support positions in a modern office setting. Students enrolled in this concentration choose from the General or Medical tracks.

Overview
Students gain an understanding of medical procedures, medical terminology, and a conceptual and practical understanding of a computerized office environment in a medical setting. Students progress from basic keyboarding and word processing to advanced information processing and office procedures.

Career Outlook
Students completing the Medical Administrative Assistant track are prepared to provide administrative support in a variety of medical office and allied health services environments.

Program Outcomes
Upon completion of the Information Technology Program – Administrative Assistant Concentration – Medical Track, students are able to:
- Read, write, discuss and think critically about topics and ideas in information and/or office technology.
- Analyze ethical issues and apply ethical standards in the performance of responsibilities in a variety of information and office technology careers.
- Synthesize information from communications, information technology, office technology, and business to provide customer service and solve business problems.
- Assume positions in a variety of information and office technology careers.
- Work well with teams in an information or office technology setting.
- Transfer to baccalaureate programs.

* If waived, must be replaced with a Business elective.

**Any course with a BIT, GIT or CSC designation or HSC104.

Business Electives: Any course with an ACC, BIT, BUS, CUL, ENT, GIT, HRM or MKT designation
# Associate in Science
## Nursing Program

To graduate in the Nursing Program, a student must complete the following required course of study.

**Note:** The following courses must be completed before entering the Nursing Program.

- BIO251 Human Anatomy & Physiology I* (formerly BIO107)
- CHM109 Chemistry for the Health Sciences*
- NUR100 Pharmacology Calculations

### Course # | Course Title | Credits | Prerequisites | Semester Offered | Semester Taken | Grade Earned
--- | --- | --- | --- | --- | --- | ---
**First Semester**
ENL101 **English Composition I** | 3 | Appropriate scores in Reading Comprehension & in Sentence Skills on CPT or grade of C or better in ENL020 & ENL050 or ESL201 | Fall, Spring, Summer
PSY101 **General Psychology** | 3 | ENL020 & ENL050 or satisfactory basic skills assessment score | Fall, Spring, Summer
BIO252 **Human Anatomy and Physiology II** (formerly BIO108) | 4 | A grade of C or higher in BIO107 or BIO251 | Fall, Spring, Summer
NUR107 Fundamentals of Nursing | 8 | Admission to the College & Nursing program; current AHA or ARC CPR certification; ENL020 & ENL050 or satisfactory basic skills assessment score; NUR100 & (BIO107 or BIO251). BIT103 recommended. Co-requisite: (BIO108 or BIO252), ENL101, PSY101 | Fall

**Second Semester**
ENL102 **English Composition II** (or) COM103 **Human Communication** | 3 | A grade of C or higher in ENL101 (or) ENL010 or ESL102 or satisfactory basic skills assessment score | Fall, Spring, Summer
PSY233 **Developmental Psychology: The Life Span** | 3 | PSY101 & ENL101 | Fall, Spring, Summer
NUR108 Nursing Across the Life Span | 8 | NUR107, (BIO108 or BIO252), ENL101 & PSY101. Co-requisite: PSY233 | Spring

**Third Semester**
BIO281 **Microbiology** (formerly BIO201) | 4 | A grade of C or higher in (CHM101 or CHM151) or CHM109 & (BIO101 or BIO151) or (BIO107 or BIO251) | Fall, Spring, Summer
HEA200 Pharmacology | 3 | Acceptance into the Nursing program; Co-requisite: NUR107 and (BIO108 or BIO252) or permission of instructor | Fall, Spring, Summer
NUR201 Physical and Mental Health I | 10 | NUR108 or NUR132 & current CPR certification. Co-requisite: BIO281 & HEA200 | Fall

**Fourth Semester**
NUR202 Physical and Mental Health II | 8 | NUR201, BIO281 & HEA200 | Spring
NUR203 Foundations of the Profession | 3 | NUR201 | Spring
**General Education** | 3 |

### Total Credits 63

* These two courses meet the revised General Education requirements (effective Fall 2010)
** Courses that can be completed in advance of applying to the Nursing Program.
*** It is strongly recommended that students take both ENL102 and COM103.

**Note:** For those students seeking additional courses, or planning to continue their education to achieve a baccalaureate degree, the following courses are recommended: HEA120, HEA201, SOC106, SOC220, PHI210 and courses in computers or keyboarding.
The Associate in Science degree in Nursing is accredited by the Accreditation Commission for Education in Nursing and is approved by the Board of Registration in Nursing of the Commonwealth of Massachusetts.

The Nursing Program offers a specific sequence of courses that lead to the Associate in Science degree. Upon successful completion of the degree program, the Coordinator of the Nursing Program will furnish documentation to the Massachusetts Board of Registration in Nursing verifying that a student has met the legal responsibilities to be eligible for the National Council Licensure Examination for Registered Nurses (NCLEX). Cape Cod Community College (CCCC) Nursing Program graduates become licensed as Registered Nurses upon successful completion of the NCLEX-RN.

In preparing your application, the Admissions Office and Nursing Program recommend that you review the following information.

**Information Sessions**
It is essential that all Nursing applicants attend a Group Information Session that will include meeting with the Coordinator of Nursing, CCCC Admissions representative, and a review of application procedures and details about the Nursing Program. These sessions are scheduled periodically throughout the fall and spring semesters. Please go to our web site at www.capecod.edu/web/admissions/visits and follow the instructions under Selective Health Programs.

**Application Procedures**
A. Nursing applications are accepted ONLY for the FALL SEMESTER.
B. Each applicant will be evaluated relative to all other applicants in the current pool.
C. Applicants MUST submit ALL of the following items to the Admissions Office by January 5:
   1. A completed CCCC Application for Admission.
   2. An official high school transcript or GED diploma.
   3. An official transcript(s) from all colleges or universities ever attended (if applicable).
   4. A letter and/or resume indicating the reasons for selecting the Nursing Program, related experiences, motivation and other pertinent data. Applicants should take this opportunity to provide information covering any special circumstances in their background.

**Qualifications for Admission**
Satisfactory performance in the most recent educational experience is required and must include:
- Successful completion of Pharmacology Calculations (NUR100) within the last two years as of January 5.
  At CCCC, (MAT030 Elementary Algebra or MAT035 Algebra for Non-STEM) is a prerequisite for this course.
- Successful completion of Chemistry for the Health Sciences (CHM109), or an equivalent college/university chemistry course. At CCCC, (MAT030 Elementary Algebra or MAT035 Algebra for Non-STEM) is a prerequisite for this course.
- Successful completion of Human Anatomy & Physiology I with a lab (BIO107 or BIO251 or the equivalent). At CCCC, CHM109 Chemistry for the Health Sciences or an equivalent college/university chemistry course is a prerequisite for this course.
- Successful completion of General Psychology (PSY100).
- Completed the required science courses, i.e., Anatomy & Physiology II, Microbiology.
- Completed the required general education courses, e.g., General Psychology, English Composition.
- Achieved a high level of academic success.
- Graduated from the CCCC Tri-level Certified Nurse Aide Certificate Program with a final grade of A and are recommended by the Allied Health Director.

**Priority will be given to applicants who:**
- Completed the required science courses, i.e., Anatomy & Physiology II, Microbiology.
- Completed the required general education courses, e.g., General Psychology, English Composition.
- Achieved a high level of academic success.
- Graduated from the CCCC Tri-level Certified Nurse Aide Certificate Program with a final grade of A and are recommended by the Allied Health Director.

**Assessment Placement**
The Basic Skills Assessment is required of all entering students. These examinations help to assess achievement levels in mathematics, writing and reading skills. The test results will assist in placing students into the correct level courses. Students who are required to study developmental educational courses should anticipate a three year program of study.

**Waiting List**
When the appropriate numbers of students have been accepted, the remaining qualified applicants are placed on the waiting list. Admission will be offered to applicants on the waiting list when an accepted student withdraws or is withdrawn by the Admissions Office. The waiting list is maintained until the first day of the fall semester, and then it is dissolved.

**Nursing Course Progression**
Students must maintain a cognitive grade of 77% or better in each nursing course and a satisfactory clinical evaluation in order to proceed to the subsequent nursing course.

**CPR Certification**
Students are required to document and maintain CPR Certification throughout the Nursing Program. There are a variety of certification programs available. However, when choosing a CPR certification course, students must ensure that the course includes adult, child, and infant CPR and a written and practical exam for Healthcare providers.

**Drug Screening**
Students are required to complete drug screening at a testing site designated by Cape Cod Community College early in the first semester of the freshman year. Drug screening may be repeated throughout the program as required by clinical settings.

**Criminal Offender Record Information and Sex Offender Record Information**
Please refer to the policy statement of Criminal Offender Record Information and Sex Offender Registry Information checks. CORI/SORI checks may be required throughout the program.
Associate in Science  
Nursing Program

Good Moral Character: Standard for Licensure
Applicants who have been convicted of a felony or misdemeanor by a court of law must comply with the requirements to document "Good Moral Character" through the Massachusetts Board of Nursing before being eligible to take the NCLEX-RN examination to become licensed as a Registered Nurse. An individual who has been convicted of certain designated felonies is permanently ineligible for licensure as a Registered Nurse in Massachusetts.

Health Requirements
Nursing students must complete specific health and immunization requirements. For more information, please visit www.capecod.edu/web/registrar/immunization.

Nursing Student Accountability for Patient/Client Care
The Cape Cod Community College nursing student must demonstrate accountability for his/her own actions in the delivery of nursing care in a way that ensures the health and safety of patients/clients, staff and self. The student will be able to function in a manner that does not pose a direct threat as defined by the Board of Registration in Nursing (BORN) as "a significant risk to the health or safety of others that cannot be eliminated by a modification of policies, practices, or procedures or by the provision of auxiliary aids or services."

Students who are evaluated as unable to meet the Nursing Program Technical Standards may follow the Cape Cod Community College grievance policy. For detailed information regarding the Nursing Program Technical Standards, please visit www.capecod.edu/web/nursing/programs.

Nursing Evening Option - Overview
The course sequencing is based on the term of enrollment. Nursing classes and clinical experiences are scheduled on selected evenings and alternate weekends. In addition to the prerequisites listed for NUR107-Day Option, students must complete the following course work prior to admission to the Evening Option: ENL101, PSY101, BIO108, PSY233, and ENL102 or COM103. Completion of BIO281 is strongly recommended.

Nursing Program - LPN to RN – Overview
In order to be considered for admission to this program, the applicant must have a current LPN license and have completed all prerequisites. In addition to the prerequisites listed for NUR107-Day Option, students must complete the following course work prior to admission to the transition course: ENL101, PSY101, BIO107, PSY233, and ENL102 or COM103. Completion of BIO281 is strongly recommended.

NUR132 - The LPN in Transition course is offered during the late spring. Successful completion of NUR132 admits the student to the third semester Nursing course, NUR201.

Career Outlook
Employment opportunities are available as an entry-level Registered Nurse in hospitals, long-term care facilities and other health care agencies.

Program Outcomes
Upon completion of the Nursing Program, students are able to:
- Synthesize data from biopsychosocial sciences for patients/clients at all developmental levels to provide nursing care
- Synthesize knowledge of stress-adaptation theory to promote and restore health
- Synthesize components of the nursing process to assist patients/clients to move toward optimal health
- Integrate knowledge of the patients/clients relationship to family, community and the external environment in providing nursing care
- Develop therapeutic nurse-patient relationships
- Function as a member of the multidisciplinary health team caring for individuals with common problems in acute and long-term structured care settings
- Demonstrate accountability for delegation of nursing tasks to unlicensed assistive personnel
- Provide nursing care based on the profession's ethical code of behavior and with respect for the beliefs and cultural practices of others
- Demonstrate accountability for own actions in the delivery of nursing care.
- Integrate information literacy into one’s role as a life-long learner.

If you are interested in the Nursing Program - Evening Option or the LPN to RN program, please request additional information from the Admissions Office.
**Certificate Programs**

Students whose placement scores indicate an insufficient level of proficiency will be required to complete MAT025 Prealgebra (formerly MAT020) and ENL050 Foundations in Writing. Credits earned in these courses will be in addition to the required credits in each certificate. Certificates of 16 to 29 credits require satisfactory completion of at least one 100-level course from the general education requirement list, [page 29](#).

Any student taking online courses or courses with online components is responsible for having reliable access to both the Internet and a computer running Chrome or Firefox.

Please visit [www.capecod.edu/online](http://www.capecod.edu/online) for more information detailing online course requirements.

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# Accounting Certificate

## Bookkeeping Clerk

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT101</td>
<td>Typing I</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC111</td>
<td>Accounting I with Computer Applications</td>
<td>3</td>
<td>(MAT020 or MAT025) &amp; ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC110</td>
<td>Personal and Small Business Taxes</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC112</td>
<td>Accounting II with Computer Applications</td>
<td>3</td>
<td>(ACC111 or ACC101) &amp; (MAT030 or MAT035) or satisfactory basic assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT105</td>
<td>Office Communication Systems</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS102</td>
<td>Business Communication</td>
<td></td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>18</strong></td>
<td></td>
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</tr>
</tbody>
</table>

### Overview

Students gain skills and knowledge in computer applications, accounting theory, and tax applications. A certificate as a Bookkeeping Clerk serves as an opening to businesses needing entry-level help year-round but especially during the extended months for tax filing. Students are encouraged to continue their studies with the Computerized Accounting Certificate and eventually an Associate in Science in Business Administration – Accounting concentration.

### Career Outlook

According to the Occupational Outlook Handbook, employment of bookkeeping, accounting, and auditing clerks is expected to grow 14% from 2010 to 2020, as fast as the average for all occupations. Job growth for these workers is largely driven by overall economic growth. As the number of organizations increases, more bookkeepers are needed to keep these organizations’ books. In addition, in response to the recent financial crisis, investors pay increased attention to the accuracy of corporate books. Stricter regulation in the financial sector creates demand for accounting services, creating opportunities for bookkeeping clerks.

### Program Outcomes

Upon successful completion of the Bookkeeping Clerk Certificate, students are able to:
- Demonstrate desirable work habits including verbal/written communication skills, technological competence, critical thinking, problem solving.
- Demonstrate ethical behavior and confidentiality with financial data.
- Assume an entry-level position within a business to help in basic accounting activities with duties that may include data input in tax preparation.
Accounting Certificate  
Computerized Accounting

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT101</td>
<td>Typing I</td>
<td>3</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC111</td>
<td>Accounting I with Computer Applications</td>
<td>3</td>
<td>(MAT020 or MAT025) &amp; ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC110</td>
<td>Personal and Small Business Taxes</td>
<td>3</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC112</td>
<td>Accounting II with Computer Applications</td>
<td>3</td>
<td>ACC111 or ACC101 &amp; (MAT030 or MAT035) or satisfactory basic assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT105</td>
<td>Office Communication Systems (or) Business Communication</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS102</td>
<td>Business Communication</td>
<td></td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT125</td>
<td>Spreadsheet Applications for Business</td>
<td>3</td>
<td>GIT110 or GIT120 &amp; ACC111 or ACC201</td>
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<tr>
<td>ACC115</td>
<td>Payroll Accounting</td>
<td>3</td>
<td>ACC111 or ACC201</td>
<td></td>
<td></td>
<td>Varies</td>
</tr>
<tr>
<td>ACC263</td>
<td>VITA Practicum or Business Administration Cooperative Work Experience</td>
<td>3</td>
<td>ACC101 or ACC111 or ACC201. Co-requisite: ACC110 (may be taken concurrently) Approval by the Business internship instructor</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Total Credits 27

Overview
Students gain skills and knowledge in computer applications, accounting theory, and tax applications. A certificate in Computerized Accounting serves as an opening to businesses needing students trained in Excel, QuickBooks, and tax software for general accounting duties. Students are encouraged to continue their studies with an Associate in Science in Business Administration – Accounting concentration.

Career Outlook
According to the Occupational Outlook Handbook, employment of bookkeeping, accounting, and auditing clerks is expected to grow 14% from 2010 to 2020, as fast as the average for all occupations. Job growth for these workers is largely driven by overall economic growth. As the number of organizations increases, more bookkeepers are needed to keep these organizations’ books. In addition, in response to the recent financial crisis, investors pay increased attention to the accuracy of corporate books. Stricter regulation in the financial sector creates demand for accounting services, creating opportunities for accounting clerks.

Program Outcomes
Upon successful completion of the Computerized Accounting Certificate, students are able to:
- Demonstrate desirable work habits including verbal/written communication skills, technological competence, critical thinking, and problem solving.
- Demonstrate ethical behavior and confidentiality with financial data.
- Assume an entry-level position within a business to help in basic accounting activities with duties that may include data input in tax preparation, payroll, and general accounting functions.
Alcohol and Substance Abuse Counselor Assistant Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS104</td>
<td>Introduction to Alcohol and Substance Abuse</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS101</td>
<td>Introduction to Human Services</td>
<td>3</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS206</td>
<td>Human Services Practicum</td>
<td>4</td>
<td>By permission of Human Services Coordinator; PSY101, HUS101, COM103</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>16</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Overview
The Alcohol and Substance Abuse Counselor Assistant Certificate is designed to provide students with the skills necessary to assist clients in the recovery process under clinical and administrative supervision. Topics and skills include assessment, case management, crisis intervention, client education, and community resources. A student who is interested in transferring into a four year undergraduate program in the area of alcohol and substance abuse can complete the certificate through electives in the Associates in Arts Human Services Concentration at Cape Cod Community College.

Career Outlook
This occupational profile is provided by O*NET. http://www.onetonline.org/link/summary/21-1093.00

Program Outcomes
Upon successful completion of the Alcohol and Substance Abuse Counselor Assistant Certificate, students are able to:
- Recognize a broad range of services that addictions professionals provide.
- Understand a basic connection between social issues such as poverty, mental health, domestic violence, and addiction.
- Practice observation and interpersonal communication techniques.
- Demonstrate ethical practices when working with diverse populations.

Please refer to the policy statement of Criminal Offender Record Information (CORI) and Sex Offender Registry Information (SORI).
## Alcohol and Substance Abuse Counselor II Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on the CPT or a grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS229</td>
<td>Introduction to Social Welfare</td>
<td>3</td>
<td>PSY101 or SOC106</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY208</td>
<td>Principles of Counseling &amp; Crisis Intervention</td>
<td>3</td>
<td>PSY101</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS207</td>
<td>Advanced Human Services Practicum</td>
<td>4</td>
<td>Permission of Human Services Coordinator; PSY209, ENL101 &amp; HUS206</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS230*</td>
<td>Mental Health, Substance Abuse, and Families (replaces HUS102)</td>
<td>3</td>
<td>(PSY101 or SOC106) and HUS101, HUS229</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS231**</td>
<td>Treatment Modalities in Human Services (replaces HUS106)</td>
<td>3</td>
<td>PSY101, HUS101, HUS229</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
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<tr>
<td>PSY209</td>
<td>Group Dynamics in Human Services</td>
<td>3</td>
<td>PSY101 or SOC106</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS208</td>
<td>Advanced Addictions Practicum</td>
<td>4</td>
<td>ENL101, HUS230*, PSY208, PSY209; Co-requisite: HUS231**</td>
<td>Varies</td>
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<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>26</td>
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</tr>
</tbody>
</table>

The courses in the Alcohol and Substance Abuse Counselor Assistant certificate are prerequisites for the course work required in the Alcohol and Substance Abuse Counselor II certificate. The Alcohol and Substance Abuse Counselor Assistant certificate should be completed prior to taking courses required in Alcohol and Substance Counselor II certificate.

### Overview

The Alcohol and Substance Abuse Counselor II Certificate is designed to provide students with the skills necessary to counsel clients in the recovery process under clinical supervision. Topics and skills include assessment, treatment planning, individual and group counseling, case management, crisis intervention, client education, and community resources. A student who is interested in transferring into a four year undergraduate program in the area of alcohol and substance abuse can complete the certificate through electives in the Associates in Arts Human Services Concentration at Cape Cod Community College.

### Career Outlook

This occupational profile is provided by O*NET.  
[http://www.onetonline.org/find/quick?s=alcohol+substance+abuse+assistant+counselor](http://www.onetonline.org/find/quick?s=alcohol+substance+abuse+assistant+counselor)

### Program Outcomes

Upon successful completion of the Alcohol and Substance Abuse Counselor II Certificate, students are able to:
- Recognize the extent of services that addictions professionals provide and identify theories and treatment modalities used in the prevention, intervention, treatment, and recovery.
- Describe addiction and its consequences for family and individual systems.
- Understand the connection between social issues such as poverty, mental health, domestic violence, and addiction.
- Practice observation, interpersonal communication, and group facilitation techniques.
- Demonstrate ethical practices when working with diverse populations.

Please refer to the policy statement of Criminal Offender Record Information (CORI) and Sex Offender Registry Information (SORI).

* HUS230 (formerly HUS102)
** HUS231 (formerly HUS106)
Allied Health
Diagnostic Technician Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tbody>
<tr>
<td>BIT103*</td>
<td>Medical Terminology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>DTC102</td>
<td>EKG Technician</td>
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<td>None</td>
<td>Fall, Spring</td>
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<tr>
<td>DTC104</td>
<td>Fundamentals of Phlebotomy</td>
<td>6</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTC204</td>
<td>Phlebotomy Practicum</td>
<td>2</td>
<td>DTC104 with passing grade of 75% or better, successful demonstration of skill proficiency &amp; recommendation of faculty</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

Diagnostic Technician Certificate Admission Requirements
The pivotal course in the Diagnostic Technician Certificate is Fundamentals of Phlebotomy (DTC104). In order to apply for the Fundamentals of Phlebotomy course, you must attend an information session. For more information regarding admission requirements for the Diagnostic Technician Certificate, please visit www.capecod.edu/web/admissions/requirements/diagnostic.

In addition to attending an information session, admission into this Allied Health certificate requires that the student meet all College Medical and Immunization Requirements, the Diagnostic Technician Certificate's Technical Standards (Physical and Behavioral Capabilities), and pass a Criminal Offender Record Information (CORI) and Sex Offender Record Information (SORI) check.

Details of the Technical Standards can be found at: www.capecod.edu/web/allied/diagnostic-technician/technical-standards

The Immunization Requirements are available at: www.capecod.edu/web/registrar/immunization.

Overview
This certificate prepares students to function in a variety of settings assisting with diagnostic testing including phlebotomy and EKG. The additional courses provide students with the vocabulary and communication skills to work with the public in the health care setting.

Graduates are eligible to take the national credentialing exams in Phlebotomy and EKG.

Career Outlook
This occupational profile is provided by O*NET.
www.onetonline.org/find/quick?s=diagnostic+technician

Gainful Employment
The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

Program Outcomes
Upon successful completion of the Diagnostic Technician certificate, students are able to:
- Communicate and interact with a caring and professional attitude in the clinical setting
- Demonstrate competence and accuracy in skills and procedures involved in the diagnostic tests which involve phlebotomy and EKG
- Interpret medical terminology pertaining to the practice area.

* It is recommended that students take BIT103 Medical Terminology prior to admission into the Diagnostic Technician Certificate program or they may take it concurrently with DTC104 once they are admitted.
## Allied Health
### Medical Assisting Certificate

The Medical Assisting Certificate program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Medical Assisting Education Review Board (MAERB).

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester (Spring)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEA134</td>
<td>Essential Skills for Health Care Professionals</td>
<td>1</td>
<td>ENL020 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT103</td>
<td>Medical Terminology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO105</td>
<td>Survey of Human Anatomy &amp; Physiology*</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Semester (Fall)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEA202</td>
<td>Essential Pharmacology for Allied Health Prof.</td>
<td>2</td>
<td>BIO105 &amp; BIT103</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC101</td>
<td>Fundamentals of Medical Assisting</td>
<td>3</td>
<td>BIT103 &amp; BIO105</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third Semester (Spring)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT203</td>
<td>Medical Office Procedures**</td>
<td>3</td>
<td>GIT110 &amp; BIT103</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAC204</td>
<td>Medical Assisting Clinical Procedures &amp; Clinical Practicum**</td>
<td>7</td>
<td>A grade of C or higher in MAC101; Co-requisite: BIT203</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Total Credits                                                                                                                                         29

### Medical Assisting Certificate Admission Requirements

Admission into the Medical Assisting Certificate program requires that the applicant attend an information session. Students must also meet all health requirements (Immunization Requirements), the Medical Assisting Technical Standards, and pass a Criminal Offender Record Information (CORI) and Sex Offender Record Information (SORI) check. To remain in this program a student must maintain a 75% average in each required course, a satisfactory clinical evaluation, and adhere to the attendance policy.

Details of the Medical Assisting Certificate Technical Standards are available at [www.capecod.edu/web/allied/medassist/technical-standards](http://www.capecod.edu/web/allied/medassist/technical-standards).

The Immunization Requirements are available at: [www.capecod.edu/web/registrar/immunization](http://www.capecod.edu/web/registrar/immunization).

### Medical Assisting Certificate Graduation Requirements

- Students must successfully complete each required course and must maintain a 75% average in each course.
- Students must take a nationally recognized certification exam at their own expense prior to graduation from this program.

### Career Outlook

This occupational profile is provided by O*NET. [www.onetonline.org/find/quick?term=medical+assisting](http://www.onetonline.org/find/quick?term=medical+assisting)

### Gainful Employment

The [Gainful Employment Program Regulations](http://www.capecod.edu) provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

### Overview

Students in the Medical Assisting certificate acquire a wide range of clinical, computer, communication, and organizational skills that prepare them for a multitude of positions in various medical environments. Medical Assistants are versatile, multifaceted professionals.

### Program Outcomes

Upon completion of this certificate, entry-level Medical Assistants are able to:

- Demonstrate competence in both administrative and clinical skills.
- Apply the knowledge acquired in the program in both the administrative and clinical areas under supervision and direction of the physician.
- Practice the behaviors that reflect a professional and caring attitude.
- Display sensitivity to all patients.
- Describe the value of obtaining professional certification and continuing education.

Refer to the policy for the Criminal Offender Record Information (CORI) and Sex Offender Record Information (SORI) check. CORI/SORI checks may be required throughout the program.

*For those planning on pursuing other health careers, (BIO107 or BIO251) and (BIO108 or BIO252) are recommended.

**Must be taken concurrently.

Students enrolled in Medical Assisting are required to maintain current CPR certification at the level of Healthcare provider or professional rescuer in MAC101 and MAC204.
## Allied Health
### Medical Interpreter Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIT103</td>
<td>Medical Terminology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO105</td>
<td>Survey of Anatomy and Physiology</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020, &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIN101</td>
<td>Medical Interpreter I</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score or ESL201 &amp; target language assessment conducted at the 1st class session</td>
<td>Varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIN102</td>
<td>Medical Interpreter II</td>
<td>3</td>
<td>BIT103 &amp; MIN101 with a grade of C or higher</td>
<td>Varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIN200</td>
<td>Medical Interpreter Practicum*</td>
<td>3</td>
<td>MIN102; co-requisite: BIO105</td>
<td>Varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>16</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Medical Interpreter Certificate Admission Requirements

Admission into the Medical Interpreter Certificate program requires that the applicant attend an information session. Students must also meet all health requirements (Immunization Requirements) and pass a Criminal Offender Record Information (CORI) and Sex Offender Record Information (SORI) check. To remain in these programs a student must maintain a 75% average in the required courses, a satisfactory clinical evaluation, and adhere to the attendance policy.

The Immunization Requirements are available at: [www.capecod.edu/web/registrar/immunization](http://www.capecod.edu/web/registrar/immunization).

### Overview

Medical Interpreters enable accurate cross-cultural communication of information from one language to another in healthcare contexts. “Interpreters strive to render the message accurately, conveying the content and spirit of the original message taking into consideration the cultural context” (National Council on Interpreting in Healthcare Inc., 2005). Fluency in English and one or more target languages such as Portuguese and Spanish is required as well as sensitivity to the cultures associated with the target language.

### Program Outcomes

Upon completion of the Medical Interpreter Certificate, students are able to:

- Accurately transmit information in the source language of healthcare professionals and the target language of patients and family members.
- Adhere to the ethical code of recognized medical interpreter organizations**.
- Execute the role of medical interpreter according to established standards of practice.
- Function as a cross-cultural broker to promote culturally and linguistically competent healthcare to patients and families with limited English language proficiency.

*MIN200 participants in a clinical site practicum must meet all immunization requirements and pass CORI/SORI checks. Please refer to the policy statements of Immunization Requirements and Criminal Offender Record Information and Sex Offender Registry Information. CORI/SORI checks may be required throughout the program.

**Standards reference the National Council on Interpreting in Healthcare (NCIHC).
Allied Health
Paramedic Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS201</td>
<td>Advanced Pre-Hospital Training Program: Paramedic I</td>
<td>7</td>
<td>ENL020 &amp; (MAT020 or MAT025) or satisfactory basic skills assessment scores</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS202/EMS602</td>
<td>Advanced Pre-Hospital Training Program: Paramedic II / Paramedic Clinical Field Experience</td>
<td>8</td>
<td>EMS201</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

**Program Outcomes**

Upon completion of the Paramedic Certificate, students are able to:

- Describe the roles and responsibilities of a Paramedic within the EMS system.
- Apply the basic concepts of development, pathophysiology, and pharmacology to assessment and management of emergency patients.
- Demonstrate competence in performing the skills and procedures required of paramedics.
- Safely manage the scene of an emergency including effective ground and air transport, general incident management, and multiple casualty incident management.
- Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for patients of all ages in a variety of situations, e.g., trauma, medical crises, neonatal.
- Demonstrate an attitude of professionalism, respect, care and concern for the dignity of the individual.

* Applicants must be currently certified as an EMT and are required to attend an information session.

**Paramedic Certificate Admission Requirements**

Admission into the Paramedic Certificate requires that the applicant attend an information session. Students must also meet all health requirements (Immunization Requirements), the Paramedic Technical Standards, and pass a Criminal Offender Record Information (CORI) and Sex Offender Record Information (SORI) check. To remain in these programs a student must maintain a 75% average in the required courses, a satisfactory clinical evaluation, and adhere to the attendance policy.

Applicants for the Paramedic Certificate program must be able to meet the physical demands and satisfy the behavioral capabilities as outlined in the Program’s Technical Standards.

The Immunization Requirements are available at: [www.capecod.edu/web/registrar/immunization](http://www.capecod.edu/web/registrar/immunization).

**Overview**

This program is designed to assist the student to prepare for the State Certificate Exam for Paramedic. Students will be given the basic skills and technical information to provide emergency medical services at the paramedic level.
Allied Health

Tri-level Nursing Assistant / Home Health Aide Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNA117</td>
<td>Tri-level Nursing Assistant/Home Health Aide</td>
<td>6</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEA130</td>
<td>Standard First Aide and Basic Life Support (CPR)</td>
<td>1</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

Program Outcomes
Upon completion of this certificate, students are able to:
- Provide basic care in activities of daily living to patients of all ages under the direction and supervision of the registered nurse in hospitals, nursing homes, home care, and in other health care facilities.
- Demonstrate basic competence in skills required by state and federal guidelines.
- Communicate a caring attitude and behaviors in all professional interactions.
- Apply principles of patient safety and infection control.
- Pass the state exam both written and skills demonstration and be placed in the Nurse Aide Registry.

Admission Requirements
Admission into this Allied Health certificate requires that the applicant attend an information session. Students must meet all College Medical and Immunization Requirements, meet the Nursing Assistant Program’s Technical Standards (Physical and Behavioral Capabilities), and pass a Criminal Offender Record Information (CORI) and Sex Offender Record Information (SORI) check. To remain in this program, a student must maintain a 75% average in the required courses, a satisfactory clinical evaluation, and adhere to the attendance policy.

Details of the Technical Standards for the Tri-level Nursing Assistant/Home Health Aide Certificate can be found at: [www.capecod.edu/web/allied/trilevel/technical-standards](http://www.capecod.edu/web/allied/trilevel/technical-standards)

The Immunization Requirements are available at: [www.capecod.edu/web/registrar/immunization](http://www.capecod.edu/web/registrar/immunization)

Overview
This 7 credit certificate program teaches basic nursing skills and beginning interpersonal relationship skills. The graduate will be able to provide care to patients of all ages under the direction and supervision of a registered nurse. Day and evening classes offered. The Tri-level Nursing Assistant/Home Health Aide course is recommended for students planning to continue their education into the Nursing Program.

Career Outlook
There are unlimited employment opportunities for graduates to work in hospitals, nursing homes, assisted living, home care and hospice settings. Graduates are eligible to take the State certification exam as nursing assistants and are certified as Home Health Aides and in CPR/First Aid Basic Life Support.
Aviation Maintenance Technology

Airframe Certificate  Pending Federal Aviation Administration approval.

Students should consult with an advisor about the general education course requirements.

A candidate for the Aviation Maintenance Technology program must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education Course*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AMT 101</td>
<td>General Module 1 (5 weeks)</td>
<td>6</td>
<td>ENL020 &amp; ENL050 or Satisfactory basic skills assessment</td>
</tr>
<tr>
<td>AMT 102</td>
<td>General Module 2 (5 weeks)</td>
<td>6</td>
<td>AMT 101 with a grade of C or higher</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education Course*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AMT 201</td>
<td>Airframe Module 1 (9.5 weeks)</td>
<td>9</td>
<td>AMT 102 with a grade of C or higher</td>
</tr>
<tr>
<td>AMT 202</td>
<td>Airframe Module 2 (9.5 weeks)</td>
<td>9</td>
<td>AMT 201 with a grade of C or higher</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education Course*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>39</td>
<td></td>
</tr>
</tbody>
</table>

Overview

The Aviation Maintenance Technology certificate develops students towards an Airframe & Powerplant license. The Airframe Certificate requires a total of 39 credits for completion. Three general education courses are required for a certificate and can be taken at any time. The entire program develops students in a one year process as an Aviation Maintenance Technician.

Career Outlook

Labor market data shows a strong need for aviation industry education targeting occupations like aviation maintenance technicians, avionics, engineering & operating technicians, inspectors, aircraft structures, rigging & systems assemblers, aviation managers, and directors of maintenance. The 12 month program will increase the number of aviation technicians and address the regional workforce gaps.

Program Outcomes

Upon successful completion of the Aviation Maintenance Technology concentration, students are able to:

- Receive Airframe Certificate.
- Sit for FAA license exam.
- Demonstrate the knowledge of aviation maintenance and increase opportunities to enter an aviation career field.

*General education courses may be chosen from a list in the college catalog. Three general education courses are required for this certificate program. Choose from the following list to stack for the Associate in Applied Science degree in Aviation Maintenance Technology:

- ENL101 English Composition I
- ENL102 English Composition II
- PHY151 Physics I
- GIT110 Microcomputer Applications Software

1 Mathematics:
   - MAT150 Elementary Statistics (or)
   - MAT175 College Algebra (or)
   - MAT180 Applied Calculus (or)
   - MAT240 Calculus I

- Recommended for transfer to Bridgewater State University:
   - PHI131 Logic
   - ECO117 Macroeconomics
   - MAT240 Calculus

The AMT curriculum will be offered eight hours a day for five days a week. The posted schedule will allow for a few holidays.

MA Aviation Workforce Development web site:
www.mass.gov/lwd/
Aviation Maintenance Technology
Powerplant Certificate  Pending Federal Aviation Administration approval.

Students should consult with an advisor about the general education course requirements.

A candidate for the Aviation Maintenance Technology program must complete the following required course of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Education Course*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AMT 101</td>
<td>General Module 1 (5 weeks)</td>
<td>6</td>
<td>ENL020 &amp; ENL050 or Satisfactory basic skills assessment</td>
</tr>
<tr>
<td>AMT 102</td>
<td>General Module 2 (5 weeks)</td>
<td>6</td>
<td>AMT 101 with a grade of C or higher</td>
</tr>
<tr>
<td></td>
<td>General Education Course*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AMT 203</td>
<td>Powerplant Module 1 (9.5 weeks)</td>
<td>9</td>
<td>AMT 102 with a grade of C or higher</td>
</tr>
<tr>
<td>AMT 204</td>
<td>Powerplant Module 2 (9.5 weeks)</td>
<td>9</td>
<td>AMT 203 with a grade of C or higher</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>39</td>
<td></td>
</tr>
</tbody>
</table>

Overview
The Aviation Maintenance Technology certificate develops students towards an Airframe & Powerplant license. The Powerplant Certificate requires a total of 39 credits for completion. Three general education courses are required for a certificate and can be taken at any time. The entire program develops students in a one year process as an Aviation Maintenance Technician.

Career Outlook
Labor market data shows a strong need for aviation industry education targeting occupations like aviation maintenance technicians, inspectors, engineering & operating technicians, rigging & system assemblers, powerplant technicians, aviation managers, and directors of maintenance. The 12-month program will increase the number of aviation technicians and address the regional workforce gaps.

Program Outcomes
Upon successful completion of the Aviation Maintenance Technology Concentration, students are able to:
- Receive Powerplant Certificate.
- Sit for FAA license exam.
- Demonstrate the knowledge of aviation maintenance and increase opportunities to enter an aviation career field.

*General education courses may be chosen from a list in the college catalog. Three general education courses are required for this certificate program. Choose from the following list to stack for the Associate in Applied Science degree in Aviation Maintenance Technology:
- ENL101 English Composition I
- ENL102 English Composition II
- PHY151 Physics I
- GIT110 Microcomputer Applications Software
- 1 Mathematics:
  - MAT150 Elementary Statistics (or)
  - MAT175 College Algebra (or)
  - MAT180 Applied Calculus (or)
  - MAT240 Calculus I
- Recommended for transfer to Bridgewater State University:
  - PH131 Logic
  - ECO117 Macroeconomics
  - MAT240 Calculus

The AMT curriculum will be offered eight hours a day for five days a week. The posted schedule will allow for a few holidays.

MA Aviation Workforce Development web site:
www.mass.gov/lwd/
# Construction Technology Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension and in Sentence Skills on CPT or grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON100</td>
<td>Quantitative Skills for Construction</td>
<td>2</td>
<td>(MAT030 or MAT035) or satisfactory basic skills assessment score</td>
<td>Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON105</td>
<td>Materials of Construction</td>
<td>3</td>
<td>None</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON110</td>
<td>Construction Technology</td>
<td>3</td>
<td>None</td>
<td>Fall, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON120</td>
<td>Understanding and Working with the MA State Building Codes</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON130</td>
<td>Computer Aided Drafting I</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction Technology elective* (or) Environmental Science elective*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction Technology elective* (or) Environmental Science elective*</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>Total Credits</td>
<td>23</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

## Overview

The certificate provides an introduction to the process of construction from start to finish, including the application of Massachusetts State Building Code, experience using computer assisted drafting software, and building materials and testing. Unique to this program is the integration of principles, practices, standards, and materials necessary to ensure sustainable construction which address environmental issues and renewable energy use. In addition, students have the opportunity to complete the certificate with the selection of two electives from a selection of construction, business, and environmental technology courses.

The coursework in the Construction Technology certificate may be helpful in obtaining the knowledge and skills necessary to pass the Massachusetts Construction Supervisors Exam.

## Career Outlook

This occupational profile is provided by O*NET. [www.onetonline.org/find/quick?sel=construction+technology](www.onetonline.org/find/quick?sel=construction+technology)

## Gainful Employment

[The Gainful Employment Program Regulations](#) provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

## Program Outcomes

Upon completion of the Construction Technology certificate, students are able to:

- **Apply basic construction knowledge and skills.**
- **Integrate sustainable and renewable energy standards, methods and materials to residential and commercial building construction projects.**
- **Demonstrate knowledge of industry standard tools for effective building practices including software, code implementation, and interpretation.**
- **Prepare basic working drawings for building construction using computer assisted drafting with AutoCAD software.**
- **Use basic business practices and principles for the execution of a construction project.**

* Construction Technology & Environmental Science Electives

- BUS120  Business Law I
- CON101  Blueprint Reading: Construction Trades
- CON115  Construction Estimating
- CON125  Architectural Drafting and Construction Drawing
- CON135  Computer Aided Drafting II
- CON225  Architectural Computer Aided Drafting I
- ENV122  Environmental Management and Decision Making
- ENV140  Introduction to Water: Concepts and Technologies
- ENV170  Renewable Energy Sources
- ENV171  Energy Efficiency and Conservation Methods
- ENV172  Commercial Energy Audits
- ENV173  Introduction to Solar Energy
- ACC111  Accounting I with Computer Applications
## Customer Service Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS100</td>
<td>Introduction to Business</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM201 (or) COM204</td>
<td>Interpersonal Communication (or) Persuasive Communication</td>
<td>3</td>
<td>COM103 or ENL101 (or) COM103 or ENL101</td>
<td>Fall, Spring</td>
<td>Spring</td>
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</tr>
<tr>
<td>GIT102</td>
<td>Computer Keyboarding or 30 wpm</td>
<td>1</td>
<td>None</td>
<td>Fall, Spring</td>
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<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT100</td>
<td>Marketing</td>
<td>3</td>
<td>ENL020 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT112</td>
<td>Customer Service: Concepts and Applications</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>18/19</strong></td>
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</tbody>
</table>

### Overview
Students in the Customer Service certificate develop and enhance their communication skills as well as have a greater understanding of consumer behavior. Students are encouraged to build on this certificate to eventually obtain an A.S. Business Administration degree concentrating in Marketing.

### Career Outlook
This occupational profile is provided by O*NET. [www.onetonline.org/find/quick?s=Customer+Service](www.onetonline.org/find/quick?s=Customer+Service)

### Gainful Employment
The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.
Early Childhood Education Certificate - Infant & Toddler Concentration

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE100</td>
<td>Intro. to Early Childhood Education</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY201</td>
<td>Child Psychology</td>
<td>3</td>
<td>PSY101</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE105</td>
<td>Intro. to Children with Special Needs</td>
<td>3</td>
<td>ECE100 or PSY201</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE200</td>
<td>Teaching Infants and Toddlers</td>
<td>3</td>
<td>PSY201 or ECE100</td>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>ECE230</td>
<td>Practicum in Early Childhood Education</td>
<td>6</td>
<td>ECE105, ECE201, PSY201*, (ECE200 or ECE202) &amp; a minimum 2.0 GPA in ECE courses</td>
<td>Fall, Spring</td>
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<tr>
<td>Total Credits</td>
<td></td>
<td>21</td>
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</tbody>
</table>

Overview
The Early Childhood Education certificates are designed to provide focused training in Early Childhood Education. Participants can elect either a preschool or an infant and toddler concentration. Students already employed in the field can use their centers as placement sites for the Practicum.

Certificate holders are eligible to apply to the Massachusetts Office of Child Care Services for teacher certification. All courses can be transferred into the Early Childhood Education Associate in Science degree at Cape Cod Community College.

Career Outcomes
This occupational profile is provided by O*NET. [www.onetonline.org/find/quick?s=Early+Childhood+Education](http://www.onetonline.org/find/quick?s=Early+Childhood+Education)

Gainful Employment
The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

"All children means all children with developmental delays or disabilities, children who are gifted and talented, children whose families are culturally and linguistically diverse, children from diverse socioeconomic groups, and other children with individual learning styles, strengths, and needs". [National Association for the Education of Young Children](http://www.naeyc.org)

* Currently employed early childhood education and care personnel should contact the coordinator of the Early Childhood Education program to discuss alternate options to meeting this requirement. Please refer to the policy statement of Criminal Offender Record Information and Sex Offender Registry Information checks.
## Early Childhood Education Certificate - Preschool Concentration

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE100</td>
<td>Intro. to Early Childhood Education</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
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</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY201</td>
<td>Child Psychology</td>
<td>3</td>
<td>PSY101</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE105</td>
<td>Intro. to Children with Special Needs</td>
<td>3</td>
<td>ECE100 or PSY201</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE201</td>
<td>Preschool Curriculum Planning</td>
<td>3</td>
<td>ECE100 or PSY201</td>
<td>Fall, Spring</td>
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<tr>
<td>ECE202</td>
<td>Advanced Curriculum Development: Creative Experiences for Early Childhood Education</td>
<td>3</td>
<td>ECE201</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECE230</td>
<td>Practicum in Early Childhood Education</td>
<td>6</td>
<td>ECE105, ECE201, PSY201*, (ECE200 or ECE202) &amp; a minimum 2.0 GPA in ECE courses</td>
<td>Fall, Spring</td>
<td></td>
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</tr>
<tr>
<td>Total Credits</td>
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<td>24</td>
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</tbody>
</table>

### Overview
The Early Childhood Education certificates are designed to provide focused training in Early Childhood Education. Participants can elect either a preschool or an infant and toddler concentration. Students already employed in the field can use their centers as placement sites for the Practicum.

Certificate holders are eligible to apply to the Massachusetts Office of Child Care Services for teacher certification. All courses can be transferred into the Early Childhood Education Associate in Science degree at Cape Cod Community College.

### Career Outlooks
This occupational profile is provided by O*NET.
[www.onetonline.org/find/quick?s=Early+Childhood+Education](http://www.onetonline.org/find/quick?s=Early+Childhood+Education)

### Gainful Employment
[The Gainful Employment Program Regulations](http://www.capecod.edu) provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

*"All children means all children with developmental delays or disabilities, children who are gifted and talented, children whose families are culturally and linguistically diverse, children from diverse socioeconomic groups, and other children with individual learning styles, strengths, and needs".

* "Currently employed early childhood education and care personnel should contact the coordinator of the Early Childhood Education program to discuss alternate options to meeting this requirement.*

Please refer to the policy statement of Criminal Offender Record Information and Sex Offender Registry Information checks.

---

*National Association for the Education of Young Children*
Engineering Technology Certificate

Overview
The Engineering Technology Certificate is a one year program of study that is designed to give students the basic skills and knowledge for initial employment in today’s engineering and manufacturing environments. With this in mind, this certificate is structured to achieve two goals. The first is to ensure that the student has acquired the foundational math, programming, and communication skills for success required by the industry. The second goal is to instill in the student an engineering problem solving mindset that is applicable across all engineering and manufacturing disciplines. Students learn and practice the theoretical and physical steps associated with the computer aided design (CAD), analysis, and production of mechanical parts. Additionally, students will hone their critical thinking skills and be well versed in the processes needed to systematically solve problems and to develop an idea into a finished product.

Students that earn this certificate are eligible to enroll in one or more second-level engineering certificates that will prepare them for more advanced employment and or transfer to a Bachelor of Science in engineering program.

Career Outlook
This certificate provides the skills for an entry level general engineering technician or entry level draftsman. Employment of engineering technicians is projected to grow 5 percent from 2012 to 2022. Employment of draftspersons is projected to show little or no change from 2012 to 2022. Nevertheless, there should be opportunities for those who can master new software and technology, as well as traditional manual skills.

This occupational profile is provided by O*NET. www.onetonline.org/find/quick?s=engineering

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENR101</td>
<td>Introduction to Engineering and Advanced</td>
<td>4</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment</td>
<td>Fall, Spring</td>
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<tr>
<td></td>
<td>Manufacturing</td>
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<td>scores</td>
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<tr>
<td>ENR102</td>
<td>3D Mechanical Design I</td>
<td>4</td>
<td>MAT030 or MAT035, ENL020 &amp; ENL050 or satisfactory basic</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>skills assessment scores</td>
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<tr>
<td>CSC120</td>
<td>Computer Programming I: C++</td>
<td>4</td>
<td>MAT030 or MAT035 or satisfactory basic skills assessment</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>score and working knowledge of any programming language</td>
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<tr>
<td>MAT240</td>
<td>Calculus I</td>
<td>4</td>
<td>MAT190 or MAT195</td>
<td>Fall, Spring, Summer</td>
<td></td>
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</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment</td>
<td>Fall, Spring, Summer</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>scores</td>
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<tr>
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<td>Total Credits</td>
<td>19</td>
<td></td>
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</tr>
</tbody>
</table>

This certificate has advanced mathematics requirements.

Program Outcomes
Upon completion of the Engineering Technology Certificate, students are able to:
- Work as part of a team to plan, design, and fabricate a mechanical device.
- Describe and follow the engineering analysis and design process.
- Communicate effectively, both orally and in writing.
- Conduct research from a variety of sources.
- Organize, schedule, and complete an engineering design project that may require one to collect and interpret technical data as well as exhibit proficiency in software programming.
- Apply mathematical methods for problem-solving and analyze working models of basic engineering systems to solve open-end problems.
- Reverse engineer the design of an existing product or service.
- Test and evaluate an engineering design against a set of requirements.
- Use a variety of instruments and software for taking measurements and or solving problems.
Engineering Technology Certificate
Engineering Innovation & Entrepreneurship

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENR104</td>
<td>3D Mechanical Design II</td>
<td>4</td>
<td>ENR102</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT100</td>
<td>Marketing (or)</td>
<td>3</td>
<td>ENL020 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENT108</td>
<td>Introduction to Entrepreneurship</td>
<td></td>
<td>None</td>
<td>Summer</td>
<td></td>
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<tr>
<td>MAT250</td>
<td>Calculus II</td>
<td>4</td>
<td>MAT240 or MAT185</td>
<td>Varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENR206</td>
<td>Quality Manufacturing</td>
<td>3</td>
<td>ENR101</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENR201</td>
<td>Statics</td>
<td>3</td>
<td>ENR101 &amp; MAT240; Co-requisite MAT250</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHY211</td>
<td>University Physics I</td>
<td>4</td>
<td>MAT195; Co-requisite MAT240</td>
<td>Varies</td>
<td></td>
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</tr>
</tbody>
</table>

Total Credits 21

This certificate has advanced mathematics requirements.

Overview
Knowing how to appropriately incorporate technology innovation is crucial for creating thriving workplaces and careers. Jobs today require creativity and alternative thinking to develop new ideas for and answer to work-related problems. This certificate enables students to study the innovation process as it relates to technology from an engineering, quality control, inventory management, and material flow perspective. This is the perfect certificate for someone interested in working within and managing an innovative and efficient organization – or for someone interested in starting a new one. This certificate will teach one how to provide your products with what user’s want, when they want it.

The certificates being offered within the engineering and advanced manufacturing field of studies are designed from a two layer perspective to ensure that a student’s skills are aligned with industry and when appropriate academia. This particular certificate is a second tier certificate that requires that the student already possess the level one Engineering Technology Certificate (or be able to demonstrate equivalent competences). Students earning this certificate will emerge with the confidence, knowledge, and experiential skills to take an idea from concept to fruition, in the shortest time possible, with maximum waste elimination throughout the value chain.

Career Outlook
This occupational profile is provided by O*NET
www.onetonline.org/find/quick?s=engineering+innovation

Program Outcomes
Upon completion of the Engineering Innovation and Entrepreneurship Certificate students are able to.

- Implement a manufacturing environment that minimizes the time from customer order to delivery of a product, with less cost, space, and inventory.
- Confer with engineering, marketing, production, or sales departments, or with customers, to establish and evaluate design concepts for manufacturability.
- Prepare layouts, drawings, or sketches using computer-aided design (CAD) software.
- Modify and refine designs, using working models, to conform to customer specifications, production limitations, or changes in design trends.
- Direct and coordinate the fabrication of models or samples and the drafting of working drawings and specification sheets from sketches.
- Evaluate feasibility of design ideas, based on factors such as appearance, safety, function, serviceability, production costs/methods, and market characteristics.
- Present designs and reports to customers or design committees for approval, and discuss need for modification.
- Investigate product characteristics such as the product’s safety and handling qualities, its market appeal, how efficiently it can be produced, and ways of distributing, using and maintaining it.
- Develop manufacturing procedures and monitor the manufacture to improve operations and product quality.
- Participate in new product planning or market research, including studying the potential need for new products.
- Monitor or measure manufacturing processes to identify ways to reduce losses, decrease time requirements, or improve quality.
Engineering Technology Certificate
Green Design & Engineering

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENR104</td>
<td>3D Mechanical Design II</td>
<td>4</td>
<td>ENR102</td>
<td>Spring</td>
<td></td>
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<tr>
<td>ENR105</td>
<td>Circuit Theory and Analysis</td>
<td>4</td>
<td>MAT041, ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td></td>
<td>Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>ENV171</td>
<td>Energy Efficiency and Conservation Methods</td>
<td>3</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT250</td>
<td>Calculus II</td>
<td>4</td>
<td>MAT240 or MAT185</td>
<td>Varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENR201</td>
<td>Statics</td>
<td>3</td>
<td>ENR101 &amp; MAT240; Co-requisite MAT250</td>
<td></td>
<td>Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>PHY211</td>
<td>University Physics I</td>
<td>4</td>
<td>MAT195; Co-requisite MAT240</td>
<td>Varies</td>
<td></td>
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<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>22</strong></td>
<td></td>
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</tr>
</tbody>
</table>

This certificate has advanced mathematics requirements.

Overview
This certificate prepares students to successfully incorporate sustainability concepts into the design, manufacture, and support of electro-mechanical devices used in industry and construction. This certificate applies equally well for those students whom are already in the workforce and are looking to augment their skills as well as new students looking to enter into the dynamic green engineering technology work field.

The certificates being offered within the engineering and advanced manufacturing field of studies are designed from a two layer perspective to ensure that a student’s skills are aligned with industry and academia. This particular certificate is a second tier certificate that requires that the student already possess the level one Engineering Technology Certificate (or be able to demonstrate equivalent competences). Therefore students earning this certificate will emerge with the confidence, knowledge, and experiential skills to convert a customer’s requirements into robust and environmentally sound deliverables, in the shortest time possible, with maximum waste elimination throughout the value chain.

Career Outlook
Green design engineering technologists typically work in the following economy sectors:
- Manufacturing - This sector covers activities related to industrial manufacturing of technology as well as energy efficient manufacturing processes.
- Research, Design, and Consulting Services - This sector encompasses "indirect jobs" which includes activities such as energy consulting or research and other related business services.

This occupational profile is provided by O*NET. www.onetcenter.org/green.html?p=2

Program Outcomes
Upon completion of the Green Design & Engineering Certificate students are able to.
- Develop a concept from an idea through to a finished product all the while integrating sustainable and renewable energy standards, methods, and materials into the project. Fully analyze and document the design using Computer Aided Design software
- Review project instructions and blueprints to ascertain test specifications, procedures, and objectives, and test nature of technical problems such as redesign. Analyze test results in relation to design or rated specifications and test objectives, and modify or adjust designs to meet specifications.
- Discuss changes in design, method of manufacture and assembly, and drafting techniques and procedures with staff and coordinate corrections.
- Set up and conduct tests of complete units and components under operational conditions to investigate proposals for improving equipment performance.
- Demonstrate knowledge of industry standard tools for effective practices including software, code implementation, and interpretation.
Engineering Technology Certificate
Robotics and Manufacturing Automation

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
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<tbody>
<tr>
<td>ENR103</td>
<td>Introduction to Robotics</td>
<td>4</td>
<td>(MAT030 or MAT035), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
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<tr>
<td>ENR105</td>
<td>Circuit Theory and Analysis</td>
<td>4</td>
<td>MAT041, ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
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<tr>
<td>MAT250</td>
<td>Calculus II</td>
<td>4</td>
<td>MAT240 or MAT185</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ENR201</td>
<td>Statics</td>
<td>3</td>
<td>ENR101 &amp; MAT240; Co-requisite MAT250</td>
<td>Fall, Spring</td>
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<tr>
<td>PHY211</td>
<td>University Physics I</td>
<td>4</td>
<td>MAT195; Co-requisite MAT240</td>
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<td></td>
<td>Total Credits</td>
<td>22</td>
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</tr>
</tbody>
</table>

This certificate has advanced mathematics requirements.

Overview
Robotics technicians and engineers design and maintain automated robotic systems. These individuals must be knowledgeable in a variety of areas, such as mechanical repair, electric circuit design, and computer programming. This certificate is designed for students who wish to develop and enhance their skills in these areas for employment at companies who have robotic devices or for students who intend on pursuing a Bachelor’s degree in engineering or manufacturing. In earning this certificate, students demonstrate competency in designing, building, programming, and testing increasingly complex electro-mechanical robots and manufacturing automation devices.

The education of a robotics technician does not always stop at the college level. Many workers receive specialized training from an employer. Companies that use robots often train workers in the detailed specifics of a particular robotic device or model. This certificate provides the core skills to be successful in these environments.

The certificates offered within the engineering and advanced manufacturing field of studies are designed from a two layer perspective to ensure that a student’s skills are aligned with industry and academia. This certificate is a second tier certificate that requires that the student already possess the level one Engineering Technology Certificate (or be able to demonstrate equivalent competences).

Career Outlook
Robotics technicians and engineers work in many different locations. Some are employed by factories and automation facilities. Some become supervisors or trainers, and provide education about robotic systems to other workers. Individuals with high levels of experience can be hired by robot manufacturers, and provide advice on ways to improve new robotic systems.

This occupational profile is provided by O*NET. www.onetonline.org/find/quick?s=robotics

Program Outcomes
Upon completion of the Robotics and Manufacturing Automation Certificate students are able to:
- Demonstrate knowledge of robotic design techniques, tools, electronic equipment, and computer hardware and software, including applications and programming.
- Develop robotic path motions to maximize efficiency, safety, and quality.
- Test and troubleshoot robotic systems, using knowledge of microprocessors, programmable controllers, electronics, circuit analysis, mechanics, sensor or feedback systems, hydraulics, or pneumatics.
- Disassemble and reassemble robots or peripheral equipment to make repairs such as replacement of components, sensors, controllers, encoders, and servomotors.
- Perform preventive or corrective maintenance on robotic systems or components and document robotics test procedures and results. Align, fit, or assemble component parts using hand tools, power tools, fixtures, templates, or microscopes.
Environmental Technology Certificate
Coastal Zone Management

The Environmental Technology certificates are a collaborative partnership among Cape Cod Community College, Massachusetts Maritime Academy and University of Massachusetts - Dartmouth, for persons seeking to acquire skills and knowledge in eight environmental fields: Coastal Zone Management, Environmental Site Assessment, Geographic Information Systems, Photovoltaic Technology, Small Wind Technology, Solar Thermal Technology, Wastewater Management, and Water Supply. Students may need to travel to each of the three schools in order to complete all the courses in any certificate program. Students are encouraged to enroll in ENV260 Cooperative Work Experience/Internship.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV118</td>
<td>Intro. to Environmental Science</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENV125</td>
<td>Coastal Ecology</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENV126</td>
<td>Coastal and Shelf Oceanography</td>
<td>3</td>
<td>(MAT020 or MAT025) or satisfactory basic skills assessment score &amp; ENV118 &amp; ENV125</td>
<td>Spring</td>
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<tr>
<td>ENV135</td>
<td>Coastal Zone Management Laws and Regulations</td>
<td>3</td>
<td>ENV118 &amp; ENV125</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV260</td>
<td>Internship (recommended)</td>
<td>3</td>
<td>ENV118 or ENV170 &amp; permission of instructor</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>13/16</td>
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</tbody>
</table>

Overview
This certificate is designed to provide students with up-to-date knowledge of the principles and practices of coastal zone management. Students study coastal ecological systems and the impact man has on these systems, physical oceanography and coastal structures and their relationship to coastal resources. Laws and regulations covering the coastal zone are presented and related to the policies of government.

Career Outlook
Completion of the Coastal Zone Management certificate prepares a student to obtain a position as a technician. The Department of Labor predicts that job opportunities are expected to increase 10 to 19 percent for all environmental technician occupations through the year 2022. In coastal areas, students may obtain positions that require knowledge of Federal, state and local laws and regulations, as well as soil and species identification. These technicians assist governmental, municipal, and non-profit coastal managers in the preservation and remediation at coastal and recreational areas.

This certificate is appropriate for students with advanced degrees that are looking for specific technical training.

Program Outcomes
Upon completion of the Coastal Zone Management Certificate, students are able to:
- Work with public and private natural resource/conservation agencies, and environmental consulting companies.
- Conduct field examinations of various coastal ecosystems and understand the application of science in coastal zone management.
- Understand the laws and regulations and their relationship to policy making at the local, state, and federal level.
Environmental Technology Certificate
Environmental Site Assessment

The Environmental Technology certificates are a collaborative partnership among Cape Cod Community College, Massachusetts Maritime Academy and University of Massachusetts - Dartmouth, for persons seeking to acquire skills and knowledge in eight environmental fields: Coastal Zone Management, Environmental Site Assessment, Geographic Information Systems, Photovoltaic Technology, Small Wind Technology, Solar Thermal Technology, Wastewater Management, and Water Supply. Students may need to travel to each of the three schools in order to complete all the courses in any certificate program. Students are encouraged to enroll in ENV260 Cooperative Work Experience/Internship.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV118</td>
<td>Intro. to Environmental Science</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ESC101</td>
<td>Intro. to Earth Science</td>
<td>4</td>
<td>(MAT030 or MAT035), ENL020, ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
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<tr>
<td>ENV122</td>
<td>Process of Environmental Management and Decision Making</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
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<tr>
<td>ENV158</td>
<td>Occupational Health and Safety through Hazardous Waste Management</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV260</td>
<td>Internship (recommended)</td>
<td>3</td>
<td>ENV118 or ENV170 &amp; permission of instructor</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>Total Credits</td>
<td></td>
<td>14/17</td>
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</tbody>
</table>

Overview
This certificate provides an understanding of the scope of environmental site assessment, the tools and techniques used to gather the field data and conduct the evaluation. Students study the interrelationship among various systems that exist on any site and apply these concepts in the evaluation of a site before and after an event has occurred. The regulatory overview focuses on federal, state and local laws governing environmental protection of sites including wetlands, wildlife and hazardous materials sites.

Career Outlook
Completion of the Environmental Site Assessment Certificate prepares a student to obtain a position as a hazardous materials removal worker or as a technician assisting a licensed site professional in development of land use planning and remediation. The Department of Labor predicts that job opportunities are expected to be excellent in this field.

Experienced workers will have especially favorable opportunities, particularly in the private sector, as more State and local government contract out hazardous materials removal work to private companies. Employment in this field is expected to increase 19 percent or more for all occupations through the year 2022, faster than the average for all occupations and reflecting an increasing concern for a safe and clean environment.

This certificate is appropriate for students with advanced degrees that are looking for specific technical training.

Program Outcomes
Upon completion of the Environmental Site Assessment Certificate, students are able to:

- Use the latest equipment and techniques to collect field samples and analyze data.
- Become familiar with the mapping of environmental parameters on a GIS system.
- Demonstrate knowledge of the laws governing site assessment.
- Be prepared to begin an apprenticeship assisting a Licensed Site Professional.
- Be certified in 40-hour OSHA for hazardous waste.
Environmental Technology Certificate
Geographic Information Systems

The Environmental Technology certificates are a collaborative partnership among Cape Cod Community College, Massachusetts Maritime Academy and University of Massachusetts - Dartmouth, for persons seeking to acquire skills and knowledge in eight environmental fields: Coastal Zone Management, Environmental Site Assessment, Geographic Information Systems, Photovoltaic Technology, Small Wind Technology, Solar Thermal Technology, Wastewater Management, and Water Supply. Students may need to travel to each of the three schools in order to complete all the courses in any certificate program.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tbody>
<tr>
<td>ENV118</td>
<td>Intro. to Environmental Science</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENV122</td>
<td>Process of Environmental Management &amp; Decision Making</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
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<tr>
<td>ENV163</td>
<td>Geographic Information Systems I</td>
<td>3</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
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<tr>
<td>ENV164</td>
<td>Geographic Information Systems II</td>
<td>3</td>
<td>ENV118 &amp; ENV163</td>
<td>Spring</td>
<td></td>
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<tr>
<td>ENV260</td>
<td>Environmental Technology Internship / Cooperative Experience (recommended)</td>
<td>3</td>
<td>ENV118 or ENV170 &amp; permission of instructor (variable credit 1, 2, 3, or 4)</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<td><strong>13</strong></td>
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</tbody>
</table>

**Overview**
Geographic Information Systems (GIS) is a computer database management system which combines computer graphics, artificial intelligence, and high speed communication to store, retrieve, manipulate, analyze, and map geographic data. The technology is used to process complex geographic and environmental data for informed decision making by government, municipal and private industry. Originally used with environmental data, GIS has become a cross discipline analysis platform for analyzing and solving a variety of complex problems. Geographic information systems are incredibly adaptable and continue to be used in new ways to present information visually and easily. The certificate introduces the student to concepts in geography, cartography and database management, and the analysis of systems and processes using GIS.

**Career Outlook**
Completion of the GIS certificate prepares a student to obtain a position as a GIS technician or to advance a career in a variety of disciplines such as regional and urban planning, environmental resource management, or economic development. The Department of Labor predicts that job opportunities in this field are expected to increase 11 to 22 percent for all occupations through the year 2022. The widespread availability and use of advanced technologies, such as GPS, GIS, and remote sensing continues to increase both the accuracy and productivity of these workers. Opportunities for technicians should be available in basic GIS-related data-entry work. This certificate is appropriate for students with advanced degrees that are looking for specific technical training.

**Program Outcomes**
Upon completion of the Geographic Information Systems Certificate, students are able to:
- Apply the concepts of geography, cartography and database management.
- Map spatial attributes and analyze systems and processes using GIS.
- Be prepared to work with environmental consulting companies, facilities management offices, and county, municipal, and town departments, such as a town planning department.
Environmental Technology Certificate
Photovoltaic Technology

The Environmental Technology certificates are a collaborative partnership among Cape Cod Community College, Massachusetts Maritime Academy and University of Massachusetts - Dartmouth, for persons seeking to acquire skills and knowledge in eight environmental fields: Coastal Zone Management, Environmental Site Assessment, Geographic Information Systems, Photovoltaic Technology, Small Wind Technology, Solar Thermal Technology, Wastewater Management, and Water Supply. Students may need to travel to each of the three schools in order to complete all the courses in any certificate program. Students are encouraged to enroll in ENV260 Cooperative Work Experience/Internship.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
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<tbody>
<tr>
<td>ENV170</td>
<td>Renewable Energy Sources</td>
<td>3</td>
<td>(MAT020 &amp; MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENV171</td>
<td>Energy Efficiency and Conservation Methods</td>
<td>3</td>
<td>(MAT020 &amp; MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall</td>
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<tr>
<td>ENV173</td>
<td>Introduction to Solar Energy</td>
<td>3</td>
<td>(MAT020 &amp; MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Spring</td>
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<tr>
<td>ENV178</td>
<td>Photovoltaic Installation</td>
<td>3</td>
<td>ENV173</td>
<td>Varies</td>
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</tr>
<tr>
<td>ENV260</td>
<td>Internship (recommended)</td>
<td>3</td>
<td>ENV118 or ENV170 &amp; permission of instructor</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>Total Credits</td>
<td></td>
<td>12/15</td>
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</tbody>
</table>

Overview
This certificate provides a solid understanding of photovoltaic technology, site analysis, system design, and installation methods. Students completing ENV173 and ENV178 are qualified to take the North American Board of Certified Energy Practitioners Entry Level Photovoltaic Certificate of Knowledge Exam. This certificate may appeal to anyone interested in learning more about solar energy and applying that knowledge to their home, business, or career.

Career Outlook
The "clean energy cluster" is a large and one of the fastest growing segments of the Massachusetts economy. Solar energy represents a significant portion of the cluster and its projected growth. A person with this certificate has basic knowledge of photovoltaic systems, suitable for a supervised, entry-level position with a dealer/installer, or other PV industry company or organization. Professionals in building trades can gain the knowledge necessary to expand their services to include photovoltaic system design, consulting, specification, and installation. A wide range of additional career opportunities are available within the clean energy cluster for students with degrees in a variety of fields, such as science, engineering, business, law, political science, and communication.

Program Outcomes
Upon completion of the Photovoltaic Technology Certificate, students are able to:
- Conduct a basic home energy audit and make energy efficiency and conservation recommendations.
- Conduct a solar energy site assessment and quantify the amount of solar energy available at a particular site.
- Property site, size, and design a residential scale photovoltaic system for both on and off grid applications.
- Accurately explain the benefits and limitations of photovoltaic systems.
- Conduct an economic and environmental assessment of proposed photovoltaic systems.
Environmental Technology Certificate
Small Wind Technology

The Environmental Technology certificates are a collaborative partnership among Cape Cod Community College, Massachusetts Maritime Academy and University of Massachusetts - Dartmouth, for persons seeking to acquire skills and knowledge in eight environmental fields: Coastal Zone Management, Environmental Site Assessment, Geographic Information Systems, Photovoltaic Technology, Small Wind Technology, Solar Thermal Technology, Wastewater Management, and Water Supply. Students may need to travel to each of the three schools in order to complete all the courses in any certificate program. Students are encouraged to enroll in ENV260 Cooperative Work Experience/Internship.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tbody>
<tr>
<td>ENV170</td>
<td>Renewable Energy Sources</td>
<td>3</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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</tr>
<tr>
<td>ENV171</td>
<td>Energy Efficiency and Conservation Methods</td>
<td>3</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV177</td>
<td>Introduction to Wind Energy</td>
<td>3</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV180</td>
<td>Small Wind Installation</td>
<td>3</td>
<td>ENV177</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ENV260</td>
<td>Internship (recommended)</td>
<td>3</td>
<td>ENV118 or ENV170 &amp; permission of instructor</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>12/15</td>
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</tbody>
</table>

**Overview**
This certificate provides a solid understanding of small wind technology, site analysis, system design, and installation methods. This certificate appeals to anyone interested in learning more about wind energy and applying that knowledge to their home, business, or career.

**Career Outlook**
The “clean energy cluster” is a large and the fastest growing segment of the Massachusetts economy. A person with this certificate has basic knowledge of small wind-electric systems, suitable for a supervised, entry-level position with a dealer/installer, or other small wind industry company or organization. Professionals in building trades can gain the knowledge necessary to expand their services to include small wind system design, consulting, specification, and installation. A wide range of additional career opportunities are available within the clean energy cluster for students with degrees in a variety of fields, such as science, engineering, business, law, political science, and communication.

**Program Outcomes**
Upon completion of the Small Wind Technology Certificate, students are able to:
- Conduct a basic home energy audit and make energy efficiency and conservation recommendations.
- Conduct a wind energy site assessment and quantify the amount of wind energy available at a particular site.
- Properly site, size, and design a residential scale small wind system for both on and off grid applications.
- Accurately explain the benefits and limitations of wind-electric systems.
- Conduct an economic and environmental assessment of proposed small wind systems.
Environmental Technology Certificate
Solar Thermal Technology

The Environmental Technology certificates are a collaborative partnership among Cape Cod Community College, Massachusetts Maritime Academy and University of Massachusetts - Dartmouth, for persons seeking to acquire skills and knowledge in eight environmental fields: Coastal Zone Management, Environmental Site Assessment, Geographic Information Systems, Photovoltaic Technology, Small Wind Technology, Solar Thermal Technology, Wastewater Management, and Water Supply. Students may need to travel to each of the three schools in order to complete all the courses in any certificate program. Students are encouraged to enroll in ENV260 Cooperative Work Experience/Internship.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV170</td>
<td>Renewable Energy Sources</td>
<td>3</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
<td></td>
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<tr>
<td>ENV171</td>
<td>Energy Efficiency and Conservation Methods</td>
<td>3</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV173</td>
<td>Introduction to Solar Energy</td>
<td>3</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Spring</td>
<td></td>
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</tr>
<tr>
<td>ENV179</td>
<td>Solar Thermal Installation</td>
<td>3</td>
<td>ENV173</td>
<td>Varies</td>
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</tr>
<tr>
<td>ENV260</td>
<td>Internship (recommended)</td>
<td>3</td>
<td>ENV118 or ENV170 &amp; permission of instructor</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>Total Credits</td>
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<td>12/15</td>
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</table>

**Overview**
This certificate provides a solid understanding of solar hot water technology, site analysis, system design, and installation methods. Courses in this certificate count towards training requirements for the North American Board of Certified Energy Practitioners Solar Thermal Installer Certification. This certificate may appeal to anyone interested in learning more about solar energy and applying that knowledge to their home, business, or career.

**Career Outlook**
The "clean energy cluster" is a large and fastest growing segment of the Massachusetts economy. Solar energy represents a significant portion of the cluster and its projected growth. A person with this certificate has basic knowledge of solar thermal systems, suitable for a supervised, entry-level position with a dealer/installer, or other solar industry company or organization. Professionals in building trades can gain the knowledge necessary to expand their services to include solar thermal system design, consulting, specification, and installation. A wide range of additional career opportunities are available within the clean energy cluster for students with degrees in a variety of fields, such as science, engineering, business, law, political science, and communication.

**Program Outcomes**
Upon completion of the Solar Thermal Technology Certificate, students are able to:
- Conduct a basic home energy audit and make energy efficiency and conservation recommendations.
- Conduct a solar energy site assessment and quantify the amount of solar energy available at a particular site.
- Properly site, size, and design a residential scale solar hot water system for both domestic hot water and pool heating applications.
- Accurately explain the benefits and limitations of solar hot water systems.
- Conduct an economic and environmental assessment of proposed solar hot water systems.
Environmental Technology Certificate
Wastewater Management

The Environmental Technology certificates are a collaborative partnership among Cape Cod Community College, Massachusetts Maritime Academy and University of Massachusetts - Dartmouth, for persons seeking to acquire skills and knowledge in eight environmental fields: Coastal Zone Management, Environmental Site Assessment, Geographic Information Systems, Photovoltaic Technology, Small Wind Technology, Solar Thermal Technology, Wastewater Management, and Water Supply. Students may need to travel to each of the three schools in order to complete all the courses in any certificate program. Students are encouraged to enroll in ENV260 Cooperative Work Experience/Internship.

<table>
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<th>Course #</th>
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<th>Credits</th>
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<th>Semester Taken</th>
<th>Grade Earned</th>
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</thead>
<tbody>
<tr>
<td>ENV118</td>
<td>Intro to Environmental Science</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENV140</td>
<td>Into to Water: Concepts &amp; Technologies</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
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<tr>
<td>ENV158</td>
<td>Occupational Health &amp; Safety through Hazardous Waste Management</td>
<td>3</td>
<td>None</td>
<td>Spring</td>
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<tr>
<td>ENV145</td>
<td>Wastewater Treatment Plant Operation</td>
<td>4</td>
<td>ENV118 &amp; ENV140</td>
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<tr>
<td>ENV260</td>
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<td>ENV118 or ENV170 &amp; permission of instructor</td>
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<td><strong>14/17</strong></td>
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</table>

**Overview**
This certificate provides training for students in wastewater collection and treatment systems. Wastewater chemistry, toxicology and microbiology are covered teaching students the basic processes and common parameters used to measure wastewater at the various stages of treatment. The courses cover the mechanical operation of the systems, an introduction to computer data gathering and process control, and the laws and regulations covering wastewater.

**Career Outlook**
Completion of the Wastewater Management Certificate prepares a student to obtain a state wastewater license and secure a position at a municipal wastewater treatment plant, a small package plant, or an on-site system. The Department of Labor predicts that employment of wastewater treatment plant and system operators is projected to grow 8 percent from 2012 to 2022, about as fast as the average for all occupations. Job prospects are expected to be excellent.

This certificate is appropriate for students with advanced degrees that are looking for specific technical training.

**Program Outcomes**
Upon completion of the Wastewater Management Certificate, students are able to:
- Describe the concepts and have the ability to operate, maintain and/or manage many of the waste streams that currently exist.
- Sit for state operator's municipal and/or industrial wastewater treatment licenses.
Environmental Technology Certificate
Water Supply

The Environmental Technology certificates are a collaborative partnership among Cape Cod Community College, Massachusetts Maritime Academy and University of Massachusetts - Dartmouth, for persons seeking to acquire skills and knowledge in eight environmental fields: Coastal Zone Management, Environmental Site Assessment, Geographic Information Systems, Photovoltaic Technology, Small Wind Technology, Solar Thermal Technology, Wastewater Management, and Water Supply. Students may need to travel to each of the three schools in order to complete all the courses in any certificate program. Students are encouraged to enroll in ENV260 Cooperative Work Experience/Internship.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV118</td>
<td>Intro to Environmental Science</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ENV140</td>
<td>Into to Water: Concepts &amp; Technologies</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
<td></td>
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<tr>
<td>ENV146</td>
<td>Water Supply</td>
<td>3</td>
<td>ENV118 &amp; ENV140</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV158</td>
<td>Occupational Health &amp; Safety through Hazardous Waste Management</td>
<td>3</td>
<td>None</td>
<td>Spring</td>
<td></td>
<td></td>
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<tr>
<td>ENV260</td>
<td>Internship (recommended)</td>
<td>3</td>
<td>ENV118 or ENV170 &amp; permission of instructor</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>Total Credits</td>
<td></td>
<td>14/17</td>
<td></td>
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</tr>
</tbody>
</table>

Overview
This certificate provides students with up-to-date knowledge of the physical and chemical principles of drinking water supply and the basic framework for the practical application of science and mathematics to assess and solve water supply problems. They will understand the functioning of related equipment and support systems and the responsibilities required in safely operating and maintaining a water supply system. Students learn the significance of the laws and regulations covering water supply.

Career Outlook
Completion of the Water Supply Certificate prepares a student to obtain a position at a municipal drinking water treatment facility or to conduct drinking water testing by a Board of Health. The Department of Labor predicts that employment of water supply workers and system operators is projected to grow 8 percent from 2012 to 2022, about as fast as the average for all occupations. Job prospects are expected to be excellent.

This certificate is appropriate for students with advanced degrees that are looking for specific technical training.

Program Outcomes
Upon completion of the Water Supply Certificate, students are able to:
- Describe the concepts of water supply systems and have the knowledge and ability to operate, maintain and/or manage a drinking water supply facility.
- Be prepared to sit for state operator's drinking water license.
Fire Officer Development Certificate

Course # | Course Title | Credits | Prerequisites | Semester Offered | Semester Taken | Grade Earned
--- | --- | --- | --- | --- | --- | ---
ENL101 | English Composition I | 3 | Appropriate scores in Reading Comprehension & in Sentence Skills on the CPT or a grade of C or better in ENL020 & ENL050 or ESL201 | Fall, Spring, Summer | | |
FSC151 | Fire Prevention (replaces FSC101) | 3 | *Co-requisite: FSC150 or FSC100 | Varies | | |
FSC152 | Fire Protection Systems (replaces FSC102) | 3 | Co-requisite: FSC150 or FSC100 | Varies | | |
FSC103 | Fire Fighting Tactics and Strategy | 3 | FSC150 or FSC100 | Varies | | |
FSC153 | Building Construction for the Fire Protection (replaces FSC104) | 3 | Co-requisite: FSC150 or FSC100 | Varies | | |
FSC110 | Fire Codes and Ordinances | 3 | None | Varies | | |
FSC120 | Introduction to Incident Management | 3 | ENL020 & ENL050 or satisfactory basic skills assessment score | Varies | | |
FSC114 | Fire Company Management | 3 | FSC150 or FSC100 | Varies | | |
**Total Credits** | **24** | | | | | |

Overview
This certificate offers the basic skills required for an individual to successfully manage and lead firefighters in daily and emergency operations at a fire company level. This program provides exposure to materials used in promotional examinations.

Career Outlook
This certificate offers instruction for firefighters who wish to upgrade their career status and for students who wish to transfer to an upper-level college or university.

This occupational profile is provided by O*NET. www.onetonline.org/find/quick?s=Fire+Officer+Development

Gainful Employment
The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

Program Outcomes
Upon completion of the Fire Officer Development Certificate, students are able to:
- Function in a leadership capacity in fire and related public safety incidents.
- Evaluate fire protection equipment for operability and compliance with safety standards.
- Recognize the effect of combustion products on types of construction and impact on safety.
- Perform basic fire prevention activities with code enforcement
- Perform management responsibilities of a first line supervisor in the fire service.

* Currently employed fire protection personnel should contact the coordinator of the Fire Science program to discuss alternate options to meeting this requirement.
Graphic Design Certificate

First Semester

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on the CPT or a grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td>ART100</td>
<td>Drawing I</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART170</td>
<td>Introduction to Computer Graphics (Adobe Photoshop, Illustrator, InDesign)</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART101</td>
<td>Design I</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART205</td>
<td>Illustration I (Adobe Illustrator)</td>
<td>3</td>
<td>ART170</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART210</td>
<td>Graphic Production &amp; Layout I (Adobe InDesign)</td>
<td>3</td>
<td>ART170 &amp; ART170</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART214</td>
<td>Digital Imaging I (Adobe Photoshop)</td>
<td>3</td>
<td>ART170</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART218</td>
<td>Typography</td>
<td>3</td>
<td>ART170</td>
<td>Fall, Spring</td>
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Third Semester

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
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<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tbody>
<tr>
<td>ART256*</td>
<td>Internship in Graphic Design</td>
<td>3</td>
<td>ART170, ART205, ART210, ART214</td>
<td>Fall, Spring</td>
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</tbody>
</table>

Overview

Students in the Graphic Design certificate develop foundation skills for understanding the language of design. This language is applied through learning to use the latest, industry standard graphic and web design software.

Program Outcomes

Upon completion of the Graphic Design Certificate, students are able to:
- Demonstrate the application of visual language through proficient use of basic design and production skills.
- Demonstrate proficiency in basic computer operation and page layout software applications.
- Demonstrate proficiency in drawing and image software applications.
- Use the Internet and integrate Internet text and images in design media.
- Prepare designs for print and/or web production.
- Create and evaluate visual form in response to solving communication problems, including basic understanding and application of design elements, composition, typography, hierarchy, organization and the creation of meaningful images.

* ART256 Internship in Graphic Design – Students are responsible for finding appropriate internship opportunities. The student needs to be proactive and plan well in advance to find a suitable internship. Find out more at www.capecod.edu/career.
# Graphic Design Transfer Portfolio Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART100</td>
<td>Drawing I</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART101</td>
<td>Design I</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on the CPT or a grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART170</td>
<td>Introduction to Computer Graphics (Adobe Photoshop, Illustrator, InDesign)</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
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</tbody>
</table>

**FIRST SEMESTER**

**SECOND SEMESTER**

| ART214   | Digital Imaging I (Adobe Photoshop) | 3 | ART170 | Fall, Spring |
| ART205   | Illustration I (Adobe Illustrator) | 3 | ART170 | Fall, Spring |
| ART210   | Graphic Production & Layout I (Adobe InDesign) | 3 | ART101 & ART170 | Spring |
| ART218   | Typography | 3 | ART170 | Spring |
| ART219   | Portfolio Preparation for Artists & Graphic Designers | 1 | ART100 & ART101 | Spring |
| **Total Credits** | 25 | | | | |

**Overview**

This certificate will enable a student to create an excellent portfolio of graphic design work to be used as part of their transfer application to a four-year art and design school. It is understood that this certificate is a stepping stone towards a higher-level degree that will help the student to realize career goals in art and design.

The Graphic Design Transfer Portfolio Certificate concludes in May with a critique, which is part of ART219, from the Graphic Design Advisory Board.

**Program Outcomes**

Upon completion of the Graphic Design Transfer Portfolio Certificate, students are able to:
- Develop oral, written and visual communication skills
- Create a portfolio of graphic design work for transfer to a four-year school.
## Homeland Security Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC101</td>
<td>Introduction to Homeland Security</td>
<td>3</td>
<td>ENL050 or satisfactory basic skills assessment score</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSC102</td>
<td>Maritime Security</td>
<td>3</td>
<td>ENL050 or satisfactory basic skills assessment score; Co-requisite: HSC101</td>
<td>Fall</td>
<td></td>
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</tr>
<tr>
<td>HSC103</td>
<td>Management of Incidents</td>
<td>3</td>
<td>HSC101</td>
<td>Spring</td>
<td></td>
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<tr>
<td>HSC104</td>
<td>Cybercrime</td>
<td>3</td>
<td>HSC101 or BIT187</td>
<td>Spring</td>
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<tr>
<td>CRJ135</td>
<td>Terrorism</td>
<td>3</td>
<td>ENL050 or satisfactory basic skills assessment score</td>
<td>Spring, Summer</td>
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<td><strong>Total Credits</strong></td>
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</table>

### Overview

The certificate is designed to provide students an introduction to the growing field of homeland security. It is designed for people working in the areas of public safety, security management and law enforcement. Criminal justice students interested in enhancing their future career prospects may also benefit from this program by broadening their studies to encompass security within private industry.

### Program Outcomes

Upon successful completion of the Homeland Security Certificate, students are able to:

- Identify effective interpersonal communication, critical thinking, and decision-making skills.
- Describe ethical principles in decision-making situations.
- Demonstrate knowledge of diverse areas, cultures and experiences and the ability to examine their own attitudes and assumptions in order to engage others with civility and empathy.
- Recognize how to access and disseminate information through multiple agencies in order to forecast the risks, types and orders of magnitude of terrorist threats most likely to confront the nation/state.
- Describe the interdisciplinary nature of homeland security functions and be able to assess and integrate various functional areas.
## Horticulture Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOR101</td>
<td>Plant and Soil Science</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skill assessment scores</td>
<td>Fall, Spring</td>
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<tr>
<td>HOR102</td>
<td>Entomology and Plant Diseases</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
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<tr>
<td>HOR103</td>
<td>Woody Plant Identification and Culture</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
<td></td>
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</tr>
<tr>
<td>HOR104</td>
<td>Turf Management</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
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<tr>
<td>HOR201</td>
<td>Herbaceous Plant Identification and Culture</td>
<td>3</td>
<td>HOR101</td>
<td>Spring</td>
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<tr>
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<td>Horticulture elective *</td>
<td>3</td>
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<td>General Education elective**</td>
<td>3</td>
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</tbody>
</table>

### Total Credits
28

### Overview
The Horticulture certificate provides the academic background needed to succeed in a variety of positions within the "green industries." The program is designed to meet the needs of individuals entering the green industry as well as to provide professional development opportunities for individuals employed in the green industries. In addition to the horticulture courses, the program includes business, design, and management courses needed to compete successfully in the green industries.

### Career Outlook
This occupational profile is provided by O*NET. [www.onetonline.org/find/quick?s=Horticulture](www.onetonline.org/find/quick?s=Horticulture)

### Gainful Employment
The [Gainful Employment Program Regulations](www.capecod.edu) provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

### * Horticulture Electives:
- HOR107 Floral Design
- HOR105 Equipment Maintenance and Operation
- HOR202 Landscape Design and Construction

### ** Two courses chosen from the following list:
- MKT103 Advertising
- MKT100 Marketing
- BUS100 Introduction to Business
- BUS107 Human Resource Management
- BUS214 Management
- ACC111 Accounting I with Computer Applications
- GIT110 Microcomputer Applications Software
- (or) additional Horticulture courses or courses that have been approved in advance by both the Horticulture Program Coordinator and the Division Dean.

### *** One course from the list of General Education courses.
Horticulture Certificate
Landscape Construction Technician

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOR101</td>
<td>Plant and Soil Science</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
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<tr>
<td>HOR103</td>
<td>Woody Plant Identification and Culture</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
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<tr>
<td>HOR105</td>
<td>Equipment Maintenance and Operation</td>
<td>3</td>
<td>None</td>
<td>Varies</td>
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<tr>
<td>HOR106</td>
<td>Horticulture Practicum</td>
<td>1</td>
<td>Enrollment in a Horticulture certificate program</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
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<tr>
<td>HOR202</td>
<td>Landscape Design &amp; Construction</td>
<td>3</td>
<td>HOR103</td>
<td>Spring</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Horticulture Elective*</td>
<td>3</td>
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<td><strong>Total Credits</strong></td>
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</tbody>
</table>

Overview
The Horticulture Landscape Construction Technician certificate is intended for individuals who are interested in landscape design and construction. All aspects of landscape site analysis and installation, equipment maintenance and operation, as well as selecting and planting appropriate landscape plants are reviewed.

Career Outlook
This occupational profile is provided by O*NET. www.onetonline.org/find/quick?s=Horticulture+Landscape+Construction

Gainful Employment
The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

* Horticulture Electives
HOR107  Floral Design
HOR105  Equipment Maintenance and Operation
HOR202  Landscape Design and Construction
Horticulture Certificate
Landscape Maintenance Technician

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tbody>
<tr>
<td>HOR101</td>
<td>Plant and Soil Science</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
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<tr>
<td>HOR103</td>
<td>Woody Plant Identification and Culture</td>
<td>3</td>
<td>None</td>
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<tr>
<td>HOR104</td>
<td>Turf Management</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
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<tr>
<td>HOR105</td>
<td>Equipment Maintenance and Operation</td>
<td>3</td>
<td>None</td>
<td>Varies</td>
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<tr>
<td>HOR106</td>
<td>Horticulture Practicum</td>
<td>1</td>
<td>Enrollment in a Horticulture certificate program</td>
<td>Fall, Spring, Summer</td>
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<tr>
<td></td>
<td>Horticulture Elective*</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
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</table>

**Overview**
The Horticulture Landscape Maintenance Technician certificate provides an overview of the technical and cultural information needed to successfully maintain turf and landscape plants and to maintain and operate landscape equipment.

**Career Outlook**
This occupational profile is provided by O*NET, www.onetonline.org/find/quick?s=Horticulture+Landscape+Maintenance

**Gainful Employment**
The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

*Horticulture Electives*
HOR107  Floral Design
HOR202  Landscape Design and Construction
Horticulture Certificate
Horticulture Technician

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
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<tbody>
<tr>
<td>HOR101</td>
<td>Plant and Soil Science</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>HOR103</td>
<td>Woody Plant Identification and Culture</td>
<td>3</td>
<td>None</td>
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<td></td>
<td></td>
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<tr>
<td>HOR106</td>
<td>Horticulture Practicum</td>
<td>1</td>
<td>Enrollment in a Horticulture certificate program</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOR201</td>
<td>Herbaceous Plant Identification and Culture</td>
<td>3</td>
<td>HOR101</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOR202</td>
<td>Landscape Design and Construction</td>
<td>3</td>
<td>HOR103</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Horticulture Elective*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>17</td>
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</tbody>
</table>

Overview
The Horticulture Technician certificate provides an overview of the identification and culture of woody and herbaceous plants as well as landscape design and construction.

Career Outlook
This occupational profile is provided by O*NET.  
www.onetonline.org/find/quick?s=Horticulture+Technician

Gainful Employment
The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

* Horticulture Electives
HOR107  Floral Design
HOR105  Equipment Maintenance and Operation
Hospitality Certificate
Culinary Arts

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL150</td>
<td>Fundamentals of Professional Cooking</td>
<td>4</td>
<td>Co-requisite: HRM111</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL180</td>
<td>Baking I</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL210</td>
<td>Dining Room Operations and Service</td>
<td>4</td>
<td>HRM140 or CUL150; Co-requisite: CUL220</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL220</td>
<td>Advanced Culinary Arts</td>
<td>4</td>
<td>HRM140 or HRM150/CUL150</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM111</td>
<td>Foodservice Sanitation</td>
<td>1</td>
<td>None</td>
<td>Fall</td>
<td></td>
<td></td>
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<tr>
<td>HRM130</td>
<td>Food and Beverage Management</td>
<td>3</td>
<td>(MAT020 or MAT025) or satisfactory basic skills assessment score</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM140</td>
<td>Introduction to Hospitality Management</td>
<td>3</td>
<td>ENL020 or satisfactory basic skills assessment score</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM262</td>
<td>Hospitality Cooperative Work Experience</td>
<td>3</td>
<td>9 credits in CUL/HRM curriculum</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(or) Special Events &amp; Operations Management</td>
<td></td>
<td>(or) CUL150 or HRM140</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overview

Students learn professional culinary fundamentals throughout the Culinary Arts certificate courses ranging from knife skills to baking basics. Students are encouraged to build on this certificate to eventually obtain a degree from the College.

Career Outlook

This occupational profile is provided by O*NET. 
www.onetonline.org/find/quick?cs=Culinary+Arts

Gainful Employment

The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

Program Outcomes

Upon completion of the Culinary Arts certificate, students are able to:

- Prepare and serve food in an attractive, professional manner in a variety of food service environments and to train for and deliver quality guest service.
- Perform technical skills in basic cooking and food service operations.
- Recognize and apply inter-personal skills needed in a food production setting, including team building and group decision making.
- Calculate costs and institute procedures to operate cost effective establishments.
Human Services Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS101</td>
<td>Introduction to Human Services</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Certificate elective*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS206</td>
<td>Human Services Practicum</td>
<td>4</td>
<td>By permission of the Human Services Coordinator. PSY101, HUS101, PSY208</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on the CPT or a grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY209</td>
<td>Group Dynamics in Human Services</td>
<td>3</td>
<td>PSY101 or SOC106</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY208</td>
<td>Principles of Counseling &amp; Crisis Intervention</td>
<td>3</td>
<td>PSY101</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUS207</td>
<td>Advanced Human Services Practicum</td>
<td>4</td>
<td>By permission of the Human Services Coordinator. ENL101, HUS202, PSY209; Co-requisite: HUS230**, HUS231***</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>9</td>
<td></td>
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</tr>
</tbody>
</table>

Overview

The field of Human Services is a broadly defined one, uniquely approaching the objective of meeting needs through an interdisciplinary knowledge base. The primary purpose of Human Services is to assist individuals, groups and communities to function as effectively as possible in the major domains of living. A student who is interested in transferring into a four year undergraduate program in the area of Human Services can complete the certificate program as part of the Human Services Concentration at Cape Cod Community College.

Program Outcomes

Upon completion of the Human Services Certificate, students are able to:

- Understand the nature of human systems: individual, group and community outreach.
- Understand the conditions which promote or limit optimal functioning and classes of deviation from desired functioning.
- Identify and select interventions which promote growth and goal attainment.
- Practice planning, implementation, and evaluation of intervention in classroom role-plays.
- Consistently select interventions which are congruent with the values of one’s self, clients, the employing organization, and the Human Services profession.
- Process skills which are required to plan and implement services.

Please refer to the policy statement of Criminal Offender Record Information (CORI) and Sex Offender Registry Information (SORI).

* Electives

Elective choices are for areas of interest within the Human Services Certificate. Advisors and students must be aware that many of the following electives have prerequisites not included in the total credits for this certificate.

** Behavioral/Social Science Electives**

- PSY235 Cognitive Psychology
- SOC205 Juvenile Delinquency
- PSY207 Abnormal Psychology
- PSY225 Social Psychology
- SOC215 Social Problems

** Alcohol and Substance Abuse Electives**

- HUS104 Intro to Alcohol / Substance Abuse
- HUS231* Treatment Modalities
- HUS230** Mental Health, Substance Abuse & Families

** Child & Youth Electives**

- PSY201 Child Psychology
- PSY202 Adolescent Psychology
- SOC210 Marriage & Family

** Education Electives**

- ECE105 Intro to Young Children with Special Needs

** General Electives**

- HUS229 Intro to Social Welfare
- SOC106 Principles of Sociology
- PSY216 Social Science Research Methods

** Gerontology Electives**

- PSY233 Developmental Psychology
- SOC232 Sociology of Aging
- SOC220 Sociology of Health & Health Care

** HUS230 (formerly HUS102)

*** HUS231 (formerly HUS106)
Information Technology Certificate
Administration Assistant – General Office Administration

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT101</td>
<td>Typing I*</td>
<td>3</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT105 (or)</td>
<td>Office Communication Systems (or)</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score (or)</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS102</td>
<td>Business Communication</td>
<td></td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC111</td>
<td>Accounting I with Computer Applications</td>
<td>3</td>
<td>(MAT020 or MAT025) &amp; ENL020 or satisfactory basic skills assessment scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Application Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102, or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
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</tr>
<tr>
<td>BUS100</td>
<td>Introduction to Business</td>
<td>3</td>
<td>None</td>
<td></td>
<td>Fall, Spring, Summer</td>
<td></td>
</tr>
<tr>
<td>GIT220</td>
<td>Advanced Word Processing Applications</td>
<td>3</td>
<td>GIT110</td>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>BIT202</td>
<td>Standard Office Procedures</td>
<td>3</td>
<td>GIT110</td>
<td></td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td></td>
<td>Fall, Spring, Summer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business Elective</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total Credits</td>
<td></td>
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<td>27</td>
<td></td>
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</tr>
</tbody>
</table>

General Office Administration Overview
Students in this option learn to keyboard, write and format business documents; use a variety of information processing tools; administer and organize an automated office; and apply correct office procedures in various situations. Students are encouraged to build on certificate programs and eventually obtain a degree at the College.

Career Outlook
This occupational profile is provided by O*NET. www.onetonline.org/find/quick?s=Administrative+Assistant

Gainful Employment
The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

Program Outcomes
Upon completion of the Information Technology certificate, students are able to:

- Read, write, discuss and think critically about topics and ideas in information and/or office technology.
- Analyze ethical issues and apply ethical standards in the performance of responsibilities in a variety of information and office technology careers.
- Synthesize information from communications, information technology, office technology, and business to provide customer service and solve business problems.
- Assume entry-level positions in a variety of information and office technology careers.
- Work well with teams in an information or office technology setting.
- Continue education in an associate program.

Business Elective: Any course with an ACC, BIT, BUS, CUL, ENT, GIT, HRM or MKT designation.

*If waived, must be replaced with a Business course.
Information Technology Certificate
Administration Assistant – Medical Office Administration

Course # | Course Title | Credits | Prerequisites | Semester Offered | Semester Taken | Grade Earned
---|---|---|---|---|---|---
GIT101 | Typing I* | 3 | None | Fall, Spring | | |
BIT103 | Medical Terminology | 3 | ENL020 & ENL050 or satisfactory basic skills assessment score | Fall, Spring, Summer | | |
GIT105 (or) BUS102 | Office Communication Systems (or) Business Communication | 3 | ENL020 & ENL050 or satisfactory basic skills assessment score (or) ENL020 & ENL050 or satisfactory basic skills assessment score | Fall, Spring | Fall, Spring | |
GIT110 | Microcomputer Applications Software | 3 | ENL020 & ENL050 or satisfactory basic skills assessment score & (GIT101, GIT102 or 30wpm) | Fall, Spring, Summer | | |
GIT220 | Advanced Word Processing | 3 | GIT110 | Spring | | |
ACC111 | Accounting I with Computer Applications | 3 | (MAT020 or MAT025) & ENL020 or satisfactory basic skills assessment score | Fall, Spring | | |
GIT150 (or) BIT207 | Database Applications (or) Medical Coding and Billing | 3 | GIT108 or GIT110 or equivalent skill level in Windows (or) BIT103 | Fall, Spring | Fall, Spring | |
BIT203 | Medical Office Procedures | 3 | GIT110 & BIT103 | Spring | | |
PSY101 | General Psychology | 3 | ENL020 & ENL050 or satisfactory basic skills assessment score | Fall, Spring, Summer | | |
**Total Credits** | | **27** | | | |

Medical Office Administration Overview
Students gain an understanding of medical procedures, medical terminology, and a conceptual and practical understanding of a computerized office environment in a medical setting. Students progress from basic keyboarding and word processing to advanced information processing and office procedures. Students are encouraged to build on certificate programs and eventually obtain a degree at the College.

Career Outlook
This occupational profile is provided by O*NET. www.onetonline.org/find/quick?s=Administrative+Assistant+Medical

Gainful Employment
The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

Program Outcomes
Upon completion of the Information Technology certificate, students are able to:

- Read, write, discuss and think critically about topics and ideas in information and/or office technology.
- Analyze ethical issues and apply ethical standards in the performance of responsibilities in a variety of information and office technology careers.
- Synthesize information from communications, information technology, office technology, and business to provide customer service and solve business problems.
- Assume entry-level positions in a variety of information and office technology careers.
- Work well with teams in an information or office technology setting.
- Continue education in an associate program.

*If waived, must be replaced with a Business course.
## Information Technology Certificate
### Application Specialist

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT102</td>
<td>Computer Keyboarding (or) 30 wpm</td>
<td>1</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT105</td>
<td>Office Communication Systems (or)</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score (or)</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS102</td>
<td>Business Communication</td>
<td></td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART170</td>
<td>Introduction to Computer Graphics (Adobe Photoshop, Illustrator, InDesign)</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT220</td>
<td>Advanced Word Processing Applications</td>
<td>3</td>
<td>GIT110</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT175</td>
<td>Visual Basic Programming</td>
<td>3</td>
<td>(MAT030 or MAT035) or satisfactory basic skills assessment score &amp; GIT110</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT150</td>
<td>Database Applications</td>
<td>3</td>
<td>GIT108 or GIT110 or equivalent skill level in Windows</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC111</td>
<td>Accounting I w/ Computer Applications (or)</td>
<td>3</td>
<td>(MAT020 or MAT025) &amp; ENL020 or satisfactory basic skills assessment score (or)</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC201</td>
<td>Financial Accounting</td>
<td></td>
<td>(BUS100 or HRM140), GIT110, (MAT030 or MAT035) &amp; ENL020 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT125</td>
<td>Spreadsheet Applications for Business</td>
<td>3</td>
<td>GIT110 &amp; (ACC111 or ACC201)</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Total Credits

Total Credits: 27/28

### Overview

Students develop teamwork skills while mastering advanced and administrative features of business application software including word processing, spreadsheets, relational database, and presentation graphics. Students are prepared to take the Microsoft Office User Specialist exams for several of the Microsoft Office products. Students are encouraged to build on the certificate program and eventually obtain a degree at the College.

### Career Outlook

This occupational profile is provided by O*NET. [http://www.onetonline.org/find/quick?s=Application+Specialist](http://www.onetonline.org/find/quick?s=Application+Specialist)

### Gainful Employment

The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.
# Information Technology Certificate
## Database Design

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT102</td>
<td>Computer Keyboarding (or) 30wpm</td>
<td>1</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Application Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td>Fall, Spring, Summer</td>
<td></td>
</tr>
<tr>
<td>GIT105 (or) BUS102</td>
<td>Office Communication Systems (or) Business Communication</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score (or) ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td>Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>GIT150</td>
<td>First-level Programming course</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT250</td>
<td>Database Design &amp; Development</td>
<td>3</td>
<td>GIT150</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT251</td>
<td>SQL &amp; SQL Server for Developers</td>
<td>3</td>
<td>GIT150</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits:** 18/19

### Overview
Students learn how to design, develop, and implement small to medium-sized databases using current technologies in Database Management Systems (DBMS).

### Career Outlook

This occupational profile is provided by O*NET.  
[www.onetonline.org/find/quick?s=Database+Design](www.onetonline.org/find/quick?s=Database+Design)

### Gainful Employment

**The Gainful Employment Program Regulations** provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.
### Information Technology Certificate

#### Medical Coding and Billing

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT101</td>
<td>Typing I</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT103</td>
<td>Medical Terminology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT105 (or) BIT102</td>
<td>Office Communication Systems (or) Business Communication</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score (or) ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td>Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>GIT150</td>
<td>Database Applications</td>
<td>3</td>
<td>GIT108 or GIT110 or equivalent skill level in Windows</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO105</td>
<td>Survey of Anatomy and Physiology</td>
<td>4</td>
<td>(MAT020 or MAT025), ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT203</td>
<td>Medical Office Procedures</td>
<td>3</td>
<td>GIT110 &amp; BIT103</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT207</td>
<td>Medical Coding and Billing</td>
<td>3</td>
<td>BIT103</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT208</td>
<td>Advanced Medical Coding and Billing</td>
<td>3</td>
<td>BIT207</td>
<td>Various</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT209</td>
<td>Pharmacology for Medical Coding</td>
<td>1</td>
<td>BIT103</td>
<td>Various</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits**: 29

### Overview

Students gain skills and knowledge in computer applications, medical terminology, anatomy and physiology, medical office procedures, medical coding, and medical billing. A certificate in Medical Coding and Billing is a foundation to a rewarding healthcare career in many healthcare settings including medical offices, hospitals, and medical billing firms. Students are encouraged to build on the certificate and obtain an Associate’s degree at the College.

### Career Outlook

The United States Labor Bureau predicts an 18% increase in the number of Medical Billing and Coding employment opportunities through the year 2016.

### Program Outcomes

Upon successful completion of the Medical Coding and Billing Certificate, students are able to:

- Demonstrate desirable work habits including verbal/written communication skills, technological competence, critical thinking, problem solving, self-reliance, cooperativeness, and adaptability.
- Analyze ethical issues and apply ethical standards in the performance of responsibilities in the healthcare environment.
- Assume an entry-level position as a medical coder and/or billing specialist in various health care settings.
- Sit for the national qualifying examination for a Certified Coding Associate (CCA) through the American Health Information Management Association (AHIMA) and/or the examination for a Certified Professional Coder (CPC) through the American Association of Professional Coders (AAPC).
- Demonstrate the ability to code and bill abstract health information from reading a medical chart to assigning the correct diagnosis (ICD-9), procedure (CPT), and supply (HCPCS Level II) code in a wide variety of medical settings.
### Information Technology Certificate

#### Medical Receptionist

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT101</td>
<td>Typing I</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT103</td>
<td>Medical Terminology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment scores</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT105</td>
<td>Office Communication Systems (or)</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score (or)</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS102</td>
<td>Business Communication</td>
<td></td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT207</td>
<td>Medical Coding and Billing</td>
<td>3</td>
<td>BIT103</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT203</td>
<td>Medical Office Procedures</td>
<td>3</td>
<td>GIT110 &amp; BIT103</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>18</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Overview

Students gain skills and knowledge in computer applications, medical terminology, and medical office procedures. A Medical Receptionist Certificate is the first step to a career in healthcare. Students are encouraged to build on the Medical Receptionist Certificate and obtain a certificate in Medical Office Administration or Medical Coding and Billing and eventually an Associate's degree at the College.

#### Career Outlook

Students are prepared for an entry-level position as a receptionist in a medical environment.

#### Program Outcomes

Upon successful completion of the Medical Receptionist Certificate, students are able to:
- Demonstrate desirable work habits including verbal/written communication skills, technological competence, critical thinking, problem solving, self-reliance, cooperativeness, and adaptability.
- Analyze ethical issues and apply ethical standards in the performance of responsibilities in the healthcare environment.
- Assume an entry-level position as a receptionist in a healthcare facility.
Information Technology Certificate
Networking

Course # | Course Title                                  | Credits | Prerequisites                                     | Semester Offered | Semester Taken | Grade Earned |
---------|-----------------------------------------------|---------|--------------------------------------------------|------------------|----------------|--------------|
GIT102   | Computer Keyboarding (or) 30wpm              | 1       | None (or) 30wpm                                  | Fall, Spring     |                |              |
COM103   | Human Communication                          | 3       | ENL010 or ESL102 or satisfactory basic skills assessment score | Fall, Spring, Summer |                |              |
GIT110   | Microcomputer Applications Software          | 3       | ENL020 & ENL050 or satisfactory basic skills assessment score & (GIT101, GIT102 or 30wpm) | Fall, Spring, Summer |                |              |
BIT113   | Microcomputer Hardware                        | 3       | ENL020 & ENL050 or satisfactory basic skills assessment score | Fall, Spring, Summer |                |              |
BIT115   | Operating Systems                             | 3       | GIT110                                           | Fall, Spring     |                |              |
BIT187   | Networking Essentials                         | 3       | Co-requisite: BIT115                             | Fall, Spring     |                |              |
BIT236   | Wireless Networking                           | 3       | BIT187                                           | Fall             |                |              |
BIT237   | Windows Server Administration                 | 3       | BIT187                                           | Fall             |                |              |
BIT239   | Advanced Networking Essentials with Cisco     | 3       | BIT187                                           | Spring           |                |              |
**Total Credits** |                                | **24/25** |                                                 |                  |                |              |

**Overview**
Students learn networking theory, planning, design, installation, support, troubleshooting, and administration of a wired and wireless network through the use of lecture and hands-on labs. This certificate provides knowledge and experience for various industry-recognized certification exams.

**Career Outlook**
Students completing the Networking certificate are trained to work as network technicians and network administrators. Students are encouraged to build on the certificate program and eventually obtain a degree at the College.

**Program Outcomes**
Upon completion of the Networking Certificate, students are able to:
- Read, write, discuss, and think critically about topics and ideas in information technology.
- Analyze ethical issues and apply ethical standards in the performance of responsibilities in a variety of information technology careers.
- Work with teams in an information technology setting.
- Synthesize information from documentation and use to solve business problems and provide customer service.
Information Technology Certificate
PC Service Technician

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT102</td>
<td>Computer Keyboarding (or) 30wpm</td>
<td>1</td>
<td>None (or) 30wpm</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT113</td>
<td>Microcomputer Hardware</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT115</td>
<td>Operating Systems</td>
<td>3</td>
<td>GIT110</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT187</td>
<td>Networking Essentials</td>
<td>3</td>
<td>Co-requisite: BIT115</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT236</td>
<td>Wireless Networking</td>
<td>3</td>
<td>BIT187</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>18/19</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overview
Students in the PC Service Technician certificate develop a firm background in the basics of microcomputer systems. Balanced coverage of hardware and software are complemented by thorough treatment of memory, troubleshooting, networking, multimedia, maintenance, as well as DOS and Windows operating systems. This certificate program provides background for A+ Certification testing.

Career Outlook
Students completing the PC Service Technician certificate are prepared for employment as PC Service Technicians. Students are encouraged to build on the certificate program and eventually obtain a degree at the College.
### Information Technology Certificate

#### Web Design

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT102</td>
<td>Computer Keyboarding (or) 30wpm</td>
<td>1</td>
<td>None (or) 30wpm</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT180</td>
<td>Intro. to the Internet</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Applications Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td>Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>GIT105</td>
<td>Office Communication Systems (or) Business Communication</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score (or) ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td>Fall, Spring</td>
<td></td>
</tr>
<tr>
<td>BUS102</td>
<td>Business Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSC110</td>
<td>Computer Programming I: JAVA (or) (MAT030 or MAT035) or satisfactory basic skills assessment score</td>
<td>3</td>
<td>GIT110 &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT183</td>
<td>Web Site Design and Scripting</td>
<td>3</td>
<td>GIT110</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART170</td>
<td>Introduction to Computer Graphics (Adobe Photoshop, Illustrator, InDesign)</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT184</td>
<td>Web Authoring and Graphic Tools</td>
<td>3</td>
<td>GIT110</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSC130</td>
<td>Computer Programming II: JAVA (or) Web Site Development Practicum (or) PHP and My SQL for Web Development</td>
<td>4</td>
<td>CSC110 (or) GIT183, GIT184 (or) GIT183 &amp; GIT150</td>
<td>Spring, Fall, Varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT221</td>
<td>(or)</td>
<td>(or)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT286</td>
<td>(or) PHP and My SQL for Web Development</td>
<td>3</td>
<td>GIT183 &amp; GIT150</td>
<td>Spring, Fall, Varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIT284</td>
<td>(or)</td>
<td>3</td>
<td>GIT183</td>
<td>Varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>27/28/29</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overview**

Students in the Web Design certificate develop skills in project management and teamwork while learning how to design and develop web sites using HTML, DHTML, Java, JavaScript, CGI, Perl, and web authoring and graphic software.

**Career Outlook**

This occupational profile is provided by O*NET.  
http://www.onetonline.org/find/quick?s=Web+Site+Design

**Gainful Employment**

The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.
Law Enforcement Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on the CPT or a grade of C or better in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM103</td>
<td>Human Communication</td>
<td>3</td>
<td>ENL010 or ESL102 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC106</td>
<td>Principles of Sociology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY101</td>
<td>General Psychology</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ101</td>
<td>Substantive Criminal Law</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ125</td>
<td>Contemporary Policing</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ102</td>
<td>Procedural Criminal Law</td>
<td>3</td>
<td>None</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ105</td>
<td>Criminology, Theory and Practice</td>
<td>3</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJ130</td>
<td>Criminal Evidence</td>
<td>3</td>
<td>None</td>
<td>Fall, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>27</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Overview
Developed in cooperation with the Massachusetts Chiefs of Police Association, the Law Enforcement Certificate program prepares students for a career in local law enforcement.

The certificate combines specialized criminal justice and general education coursework to provide students with knowledge and skills needed to compete for entry into the Massachusetts law enforcement field. All of the credits in the certificate program can be applied to the Criminal Justice Associate in Science degree.

The Law Enforcement certificate was developed in cooperation with the Massachusetts Police Chiefs Association and has been ratified by their Training and Education Committee as an important step in their goal to have a better-educated and more professional workforce. Although the certificate is not yet a requirement in the hiring and training procedures, it is anticipated that it will substitute for a significant part of the Massachusetts Training Council curriculum in the near future.

Career Outlook
This occupational profile is provided by O*NET. www.onetonline.org/find/quick?c=Law+Enforcement

Gainful Employment
The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

Program Outcomes
Upon completion of the Law Enforcement Certificate, students are able to:

- Identify, evaluate and utilize effective verbal, non-verbal and written communication.
- Apply ethical principles in decision-making situations.
- Demonstrate an understanding of diversity and multiculturalism.
- Identify a problem and develop solutions.
- Properly use basic criminal justice terms and concepts.
- Identify, explain, and apply major theories of crime causation and individual criminal behavior.
- Identify and explain the interrelationship between the major components of the criminal justice system.
# Paralegal Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL101</td>
<td>English Composition I</td>
<td>3</td>
<td>Appropriate scores in Reading Comprehension &amp; in Sentence Skills on the CPT or a grade of C or higher in ENL020 &amp; ENL050 or ESL201</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGS130</td>
<td>Intro. to Substantive Law (formerly BIT130)</td>
<td>3</td>
<td>None</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT102</td>
<td>Computer Keyboarding (or) 30 wpm</td>
<td>1</td>
<td>None</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGS132</td>
<td>Law Office Management (formerly BIT132)</td>
<td>1</td>
<td>LGS130</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIT110</td>
<td>Microcomputer Application Software</td>
<td>3</td>
<td>ENL020 &amp; ENL050 or satisfactory basic skills assessment score &amp; (GIT101, GIT102 or 30wpm)</td>
<td>Fall, Spring, Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGS135</td>
<td>Civil Litigation (formerly BIT135)</td>
<td>3</td>
<td>LGS130</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGS133</td>
<td>Legal Research and Writing (formerly BIT133)</td>
<td>3</td>
<td>LGS130 &amp; ENL101 &amp; two of: LGS131, LGS134, LGS135, LGS136, LGS137</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGS134</td>
<td>Real Estate, Mortgages and Landlord-Tenant Law (formerly BIT134)</td>
<td>3</td>
<td>LGS130</td>
<td>Spring (odd)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Paralegal elective* | 3 |
| Paralegal elective* | 3 |
| Paralegal elective* | 3 |

| Total Credits | 28/29 |

The Paralegal Certificate program is designed for part-time study and takes approximately two years to complete. The professional courses are offered in the evenings.

**Overview**

Paralegal students learn to do legal research, prepare legal documents, and investigate cases. This program trains individuals in the skills necessary to give legal assistance to attorneys, government agencies, and others.

**Program Outcomes**

Upon completion of the Paralegal Certificate, students are able to:

- Read, write, recognize, research, analyze, and discuss legal issues, cases, laws, and rules
- Recognize diversity issues in order to interact with others appropriately and research effectively
- Use online database information, conventional libraries, and other relevant resources
- Establish and maintain cooperative working relationships with supervisors, co-workers, clients, and others
- Maintain composure; work well independently and under stress
- Comprehend and communicate information and ideas, in writing and orally
- Arrange things and actions based on specific patterns or rules
- Apply general laws and rules to specific circumstances to provide clear answers
- Analyze ethical issues and apply ethical standards in assignments for a variety of legal questions
- Assume positions in law offices, municipal agencies, private industry and other workplaces
- Provide agency or law office services within the ethical standards of the legal profession
- Transfer to Associate's degree programs

**Gainful Employment**

The Gainful Employment Program Regulations provide students with the information they need to make informed educational choices including total program costs, loan repayment rates, and career outlooks.

*Paralegal Electives*

- LGS131 Family Law (formerly BIT131)
- LGS136 Estate Planning, Wills, Trusts, and Probate Procedures (formerly BIT136)
- LGS137 Contracts, Business Organizations, and Transactions (formerly BIT137)
- LGS138 Criminal Law and Procedures (formerly BIT138)
- LGS238 Internship in Paralegal Studies (formerly BIT238)

**Paralegal Course Offerings**

**Fall 2015**

- LGS130 Intro to Substantive Law
- LGS131 Family Law
- LGS135 Civil Litigation
- LGS138 Criminal Law and Procedures
- LGS238 Internship in Paralegal Studies

**Fall 2016**

- LGS130 Intro to Substantive Law
- LGS135 Civil Litigation
- LGS238 Internship in Paralegal Studies

**Spring 2016**

- LGS132 Law Office Management
- LGS238 Internship in Paralegal Studies

**Spring 2017**

- LGS132 Law Office Management
- LGS133 Legal Research & Writing
- LGS137 Contracts
- LGS134 Real Estate, Mortgages, LL/T
- LGS238 Internship in Paralegal Studies

Review the prerequisites prior to application. An application for the Internship must be submitted to the coordinator on or before the first day of registration for the semester in which the student wishes to register for the Internship.

**Career Outlook**

This occupational profile is provided by O*NET. [www.onetonline.org/find/quick?s=Paralegal](http://www.onetonline.org/find/quick?s=Paralegal)
Programming for Computer Science Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
<th>Semester Taken</th>
<th>Grade Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC120</td>
<td>Computer Programming I: C++</td>
<td>4</td>
<td>(MAT030 or MAT035) or satisfactory basic skills assessment score &amp; working knowledge of any programming language</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSC110</td>
<td>Computer Programming I: JAVA</td>
<td>3</td>
<td>(MAT030 or MAT035) or satisfactory basic skills assessment score</td>
<td>Fall, Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSC130</td>
<td>Computer Programming II: JAVA</td>
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<td>CSC110</td>
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<td>CSC210</td>
<td>System Software and Assembly Language Programming</td>
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<td>CSC130</td>
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<tr>
<td>CSC230</td>
<td>Data Structures</td>
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<td>CSC120 &amp; CSC130</td>
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<tr>
<td><strong>Total Credits</strong></td>
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**Overview**
Using hands-on projects and teamwork, Computer Science students learn to design, implement, and test programs in Java, C++, and assembly language. Students analyze and use various software development models and basic software engineering principles. Object-oriented programming methodology, systems software, and data structures are studied in depth. Students also complete concentrated course work in Calculus and Physics.

**Career Outlook**
This occupational profile is provided by O*NET.  
[www.onetonline.org/find/quick/?s=Programming+for+Computer+Science](www.onetonline.org/find/quick/?s=Programming+for+Computer+Science)
# Visual Arts Transfer Portfolio Certificate

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Semester Offered</th>
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<th>Grade Earned</th>
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<td>ART100</td>
<td>Drawing I</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
<td>Fall, Spring, Summer</td>
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<td>ART101</td>
<td>Design I</td>
<td>3</td>
<td>ENL010 &amp; ENL040 or satisfactory basic skills assessment score</td>
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<td>Fall, Spring, Summer</td>
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<td>ART219</td>
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<td>ART100 &amp; ART101</td>
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## Overview

This certificate will enable a student to create an excellent portfolio of art and design work to be used as part of their transfer application to a four-year art and design school. It is understood that this certificate is a stepping stone towards a higher-level degree that will help the student to realize career goals in art and design.

The Visual Arts Transfer Portfolio Certificate concludes in May with an Open House Portfolio Critique, which is part of ART219, for Cape Cod Community College and area high school students with invited art schools (MASS Art, UMass-Dartmouth, Bridgewater University).

## Program Outcomes

Upon completion of the Visual Arts Transfer Portfolio Certificate, students are able to:

- Develop oral, written and visual communication skills
- Create a portfolio of graphic design work for transfer to a four-year school.
Course Descriptions

- Courses are listed alphabetically by discipline. To determine the division and department in which the discipline is included, refer to page 32.
- Consult the Course Index to locate a course by course number, page 195.
- 100-level courses are generally designed for first-year students; 200-level courses are generally designed for second-year students.
- Many courses are offered only once in an academic year, either Fall or Spring semester pending sufficient enrollment.
- Many courses have prerequisites that are either other college courses, developmental courses, or satisfactory scores on the basic skills assessment.

American Sign Language

American Sign Language I

ASL101. An introductory-level course in American Sign Language intended to give an overview of both the language and the culture of the Deaf community. The course focuses on everyday interaction, frequently used signs, basic rules of grammar, and cultural features within the Deaf community. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores or permission of instructor / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

American Sign Language II

ASL102. The continued study of American Sign Language with emphasis on increasing vocabulary usage both receptively and expressively. A detailed look into the grammar and structure of American Sign Language with continued exposure to Deaf culture. Prerequisite: ASL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Anthropology

Introduction to Anthropology

ANT107. An introduction to the principles and procedures of anthropology. The course is divided into two main areas: Physical Anthropology, which covers the physical nature of humans and the evolution of this nature; and Cultural Anthropology, which covers the cultural nature of humans including the origin and development of social institutions. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

World Archeology

ANT108. This introduction to world prehistory traces our shared human past from the emergence of human material culture to the rise and establishment of ancient states and empires. Special attention devoted to the study of the early civilizations of Western Asia, Europe, China, India, Africa, and the Americas provides for the understanding of how any why the various continents developed their unique civilizations. Archaeological discoveries provide the basis and background for this study. Prerequisite: None / 3 credits. Offered: Fall

Comparative Cultures

ANT211. This course provides an in-depth examination of selected contemporary societies focusing on their customs, language, values, key social institutions and stratification systems. The various internal and external forces affecting political, economic, religious and social cultural dynamics in different distinct cultures are examined. Students explore the differing social relationships within the family and the community in selected societies. The course also provides a review of selected anthropological case studies from many world cultures. Prerequisites: SOC106 or ANT107 / 3 credits. Satisfies a Behavioral/Social Science general education requirement. Offered: Varies

Peoples and Cultures of the Middle East

ANT215. This course is an overview of the cultures of the contemporary Middle East. Emphasis is placed on understanding the region's cultural, social, political, and religious diversity. Popular and academic conceptions (and misconceptions) of the region are examined and a general history of the region is introduced in order to develop an anthropological perspective on the contemporary culture as observed in the villages, towns, cities, and nations of the region. Prerequisite: ANT107 or SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Varies

Arabic

Conversational Arabic

ARB100. This basic conversational Arabic course is designed to introduce the non-native speaker of Arabic to the basic skills necessary to developing a working knowledge of spoken Arabic. The emphasis is on listening, speaking, and understanding spoken Arabic. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Immersion Study in Arabic Language and Civilization

ARB122. Students study spoken Arabic language and civilization in an Arabic speaking country. Traditional class work is supplemented by field trips and cultural activities. Prerequisite: None / 3 credits. Offered: January Intersession

Art

Drawing I

ART100. Students apply various graphic approaches that may include drawing from still life, landscape, and human figure. Emphasis is on individual creative expression with the objective being the development of perception and understanding of natural phenomena and translation of this information to a two-dimensional surface. Examples of contemporary drawing are appraised in the context of diversity and cultural differences. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer
Design I
ART101. Basic design elements including line, shape, color, texture, value, and composition and their integration on a two-dimensional surface are studied and applied. Students examine the nature and effect of color in its full utilization as a design element in conjunction with the interaction of positive and negative space, optical phenomena, and theories of harmony and visual dynamics. Cultural, ethical, and environmental influences on design from a global perspective will be understood. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Painting I
ART103. This is an introductory course in painting, exploring a variety of approaches and painting media. A series of landscape, still life, and personal imagery paintings are investigated as both descriptive and imaginative forms of creative expression. The ethical, multicultural and international contributions of paintings are evaluated. Prerequisite: ART100 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Art Appreciation
ART109. This course provides an introduction to the visual arts made by cultures throughout the world from prehistory to the present. It includes European art as well as art from Africa, Asia, and the Americas. Emphasis is placed on how and why art is created, its nature, and the role it plays in society. By studying the fundamental principles, elements, techniques, styles, and vocabulary of art, students explore significant artistic creations ranging in character from the personal, to the political, and religious. Students are required to make an independent visit to a museum. Prerequisites: ENL010 and ENL040 or satisfactory basic skills assessment scores / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

History of Art: Stone Age to Gothic
ART125. This course provides an interdisciplinary approach to the art of the western world from the magical creations of the Old Stone Age to the magnificent works of the Gothic era. Illustrated lectures deal with such topics as the ideas guiding the artistic creations, general stylistic trends, important methods, materials and techniques used. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

You Can Design!
ART130. An online introduction to understanding and interpreting the world around you for the purpose of creating art work. Recognizing and identifying elements of visual language like line, shape, color, texture, and tone lead to applying these elements in the creation of art and design work. Critically evaluating art work and the work of other artists and designers helps nurture confidence in the use of visual language and provides a basis for exploring all forms of visual expression, including drawing, painting, life drawing, sculpture, design, graphic art, web site design and printmaking. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 1 credit. Offered: Fall, Spring, Summer

Art History: Renaissance to Modern
ART134. Students explore the art of the western world from the Renaissance to the Modern eras. Illustrated lectures cover general aesthetic trends, the life and work of key artists, ideas guiding their creations, the vocabulary of art, as well as important methods, materials, and techniques the artists have employed. Significant artistic creations ranging in character from the personal, to the political, and religious are examined. Students are required to make an independent visit to a museum. Prerequisites: ENL010 and ENL040 or satisfactory basic skills assessment scores / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Varies

Fashion, Textile and Fiber Art
ART135. Students investigate and develop various approaches to fiber art, using traditional and non-traditional designs and work on paper and fabric surfaces to create multicolor screen-printed images. Techniques may include silkscreen printing. Students create individual printable multicolor screen-printed images. Techniques may include silkscreen printing. Students create individual printable designs and work on paper and fabric surfaces to create multicolor screen-printed images. Techniques may include silkscreen printing. Students create individual printable designs and work on paper and fabric surfaces to create multicolor screen-printed images. Techniques may include silkscreen printing. Students create individual printable designs and work on paper and fabric surfaces to create multicolor screen-printed images. Techniques may include silkscreen printing. Students create individual printable designs and work on paper and fabric surfaces to create multicolor screen-printed images. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Digital Photography
ART139. This is an introductory course in digital photography, exploring both digital capture and aspects of Adobe Photoshop®. This course focuses on developing strong photographic skills, creating dynamic images and an online portfolio. Students explore light in relation to photography, relevant aspects of photographic history and contemporary photography. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score; ART214 recommended / 3 credits. Offered: Fall, Spring, Summer

Introduction to Silkscreen Printing
ART140. Students study elements and apply methods of silkscreen printing. Students create individual printable designs and work on paper and fabric surfaces to create multicolor screen-printed images. Techniques may include a variety of stencil making methods, direct approaches, and photo-emulsion. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

History of Graphic Design
ART137. This course critically investigates and explores graphic design and visual communication history, materials, techniques and styles, major movements and significant artists and designers. This course requires students to participate in lecture and presentation, and prepare writing and studio projects. Students build a conceptual and visual understanding of vocabulary, applying critical thinking and visual skills in an evaluation of the historical context and the importance of historical reference in graphic design work. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Three-Dimensional Design
ART136. This course is an introduction to the elements of visual language (line, shape, tone, texture, color, light, volume, negative space) in 3D form. Students solve 3D design problems by creating modeled and constructed forms both in relief and free-standing form. Historical references are made to support the development and understanding of the work. This course can inspire students to explore their creative expression in sculpture. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits; may be repeated once for credit. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring
Introduction to Computer Graphics (Adobe Photoshop®, Illustrator®, InDesign®)

ART170. Students learn software, hardware, and operating system basics using Adobe Photoshop®, Adobe Illustrator®, and Adobe InDesign®. This course introduces fundamental concepts and terminology for creating and editing basic electronic images. The students successfully utilize these applications in graphic design, publication design, and preparation of documents for the web. Prerequisite: ENL010 & ENL040 or satisfactory basic skills assessment scores. / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Drawing II

ART200. Students explore advanced drawing concepts and techniques including free-hand perspective and rendering techniques as they apply to the representation of natural and man-made forms. Emphasis is placed on drawing the human figure including the nude. Individual style and self-expression are developed. Prerequisite: ART100 / 3 credits. Offered: Spring

Design II

ART201. An investigation of a variety of fundamental visual forms and concepts that can be used to delineate and describe both two and three dimensional structures. The descriptive expressive uses of color will be utilized in conjunction with structural systems that will explore different spatial concerns. Prerequisite: ART100 / 3 credits. Offered: Spring

Illustration I (Adobe Illustrator®)

ART205. Illustration I is a detailed exploration of a variety of drawing, painting and design concepts and techniques using Adobe Illustrator®. Development of personal expression is addressed, as students use various techniques to illustrate book, poster, periodical and editorial designs. Prerequisite: ART170 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Graphic Design I

ART207. Introduction to the field of graphic design, including typography, layout and general graphic techniques. The use of technology and computational skills are applied in studio projects to support creativity and proficiency in handling media and preparing graphic designs. Ethical principles and concepts in communication design are explored in multicultural and global contexts. Prerequisite: ART170 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Graphic Design II

ART208. This course is a continuation of ART207, which introduces typography, composition, layout, development of graphic concepts, and problem solving and creative thinking. Prerequisite: ART207 / 3 credits. Offered: Spring

Printmaking Techniques

ART209. The study and development of the fundamental elements of printmaking techniques using a variety of approaches to edition and unique printing. Students cover all aspects of plate preparation and printing. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Graphic Production and Layout (Adobe InDesign®)

ART210. This course is an introduction to the field of electronic publishing and preparing materials for printed output using modern computer-based technologies. It explores the basics of digital typography and page layout using a professional page layout application to assemble various text-based and graphical elements into cohesive and effective communications using guided and unguided hands-on exercises to produce simple documents. Also covered are the fundamentals of color as they apply to printing. Emphasis is on the mastery of the software and technology. Prerequisite: ART101 & ART170 / 3 credits. Offered: Spring

Myths, Legends and Symbols in Art

ART213. In this course, students explore key myths, legends and symbols in the visual arts and the way in which they have been interpreted by artists throughout history. Illustrated lectures include the study of art works which deal with specific divinities, legendary and mythic figures as well as symbolic elements such as particular flowers, fruit, animals, objects, colors and numbers. Disciplines such as music, literature, drama, or cinema, relating to the topics discussed in class, are incorporated into the course. Prerequisite: ENL101 / 3 credits. Offered: Spring

Digital Imaging I (Adobe Photoshop®)

ART214. This introductory course covers Adobe Photoshop® software and scanning techniques and their relationship to graphic design. Students learn from hands-on projects the features of Adobe Photoshop®. Assignments are tailored to a wide variety of users, from graphic designers, artists, photographers, and web page designers. From the first pixel to the finished picture, students gain imaging proficiency and a strong understanding of the program. Prerequisite: ART170 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Life Drawing

ART216. Through the use of traditional and contemporary drawing media and methods, students explore gesture, modeling, anatomy, tonality, form, composition, and other aspects of figurative study through observation of clothed and/or unclothed live models. Prerequisite: ART100 / 3 credits; Offered: Fall, Spring

Typography

ART218. This course is designed to introduce students to the basics of typography. Students demonstrate how to utilize type to solve visual problems in graphic design and visual communication. Students are taught typographic structures and terminology for visual problem solving. This course uses both computer and hands-on methods to address the language of type and its effective usage. By studying the language of type through its history and by its application, students gain strong working knowledge of this essential element in graphic design. Prerequisite: ART170 / 3 credits. Offered: Fall, Spring

Portfolio Preparation and Professional Practices for Artists

ART219. This course covers preparing, critiquing, and presenting a portfolio utilizing existing, personal art work. The portfolio of work is used primarily to support the students transfer to art school. Other topics include writing a resume and cover letter and creating an artist’s statement. Students are expected to have finished artwork for a portfolio. Prerequisite: ART100 & ART101 / 1 credit. Offered: Spring
Printmaking II
ART226. This course enables students to continue the study of printmaking and further develop their ideas through the exploration of advanced techniques and concepts. The class uses a variety of approaches to edition and unique print. Students explore collagraph, woodcut, solar etching, and polymer lithography. Students become proficient in all aspects of plate preparation and printing using professional printmaking inks. Prerequisite: ART209 / 3 credits; may be repeated once for credit. Offered: Spring

Painting II
ART229. Painting II provides an in-depth study of painting including color theory, and composition with an emphasis on developing self-expression. The course will continue exploring a variety of genres from observational realism to abstraction. Critical analysis of contemporary artistic movements will help students to become familiar with a variety of styles, find their own personal “aesthetic language”, and develop their ability to work with acrylic media. Prerequisite: ART103 / 3 credits; may be repeated once for credit. Offered: Spring

Design and the Book
ART239. This course will explore a variety of techniques and concepts to make hand-made books. Topics may include organizations, sequence, layout, design, development of content, and bookbinding techniques. Students develop content with photography, printmaking, and computer generated images. Students explore paper making techniques and make paper for their books. Prerequisite: ART103 / 3 credits; may be repeated once for credit. Offered: Spring

Internship in Graphic Design
ART256. This course is designed to provide a practical experience in a professional graphic arts setting and preparation for a successful career in the graphic design field. Designation of intern site is based on student academic and career goals. The student works in a graphic design business for 150 hours. Prerequisite: ART205, ART207, ART210 & ART214 / 3 credits. Offered: Varies

Astronomy
Fundamentals of Astronomy
AST101. A one-semester science course, with laboratory, that provides an introduction to the principles and theories of contemporary astronomy within and beyond the solar system. The course traces the pathways of observation, conjecture, thought, investigation and discovery to demonstrate how scientific inquiry has enabled the human mind to attain an unprecedented insight to the nature of the universe. (3 class hours / 2 laboratory hours) Prerequisite: (MAT030 or MAT035) ENL020 and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer

Current Topics in Astronomy
AST201. This course provides an opportunity for students to explore various topics of current interest in astronomy, adding breadth and depth to their knowledge of the cosmos and building independent research and presentation skills. Most course materials are drawn from highly credible sources on the Internet (for example NASA.GOV) and current astronomical publications. Prerequisite: AST101 or (PHY101 or PHY151) or PHY211 / 3 credits. Offered: Varies

Aviation
Aviation Maintenance Technology (AMT):
Airframe Module I
AMT201. Airframe AMT Module 1 for the Federal Aviation Administration (FAA) is required by Title 14 of the Code of Federal Regulations (14 CFR) Advisory Circular Part 147-3A. Airframe AMT Module 1 introduces students to the applications of airframe inspections, landing gear systems, hydraulic & pneumatic systems, cabin atmosphere control, communication/navigation systems, and aircraft position, warning, ice & rain control systems. Prerequisite: Grade of C or higher in AMT102 / 9 credits. Offered: Varies

Aviation Maintenance Technology (AMT):
Airframe Module 2
AMT202. Airframe AMT Module 2 for the Federal Aviation Administration (FAA) is required by Title 14 of the Code of Federal Regulations (14 CFR) Advisory Circular Part 147-3A. Airframe AMT Module 2 introduces students to the applications of metallic and non-metallic structures, aircraft coverings, aircraft finishes, aircraft welding, and assembly & rigging. Prerequisite: Grade of C or higher in AMT201 / 9 credits. Offered: Varies

Aviation Maintenance Technology (AMT):
Powerplant Module I
AMT203. Powerplant AMT Module 1 for the Federal Aviation Administration (FAA) is required by Title 14 of the Code of Federal Regulations (14 CFR) Advisory Circular Part 147-3A. Powerplant AMT Module 1 introduces students to the applications of propellers, reciprocating engines, turbine engines/un-ducted fans/auxiliary power unit, Powerplant exhaust/reverser systems, and Powerplant inspections. Prerequisite: Grade of C or higher in AMT102 / 9 credits. Offered: Varies

Aviation Maintenance Technology (AMT):
Powerplant Module 2
AMT204. Powerplant AMT Module 2 for the Federal Aviation Administration (FAA) is required by Advisory Circular Part 147-3A. Powerplant Module 2 introduces students to the applications of aircraft lubricating systems, ignition systems, fuel metering, induction and airflow systems, and power plant cooling systems. Prerequisite: Grade of C or higher in AMT203 / 9 credits. Offered: Varies
Biology

Survey of Human Anatomy and Physiology

BIO105. This is an introductory course of human anatomy and physiology. The course starts with anatomical terms and basic cellular biology and then emphasizes the structure and function of several organ systems. The laboratory portion of the course involves the examination of slides, bones, models, and the dissection of a rat. (This course does not meet the Nursing and Dental Hygiene program requirements for Anatomy and Physiology.) (3 class hours / 2 laboratory hours) Prerequisite: (MAT020 or MAT025), ENL020 and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer

Survey of Biology

BIO109. This is a survey course of biology, the study of life, in one semester. It is designed to conceptually and experimentally explore the processes that sustain life. Major topics include cell biology, adaptation and evolution, genetics and reproduction, ecology and diversity, taxonomy and classification. The course is not intended for science majors. Prerequisite: (MAT020 or MAT025), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring

The following two courses (BIO151 and BIO152) constitute a coordinated general biology sequence. Students are expected to complete both courses.

General Biology I (formerly BIO101)

BIO151. The course provides a descriptive and experimental approach to major concepts in modern biology from the molecular to the organism level. It is primarily designed for the student intending to pursue a degree in Biology or a related life science and places a heavy emphasis on the chemistry of life. Major topics include the chemical basis of life, its organization and continuity, the evolution of complexity, and the taxonomic relationship of organisms. (3 class hours / 2 laboratory hours) Prerequisite: (MAT030 or MAT035), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer

General Biology II (formerly BIO102)

BIO152. This course is a continuation of BIO151. It is designed to acquaint the student with the structure and function of plant and animal systems and finally to provide a view of the organism’s environment and its place therein. Lectures and laboratory sessions are utilized. In lab, the study of animal physiology and ecological systems is stressed. Dissection, physiological testing and some field work provide the basis for learning. (3 class hours / 2 laboratory hours) Prerequisite: A grade of C or better in BIO101 or BIO151 / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring

The Microbial World

BIO161. An introduction to microorganisms and the roles they play in our environment and our bodies, for non-science majors. The topics covered include the different types of microbes, their cell structure, function, ecology, physiology and genetics. An introduction will be given to applied microbiology including the fields of agricultural, food, industrial and medical microbiology and of microbial ecology. The laboratory component introduces basic skills of viewing, handling, isolating, growing, and identifying microorganisms. (3 class hours / 2 laboratory hours) Prerequisite: ENL101 and MAT035 / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring

Introduction to Public Health

BIO204. This course provides an introduction to the public health. Its biomedical basis, including infectious and non-infectious diseases, environmental pollutants, and related factors are discussed. Other topics covered include social, behavioral, and environmental factors that affect public health, Federal, state and international health agencies. Epidemiological principles, surveillance and regulation are addressed with analysis of case studies. Emerging diseases, biotechnology, and new investigative tools are also introduced. Prerequisite: (MAT030 or MAT035) or satisfactory basic skills assessment score, ENL101, and a 4-credit science course with lab component / 3 credits. Satisfies a General Education elective. Offered: Fall, Spring.

General Ecology

BIO205. The lecture portion of this course provides an introduction to the fundamentals of ecology including the interactions of populations, communities, and ecosystems. Students will be introduced to the techniques of ecological data gathering and analysis. The laboratory exposes students to the field techniques used in investigating different ecological communities, specifically of Cape Cod, and emphasizes team-based research. One Saturday field trip is required for the laboratory component. (3 class hours / 3 laboratory hours per week) Prerequisite: ENL101 and a grade of C or higher in BIO151 or ENV118 / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall

Cell Biology (formerly BIO202)

BIO241. This course provides an introduction to cell structure, function, and physiology. Topics include the function of cellular organelles, enzymes and their role in metabolism and regulation, synthesis of macromolecules, and gene expression and regulation. Prerequisite: A grade of C or better in ENL101, (CHM101 or CHM151) and (BIO101 or BIO151) or (BIO107 or BIO251) / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Spring

Human Anatomy and Physiology I (formerly BIO107)

BIO251. A comprehensive systematic study of the human body emphasizing the structure and function of the systems. Part I topics include: cells and tissues, chemistry review, metabolism, the integumentary, skeletal, muscular and reproductive systems with correlated laboratory work. (3 class hours / 2 laboratory hours) Prerequisite: A grade of C or higher in CHM109 or (BIO101 or BIO151) or (BIO107 or BIO251) / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer

Human Anatomy and Physiology II (formerly BIO108)

BIO252. This course is a comprehensive systematic study of the human body emphasizing the structure and function of several organ systems. Human Anatomy and Physiology II covers the following organ systems: nervous, endocrine, circulatory, lymphatic, respiratory, digestive, and urinary. Lecture topics are correlated with laboratory work. (3 class hours / 2 laboratory hours) Prerequisite: A grade of C or better in BIO107 or BIO251 / 4 credits. Offered: Fall, Spring, Summer

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Microbiology (formerly BIO201)
BIO281. An introduction to microorganisms and their activities, for health-related majors. The topics cover cell structure, classification, metabolism, methods of control, antimicrobial drugs, genetics, microbial and host defenses, immunology and applications, representative infectious diseases, and food and industrial microbiology. Independent study is encouraged. The laboratory component includes basic procedures of handling, growing, and identifying microorganisms. (3 class hours / 2 laboratory hours) Prerequisite: A grade of C or higher in (CHM101 or CHM151) or CHM109 and (BIO101 or BIO151) or (BIO107 or BIO251) / 4 credits. Offered: Fall, Spring, Summer

Business - Accounting

Cooperative Work Experience in the Natural Sciences SCI261. This course provides students the opportunity to participate in a laboratory or field project in the natural sciences, under the supervision of a mentor. The course provides the student with the opportunity to apply the principles learned in the classroom to a practical real-world project. The project may be performed on campus, or at an off-campus location. The project outline needs to be approved by the department. Time commitment is based on the number of credits, approximately 70 hours per credit. Prerequisite: Two 4-credit science with labs courses with a grade of C or higher and approval of the department / Variable credits. 1, 2, 3, or 4 credits. Offered: Varies

PAYROLL ACCOUNTING

ACC115. Payroll Accounting provides an understanding of the laws that affect a company’s payroll structure and practical application skills in maintaining payroll records. Topics covered include: payroll tax laws, payroll tax forms, payroll and personnel records, computing wages and salaries, taxes affecting employees and employers, analyzing and journalizing payroll transactions and completing various federal and state forms. Students prepare business payroll in both a manual and computer format. Prerequisite: ACC111 or ACC201 / 3 credits. Offered: Fall, Spring

Financial Accounting

ACC201. Students learn principles of financial accounting with emphasis on service and merchandising businesses. Topics include: the accounting cycle, recording transactions, adjusting accounts and preparing financial statements, inventory valuation, depreciation methods, disposal of assets, receivables, liabilities, investments, and interpreting financial statements of proprietorships, partnerships and corporations. This is a transfer level course in Financial Accounting intended for the Associate of Arts student. Prerequisite: (BUS100 or HRM140), GIT110, (MAT030 or MAT035) and ENL020 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring, Summer

Intermediate Accounting II

ACC222. Continues ACC221. Special valuation problems in liabilities and equity, such as interest method in bonds, leases, and cash-flow statements. Prerequisite: ACC221 / 3 credits.

VITA Practicum

ACC263. This Volunteer Income Tax Assistance (VITA) practicum provides an opportunity for students to perform a community service in cooperation with the Internal Revenue Service and the Massachusetts Department of Revenue. The course trains students to assist taxpayers in filling out tax returns. Students also staff centers on Cape Cod, helping local residents complete their tax returns. Prerequisite: ACC101 or ACC111 or ACC201. Co-requisite: ACC110 (may be taken concurrently) / 3 credits. Offered: Spring

Business - Entrepreneurship

Introduction to Entrepreneurship

ENT108. This course provides an overview of the entrepreneurial process of creating businesses, non-profits and other new ventures. Students learn about the roles and attributes of successful entrepreneurs while undergoing a rigorous self-assessment process. Students interview a local entrepreneur, participate in case studies related to new ventures and have the opportunity to learn directly from a variety of speakers invited to class to share their start-up experiences, including ethical dilemmas and other obstacles they will face as entrepreneurs. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Business - General

Introduction to Business

BUS100. Students examine the purpose, role and responsibility of business in American society and gain a broad overview of the functions, institutions, principles and practices of business and other organizations. This course provides a basic foundation for those students who will specialize in business and an opportunity for non-business majors to learn about the business world as a major social institution. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer
Business Communication
BUS102. This course is designed to expose the student to a variety of communication modes available to individuals employed in today’s business environment. The following major areas are addressed: communication theory, electronic communications in business, oral presentations, ethical practices and written business documents. The importance of accurate communications and the development of language art skills are emphasized. Business communications and formats, including business reports, letters, and memos, are studied. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Business Law I
BUS120. A comprehensive guide to the basic principles and practices of Business Law. This includes an introduction to law and its application in the business world. The course covers the law of business ethics, the judicial process, contracts, sales, agency, employment law, partnerships, corporations and other forms of business organization. Prerequisite: None / 3 credits. Offered Fall, Spring, Summer

Business Administration Cooperative Work Experience
BUS261. Students work in an organizational setting for no less than 150 hours to receive practical training and experience related to the student’s academic program. All students enrolled in Business Administration programs are encouraged to take a cooperative work experience. This course is limited to students enrolled in Business Administration programs. Prerequisite: Approval by the Business internship instructor / 3 credits. Offered: Fall, Spring, Summer

International Business: A European Experience
BUS225. Refer to International Studies.

Business - Management

Supervision
BUS103. This course provides an opportunity to learn effective supervisory practices. Although various concepts and theories are covered to provide a conceptual framework for management and supervision, the emphasis is on the practical experiences of supervisors. Prerequisite: None / 3 credits. Offered Fall, Spring, Summer

Human Resource Management
BUS107. Students learn about the principles and practices of human resource management including staffing, developing, motivating, leading, and controlling the human resources of a business, government, or non-profit organization. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Business Finance
BUS201. This course provides an overview of the principles and practices of financial management. Includes the study of the procurement and effective use of funds in a business, budget preparation, alternative sources of funds, and control of working capital. Prerequisite: ACC202 or ACC105 / 3 credits. Offered: Fall, Spring, Summer

Management
BUS214. Provides an introduction to principles and techniques of management as they relate to business, government, and non-profit organizations. Includes the study of the functions of management: coordinating, problem-solving, decision-making, communicating, planning, organizing, staffing, directing, and controlling. Prerequisite: ENL101 and BUS100 / 3 credits. Offered Fall, Spring, Summer

Business - Marketing

Marketing
MKT100. This course focuses on the basic principles, problems, and practices in marketing. Students learn marketing strategies, design of marketing mixes, and market planning in a changing environment. Prerequisite: ENL020 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring, Summer

Advertising
MKT103. Students study and analyze the principles and practices of advertising including its functions in our society, its role in business, its challenges, and the creative opportunities that exist in the field of advertising. Emphasis is placed on how and why advertising influences consumer behavior, including a study of the various types of media used. Prerequisite: ENL020 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Consumer Behavior
MKT106. Students learn about the various processes and facets of consumer motivation and behavior, including the internal and external influences on buyer behavior. Prerequisite: MKT100 / 3 credits. Offered: Fall, Spring

Customer Service: Concepts and Applications
MKT112. This course provides an overview of customer service concepts and terminology and exposes students to various customer service challenges. Students learn to identify different types of customer behaviors, determine customer needs through active listening, become effective verbal and non-verbal communicators, hone telephone customer service skills, learn how best to handle difficult customers, become aware of how to offer customer service within a diverse organizational environment, take steps to encourage customer loyalty, and practice service recovery. Prerequisite: None / 3 credits. Offered: Fall, Spring

Chemistry

The following two courses (CHM151 and CHM152) constitute a chemistry sequence that covers chemistry without the use of calculus.

Survey of Chemistry
CHM106. Presents the fundamentals of chemistry that are integral to an understanding of physical and biological processes. Emphasis is placed on the relationships between these processes and contemporary environmental topics. For non-science majors. (3 class hours / 2 laboratory hours) Prerequisite: (MAT020 or MAT025), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring

Chemistry for the Health Sciences I
CHM109. An introductory course for students in various health-related programs. Emphasis is placed on practical aspects of inorganic chemistry. Some organic chemistry is introduced. (3 class hours / 2 laboratory hours) Prerequisite: (MAT030 or MAT035), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer
General Chemistry I (formerly CHM101)  
CHM151. This course emphasizes the atomic nature of matter, fundamental laws and theories of mass and energy, the periodic classification of elements, chemical bonding, nomenclature, kinetic molecular theory applied to solids, liquids and gases, solution chemistry, and descriptive chemistry. Laboratory studies reinforce the principles and concepts studied in lecture and will initiate the student to sound methods of scientific investigation. (3 class hours / 3 laboratory hours)  
Prerequisite: MAT040 or MAT045 and ENL020, ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Summer

General Chemistry II (formerly CHM102)  
CHM152. Continuation of CHM151. Considers the study of chemical families, chemical kinetics, chemical equilibria, solubility products, electrochemistry, nuclear chemistry and organic chemistry. Laboratory studies reinforce the principles and concepts studied in lecture and include the qualitative analysis of metals. (3 class hours / 3 laboratory hours)  
Prerequisite: A grade of C or better in CHM101 or CHM151 / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Spring

Organic Chemistry I (formerly CHM201)  
CHM251. This course covers organic nomenclature, bonding, structure, reaction theory, aliphatic hydrocarbons, functional groups, stereochemistry, aromatic hydrocarbons, alkyl halides, and reaction mechanisms. The laboratory emphasizes basic laboratory techniques for separation, purification and synthesis. (3 class hours / 4 laboratory hours)  
Prerequisite: A grade of C or higher in CHM102 or CHM152 / 5 credits. Offered: Fall

Organic Chemistry II (formerly CHM202)  
CHM252. Continuation of CHM251. It includes nomenclature, reaction mechanisms, name reactions, synthesis, organic qualitative analysis, carbanes, oxygen and nitrogen containing functional groups, spectroscopy and biochemical processes. In the laboratory, organic qualitative analysis, synthesis, and spectroscopy of organic compounds are taught. (3 class hours / 4 laboratory hours)  
Prerequisite: A grade of C or higher in CHM201 or CHM251 / 5 credits. Offered: Spring

Cooperative Work Experience in the Natural Sciences SCI261. Refer to Biology.

Communication  
Voice and Diction  
COM100. This course provides the student with basic vocal skills. Particular attention is paid to incorporating techniques to open the voice, breathing, tone production, articulation and diction. This course is designed for the student working to improve their oral skills with an interest towards performance and/or oration.  
Prerequisite: None / 3 credits. Offered: Fall, Spring

Human Communication  
COM103. This course fosters and improves competence in intrapersonal, interpersonal, group and public communication situations. Students demonstrate skills necessary to communicate effectively through exercises and presentations that reflect practical, real-world situations. The purpose of the course is to improve the student’s skill in communication by providing relevant knowledge and opportunity to apply that knowledge.  
Prerequisite: ENL010 or ESL102 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Survey of Mass Communication  
COM105. This course explores the history, social impact, forms, and techniques of such media as newspapers, film, books, radio, television, and other expressions of mass culture. The aims of the course are to enable the student to better understand the media-oriented environment in which we find ourselves and to explore various options available as a consumer of public information.  
Prerequisite: ENL010 or ENL050 or satisfactory reading comprehension score on the basic skills assessment / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Radio Broadcasting  
COM113. This course is designed to instruct the student in the operation of a radio station. On-air and off-air broadcasting techniques are discussed. Broadcast management, legal requirements, announcing, and copywriting are considered as they relate to specific assignments and duties at a radio station. Decisions involved with programming formats are considered. Students apply knowledge to individual and collective work projects. Students are expected to be proficient in computer file management skills. (60 contact hours per semester)  
Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Radio Production  
COM114. This course is designed to instruct the student in radio production. Audio production, equipment, engineering, audio editing software, copywriting, broadcast delivery, and production techniques are considered as they relate to specific assignments and duties at a radio station. Students learn digital audio techniques that can be applied to a variety of communications settings such as: podcasting, commercial production, public relations, and audio for the Web. Students apply knowledge to individual and collective work projects. Students are expected to be proficient in computer file management skills. (60 contact hours per semester)  
Prerequisite: None / 3 credits. Offered: Fall, Spring

Introduction to Video Production  
COM131. Students learn video production through lectures and hands-on projects. Specific skills covered include concept development, storyboarding, proper video camera operation, framing, and camera angles. While learning about the equipment and techniques used in video production and post production, students write and produce two projects that are edited on a non-linear system and screened in class for review. Students are expected to be proficient in computer file management skills.  
Prerequisite: None / 3 credits. Offered: Fall, Spring

Interpersonal Communication  
COM201. This course is designed to improve human relationships through an understanding of the principles of effective interpersonal communication. Students participate actively in listening, perceiving, interpreting words and meanings, conflict resolution, assertiveness, nonverbal awareness, developing trusting relationships, and considering the role of the self-concept.  
Prerequisite: COM103 or ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Small Group Communication  
COM202. Small Group Communication is a course designed to provide the student with an understanding of group dynamics, leadership skills, and decision-making and problem-solving models in a variety of small-group settings. Theoretical approaches are applied in practical situations, both in and out of the classroom.  
Prerequisite: COM103 or ENL101 / 3 credits. Offered: Varies
Public Speaking  
**COM203.** A study of elements of public communication through various one-to-many speaking situations. Emphases include communication theory, speaker-audience relationships, speaker resources, speech construction, and delivery. Prerequisite: **COM103 or ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall**

Persuasive Communication  
**COM204.** A study of the process of persuasion, focusing on the formation of beliefs, attitudes and values, fundamentals of attitude change, audience analysis, the persuasive message, effects of channel and setting, and source credibility. Opportunities are offered for classroom application of the principles and theories discussed. Prerequisite: **COM103 or ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall**

Oral Interpretation/Readers Theater  
**COM205.** A performance course involving the analysis and aesthetic appreciation of literature (lyric, narrative, drama) through the medium of oral interpretation. This course incorporates techniques for control of self (body and voice), control of the literary object, control of the audience, and critique of solo and group performances. Rehearsals outside of class time may be required; please see instructor. Prerequisite: **COM103 or ENL101 or THR103 / 3 credits. Offered: Varies**

Communication in Current Settings  
**COM206.** This course addresses special topics of interest for students interested in the communication discipline. Course topics vary from semester to semester. Students are exposed to a diverse range of subject matter to provide familiarity with advanced theories and approaches in communication studies. Prerequisite: **COM103 / 3 credits; may be repeated once for credit. Offered: Varies**

Argumentation and Debate  
**COM207.** This class provides an overview of the study of argumentation. Students learn argumentation theories and approaches while gaining skills in critical thinking and public speaking. By the end of the semester, students understand how to research and build an argument; how to anticipate, construct, and refute arguments; and how to evaluate the political, moral, and cultural contexts of argumentation. Prerequisite: **COM103 or ENL101 / 3 credits; may be repeated once for credit. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring**

Broadcast Writing and Presentation  
**COM208.** This course is designed to give students a full understanding of how to write for broadcast media, and the skills needed to read copy on the air. Topics covered include news writing, sports writing, commercial writing, public service announcements, editorial writing, as well as questions of news standards, practices, and ethics. Students master writing on deadline, fact checking, and delivering copy in written and verbal form. Prerequisite: **ENL101 / 3 credits. Offered: Varies**

Event Planning  
**COM209.** Students analyze ways in which organizations communicate their image and message through events and publications. Students learn organizational communication theory as it relates to events planning and gain practice in planning, critiquing and analyzing events. Prerequisite: **COM103 or COM201 or COM202 / 3 credits. Satisfies a General Education elective. Offered: Varies**

Advanced Debate  
**COM213.** This class is a continuation of COM207 Argumentation and Debate. It provides in-depth training in intercollegiate competitive debating. Students advance their skills in debate topic analysis and preparation and further strengthen their ability to build clear, organized, and coherent arguments. Students enrolling in this class are required to represent the debate club in various media contexts and/or public debates, as well as intercollegiate debate tournaments. Prerequisite: **COM207 / 3 credits. Offered: Varies**

Advanced Radio Production  
**COM231.** Building upon the skill based in COM113, students learn advanced radio production skills. Advanced production techniques are discussed and applied to on-air and remote broadcasts. Students learn production software and automation broadcast software in regards to music / commercial programming and voice tracking. Prerequisite: **COM113 / 3 credits. Offered: Spring**

Mass Communication Cooperative Work Experience  
**COM262.** This course is designed to expand student knowledge through actual work involvement within an area of mass communication. Working with a mentor and collaborating with an employer, the student develops a list of learning objectives that become an integral part of the experience. Prerequisite: **COM105, 6 other hours from mass communication suggested sequence list, and permission of co-op coordinator / 1, 2, or 3 credits; may be repeated once; 6 credit maximum.**

Computer Science  
**CSC110.** In this introduction to the field of computer science, students use hands-on projects and teamwork to design, implement, and test programs in Java which can be run on any Java-aware browser. Good programming style, expression, and documentation are emphasized. Object-oriented programming methodology, graphical user interfaces, debugging techniques, and string processing are covered. Java provides a good introduction to programming for students in any academic discipline. (This course does not satisfy the mathematics general education or CSI transfer requirements.) Prerequisite: **MAT030 or MAT035 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring**

Computer Programming I: JAVA  
**CSC120.** In this introduction to the field of computer science, students use hands-on projects and teamwork to design, implement, and test programs in C++. Good programming style, expression, and documentation are emphasized. Object-oriented programming methodology, graphical user interfaces, debugging techniques, and string processing are covered. (This course does not satisfy the mathematics general education or CSI transfer requirements.) Prerequisite: **MAT030 or MAT035 or satisfactory basic skills assessment score and working knowledge of any programming language / 4 credits. Offered: Fall**

Computer Programming II: JAVA  
**CSC130.** Students use hands-on projects and teamwork to design, implement and test large computer programs in Java, with emphasis on good programming style, expression, and documentation. Object-oriented programming methodology, elementary data structures, internal searching and sorting methods, basic graphical animation techniques, exceptions, multithreading, and simple recursion are covered. Students analyze and implement several software development models. (This course does not satisfy the mathematics general education requirement. It does satisfy CSI transfer requirements.) Prerequisite: **CSC110 / 4 credits. Offered: Spring**
System Software and Assembly Language Programming
CSC210. Students analyze the design and implementation of the components of software used to run a computer including assemblers, compilers, linkers, loaders, operating systems, debuggers, and macroprocessors. The general concepts of system software are related to the specific implementation of Intel assembly language (MASM) and Java on a Windows system. Students use hands-on projects and teamwork to design, implement, and test programs in Intel assembly language and to use assembly language procedures in a Java program. (This course does not satisfy the mathematics general education requirement.) Prerequisite: CSC130 / 4 credits. Offered: Varies

Data Structures
CSC230. Through hands-on projects and teamwork, students learn to use data structures and recursion in Java and C++ programs. Abstract Data Types (ADTs) and the actual implementations of data structures including lists, stacks, queues, tables, heaps and trees are studied. Students analyze the theoretical and actual running times of various internal/external searching and sorting methods. Basic software engineering principles are studied and implemented. (This course does not satisfy the mathematics general education requirement.) Prerequisite: CSC120 and CSC130 / 4 credits. Offered: Varies

Construction Technology
Quantitative Skills for Construction
CON100. This course applies fundamental mathematical skills and critical thinking to solve basic construction problems. A review of numbers, fractions, ratios, angles and triangles, weights, measures and conversions, and formulas for calculating area and volume are included. Problem solving uses cases that introduce concepts of the estimating process for selected parts of a construction project including lumber pricing, footings, foundations, girders, sill plates, bridging, floor joists, flooring, wall framing, and roofing. Prerequisite: (MAT030 or MAT035) or satisfactory basic skills assessment score / 2 credits. Offered: Fall, Summer

Blueprint Reading: Construction Trades
CON101. This course introduces fundamentals of reading and interpreting construction documents including plan views, elevations, sections, details, schedules and notes. The symbols and language of construction are studied through the review and study of glossaries, legends and specifications. Application of the arithmetic of construction documents are included. Prerequisite: None / 3 credits. Offered: Spring

Materials of Construction
CON105. Students learn about basic construction materials including properties and limitations, fabrication processes, and their proper application in the construction of residential and small commercial buildings. Sustainability aspects of the materials are discussed as well as characteristics such as material strength, fire resistance, and code conformity. The course is directed to building technology students, the building trades, building supply personnel, local authorities as well as fire and public safety officials. Prerequisite: None / 3 credits. Offered: Spring

Construction Technology
CON110. This course gives the student a working knowledge of the operation of small commercial and residential construction firms. The objective is to prepare the student to assume greater responsibility in his or her present firm or to start a firm of their own. Topics covered include: record keeping, firm management principles, estimating, bidding, and subcontractor relations. Prerequisite: None / 3 credits. Offered: Fall, Summer

Construction Estimating and Practice
CON115. Students explore various systems and methods for estimating construction costs in all phases of residential and commercial buildings. Emphasis is placed on accurate preparation of bids and cost control. Checklists are used to ensure accuracy. Measurements and quantities from actual construction plans and specifications are utilized for all estimating work. Prerequisite: None / 3 credits. Offered: Fall

Understanding and Working with the Massachusetts State Building Code
CON120. Students develop an in-depth working knowledge of the Massachusetts State Building Code, and learn to interpret and apply the code requirements. The course is designed for the general building contractor, for persons engaged in the design and construction of buildings, and for code enforcement officials and firefighters. This course and CON110 may be helpful in obtaining information and skills necessary to pass the Massachusetts Construction Supervisors Exam. Prerequisite: None / 3 credits. Offered: Fall

Architectural Drafting and Construction Drawing
CON125. This course is intended to provide students with practical experience in preparing working drawings for building construction. This course utilizes concepts developed in CON130 and CON101. A complete set of working drawings are prepared over the course of the semester. Prerequisite: CON101 and CON130 / 3 credits. Offered: Varies

Computer Aided Drafting I
CON130. This course is a first course in computer aided drafting including an introduction to AutoCAD, drawing, editing drawings, applications, using advanced functions, producing hardcopy, and customizing AutoCAD. The emphasis of this course is in developing drafting techniques using the computer as the drafting tool. Specific topics include system setup, 2-D drawing, editing drawings, multiview drawing, orthographic views, dimensioning, sectional views, and graphic patterns. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Computer Aided Drafting II
CON135. This course is a second course in computer aided drafting. A brief review of CON130 is followed by the following topic development: threads and fasteners, auxiliary views, revolutions, shop processes, working drawings, isometric and three dimensional drawings, rendering, and expanding AutoCAD applications. Prerequisite: CON130 / 3 credits. Offered: Spring
Architectural Computer Aided Drafting I

CON225. This course develops a student’s architectural drafting techniques utilizing personal computers as the tool for the computer aided design (CAD) system. Residential construction is the focus in drawing tasks. Students review CAD techniques, draw building elevations and plan individual rooms by drawing walls, doors and windows. Students use accepted conventions for lettering, dimensioning, noting and titling. Prerequisite: CON130 / 3 credits. Offered: Fall

Criminal Justice

Substantive Criminal Law

CRJ101. This course is a survey of criminal law and evidence with emphasis on Massachusetts laws and recent court rulings. Prerequisite: None / 3 credits. Offered: Fall

Procedural Criminal Law

CRJ102. This course emphasizes the evolution of due process as it affects functions and duties of law enforcement officers. Prerequisite: None / 3 credits. Offered: Fall

Criminology, Theory and Practice

CRJ105. This course provides a general overview of the major theories of crime and criminal behavior, as well as the scope and nature of the criminal justice system and the problem of crime. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Introduction to Corrections

CRJ116. This course is a general overview of corrections in the United States today, concentrating on the history, organization and administration of corrections, as well as sentencing, corrections law, career issues, tactical operations and the future of corrections. Prerequisite: None / 3 credits. Offered: Spring

Contemporary Policing

CRJ125. This course is a general overview of policing in the United States today, concentrating on history, organization - public and private - as well as personal issues, police operations, and critical and emerging issues. Prerequisite: None / 3 credits. Offered: Fall, Spring

Criminal Evidence

CRJ130. This course is designed to introduce the basic concepts of criminal evidence as applied in the criminal justice environment. It includes a description of the trial process and types of evidence. The course presents principles relating to the United States Constitution and those principles relating to the law enforcement professional as a witness. Prerequisite: None / 3 credits. Offered: Fall, Summer

Terrorism

CRJ135. This course acquaints students with the concept of terrorism at both the international and domestic level, examining the history of terrorism, terrorism today, and terrorism in the future. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Spring, Summer

Principles of Investigation I

CRJ206. This course examines the organization and functions of investigative agencies, preparation and presentation of accurate written and verbal reports, courtroom presentation of evidence, and elements of legal proof. Prerequisite: All Level I Criminal Justice courses / 3 credits. Offered: Fall

Principles of Investigation II

CRJ207. This course is a continuation of CRJ206. It introduces the student to the collection, presentation, and analysis of physical evidence, and investigation of specific offenses. Prerequisite: CRJ206 and all Level I Criminal Justice courses / 3 credits. Offered: Spring

Ethical Issues in Criminal Justice

CRJ210. This course examines ethical principles as they apply to the many practical problems which confront criminal justice professionals in the performance of their duties and responsibilities. Wherever possible, concrete case studies are used to illustrate ethical reasoning. Prerequisite: All Level I Criminal Justice courses / 3 credits. Offered: Fall

Crisis Intervention for Criminal Justice Professionals

CRJ220. This course explores the relationship of police and crisis intervention. Special emphasis is placed upon the development and utilization of helping skills in dealing with crisis situations. Prerequisite: All Level I Criminal Justice courses / 3 credits. Offered: Fall

Juvenile Justice

CRJ221. This course is designed to introduce students to the Juvenile Justice system, the processes and the law pertaining to the system by presenting a thorough examination of the social, historical, and legal context within which delinquency and Juvenile Justice practice occurs. Prerequisite: All Level I Criminal Justice courses / 3 credits. Offered: Spring

Selected Issues in Criminal Justice

CRJ240. The course seeks to explore issues that are currently facing the criminal justice system. This course introduces the student to human and cultural relations that affect the criminal justice system. Prerequisite: All Level I Criminal Justice courses / 3 credits. Offered: Spring

Criminal Justice Cooperative Work Experience

CRJ261. A supervised work/learning experience in a local criminal justice agency combined with a seminar component for student feedback and evaluation. Limited to students enrolled in the Criminal Justice program. Required for all Criminal Justice majors. Prerequisite: All Level I Criminal Justice courses / 3 credits; may be repeated once. Offered: Fall, Spring, Summer

Culinary Arts

Refer to Hospitality Management

Dance

Refer to Theater and Dance.

Dental Hygiene

Oral Tissues I

DEN101. In this course, designed for first semester dental hygiene students, the student learns the basic anatomy of the teeth and dental nomenclature. This study is further developed by concentrating on functions and forms of teeth with emphasis on eruption dates of both primary and permanent dentitions and root morphology of permanent teeth. An introduction to general histology and embryology of the face and oral cavity completes the course. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores and CHM109 or equivalent / 2 credits. Offered: Fall
Dental Hygiene I
DEN121. This first course introduces the student to the profession of dental hygiene, the dental hygiene code of ethics, principles of infection and exposure control, and the CDC Bloodborne Pathogens Standard. The dental hygiene process of care with an emphasis on the assessment phase is presented. Oral hard and soft deposits are discussed along with an introduction to safety and emergency procedures. Additionally, oral health education and oral physiotherapy techniques are introduced. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score and CHM109 / 2 credits. Offered: Fall

Dental Hygiene II
DEN123. This course continues the study of the dental hygiene process of care begun in DEN121. The dental hygiene diagnosis and treatment care plan are introduced as well as specific treatment modalities. Emphasis is placed on the dental hygiene care and management of patients at each life stage and the management of the medically compromised patient. Additionally, individuals with physical, sensory and mental disabilities are studied. Prerequisite: DEN121 / 2 credits. Offered: Spring

Clinical Dental Hygiene I
DEN126. The principles, protocols and components of the dental hygiene process of care described in DEN121 are applied in a pre-clinical setting. Additionally, ergonomics, patient/operator positioning, selective polishing and instrumentation skills with assessment and debridement instruments are introduced and practiced on both typodonts and student partners. Instrument sharpening skills are developed. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall

Clinical Dental Hygiene II
DEN128. Previously acquired knowledge, skills and values applicable to comprehensive dental hygiene care are reviewed. Components of the dental hygiene process of care presented in Dental Hygiene II are applied in a clinical setting. The primary focus of this course is for students to increase and refine their skills in the areas of assessment, dental hygiene diagnosis, care planning, implementation and evaluation while providing comprehensive care to patients of various population groups in a safe and ethical manner. Prerequisite: DEN121 and DEN126 / 4 credits. Offered: Spring

Pharmacology for Dental Hygiene
DEN200. This course addresses the basic principles of pharmacology and anesthesiology and applies this knowledge to the treatment of dental hygiene patients. The student applies the knowledge of drugs, their actions, and the use of the drugs used in dentistry and their impact on patients. The course content includes the physical and chemical properties, preparations, mode of administration, and effect on body systems, as well as reference to medical emergencies associated with dental treatment. Prerequisite: DEN121 or permission of the instructor / 3 credits. Offered: Spring

Oral Pathology
DEN205. This course incorporates important aspects of general pathology and their relationship to the oral cavity. The course stresses comprehensive oral examination procedures, recognition of deviations from the normal, and clinical aspects of pathological processes affecting the patient as a whole and the oral cavity. Prerequisite: DEN121 and DEN126 / 3 credits. Offered: Spring

Dental Materials
DEN209. A study of the science of dental materials including the physical, chemical, and biological properties, manipulation, and care of materials used in the prevention and treatment of oral disease. The scientific and clinical properties of gypsum materials, impression materials, waxes, porcelain, dental abrasives, cements, resins, and metals used in dentistry are discussed in lecture and manipulated in laboratory sessions with special emphasis on the materials within the scope of the practice of Dental Hygiene. (2 class hours / 3 laboratory hours) Prerequisite: CHM109 and DEN101 / 3 credits. Offered: Fall

Periodontics
DEN211. This course is an advanced study of the periodontium and its relationship to clinical practice. Incorporating current research, emphasis is placed on the pathogenesis of periodontal disease, the relationship between periodontal health and systemic health, risk factors, methods of assessment, and current therapies for treatment and maintenance of the periodontal patient. Prerequisite: DEN123 and DEN128 / 2 credits. Offered: Fall

Dental Hygiene III
DEN230. Advanced procedures and related specialties are discussed and integrated into the clinical experience. Some of the topics that are discussed include implants, dental specialties, health promotion, risk assessment, and the use of advanced technologies in dental hygiene practice. Prerequisite: DEN123 and DEN128 / 2 credits. Offered: Fall

Clinical Dental Hygiene III
DEN236. This course, designed for third semester dental hygiene students, consists of clinical sessions in which advanced clinical procedures and advanced radiographic procedures are integrated into the clinical experience. Prerequisite: DEN123 and DEN128 / 4 credits. Offered: Fall
Dental Hygiene IV
DEN232. In lecture, the students are introduced to areas of private practice: ethics, practice acts, national and regional licensure, professional organizations, practice management, recalls and computer use. Discussions include resume writing, the job interview and the future of dental hygiene. Prerequisite: DEN230 / 2 credits. Offered: Spring

Pain Management in Dental Hygiene Practice
DEN237. This course provides a comprehensive study of local dental anesthetics administered in the dental hygiene profession. Utilizing lecture and lab components, the student learns to safely administer topical and local dental anesthetics. This course covers Massachusetts Rules and Regulations 234CMR3.09-3.14, and the requirements in the administration of local dental anesthetics. Prerequisite: DEN123 and DEN128 / 2 credits. Offered: Fall

Clinical Dental Hygiene IV
DEN238. This course, designed for fourth semester dental hygiene students, consists of clinical sessions which provide further refinement of clinical skills emphasizing the role of expanded duties in therapy, prevention, and control of periodontal disease. Prerequisite: DEN230 and DEN236 / 4 credits. Offered: Spring

Developmental Education - English
Developmental education credits cannot be counted in the determination of the academic credits required for the A.A. and A.S. degrees.

Students whose first language is not English or whose basic skills assessment scores place them into developmental / English courses are advised to consider enrolling in the appropriate ESL course. Please refer to English for Speakers of Other Languages/English for Academic Purposes (ESOL/EAP) on page 164 of this catalog.

Preparation for College Reading
ENL010. This course is the first course in a two-course sequence designed for the entering college student whose reading comprehension skills are at a pre-college level. Vocabulary development is an integral component of this course. Students become effective learners by reading regularly, making oral and written responses to readings, having class discussions, and learning to self-monitor their comprehension. Prerequisite: Recommendation by basic skills assessment score. Letter grade or Pass-Fail / 3 non-degree credits. Offered: Fall, Spring

College Reading and Study Skills
ENL020. This course is the second course in a two-course sequence designed to prepare students for the demands of collegiate study. Students read from textbooks, novels, expository works, and media (newspapers, magazines). Students practice the following study skills: reading comprehension monitoring, systematic approaches to textbook study, listening, note taking and preparation for test taking. Prerequisite: Appropriate score in Reading Comprehension on the Computerized Placement Test or a grade of C or better in ENL010. Letter grade or Pass-Fail / 3 non-degree credits. Offered: Fall, Spring, Summer

Essential Writing Skills
ENL040. This course is designed for the student who requires writing skills essential for academic and career success. Basic sentence level skills such as sentence formation, punctuation, and sentence combination are emphasized within the context of paragraph development. Prerequisite: Placement test score of greater than or equal to 40 on Reading Comprehension and less than or equal to 53 on Sentence Skills / 3 non-degree credits. Offered: Fall, Spring.

Sentence Strategies
ENL045. This is an intensive developmental writing course focusing on eliminating certain repeated errors appearing in adult Standard American English (SAE) writing, particularly in the following areas: sentence types and expanded combinations including relevant punctuation, subject-predicate and pronoun agreements, word order. Students engage in intensive practice using sentences as independent structures and within paragraphs and short essays. Prerequisite: Appropriate CPT score (RC68+, SS 68-87), instructor’s screening / 2 non-degree credits. Offered: Varies

Foundations in Writing
ENL050. This course is a one-semester course in which students develop and demonstrate knowledge of fundamental composing processes by composing paragraphs and essays, mastering basic sentence types and construction, and using standard American English grammar, usage and mechanics. Prerequisites:Appropriate score on the sentence skills assessment or a grade of C or better in ENL040 and appropriate score on the reading skills assessment or a grade of C or better in ENL010. Letter grade or Pass-Fail / 3 non-degree credits. Offered: Fall, Spring, Summer

Developing Vocabulary
ENL080. This mini-course is designed to expand the students’ general vocabulary and provide intensive practice in major skills of word attack through structural analysis and contextual clues. Prerequisite: None. Pass-Fail / 1 non-degree credit. Offered: Varies

Study Skills
ENL082. This mini-course is designed to help students understand more about their learning styles, improve their study skills and develop the self-discipline they need to be successful college students. This course focuses on the key skills essential to college success: listening, note taking, reading, writing and taking exams. Prerequisite: None. Pass-Fail / 1 non-degree credit. Offered: Varies

Basic Grammar Review
ENL083. This mini-course helps students understand the basic structure of English grammar and punctuation. This course focuses on key elements of grammar and punctuation. Prerequisite: None. Pass-Fail / 1 non-degree credit. Offered: Varies

English as a Second Language I
ESL010. Refer to English for Speakers of Other Languages.

Developmental Education - Math
Developmental education credits cannot be counted in the determination of the academic credits required for the A.A., A.A.S. or A.S. degrees.

Fundamental Arithmetic
MAT010. A mastery-based course in basic arithmetic operations and techniques designed to provide a thorough coverage of whole number arithmetic, fractions, decimals. Applications are used extensively to develop problem-solving techniques. The course focuses on basic computational skills, study skills, and background needed to succeed in subsequent courses. Students use the language of arithmetic to understand basic arithmetic vocabulary and to read/write simple quantitative statements. Prerequisite: None. Recommendation by basic skills assessment score. Letter grade or Pass-Fail / 3 non-degree credits. Offered: Fall, Spring, Summer
Prealgebra
MAT025. A fundamental course in prerequisite algebraic topics designed to help prepare students for the study of introductory algebra and its applications. Topics include: introduction to, operation with, and application of whole numbers, integers, fractions, and decimals; exponentiation, rooting, order of operations, ratios, rates, proportions, unit conversions, percents and their applications; an introduction to algebraic expressions and equations, applications of algebraic expressions and equations, geometry, and measurement. (5 contact hours) Prerequisite: MAT010 or satisfactory basic skills assessment score / 3 non-degree credits. Offered: Fall, Spring, Summer

Algebra for Non-STEM
MAT035. An algebra course designed to prepare students for college-level non-STEM math courses, address the quantitative needs of other disciplines, and develop quantitative reasoning skills for citizenship and workplace. Concepts are introduced through meaningful applications and in-class activities. Topics include proportional reasoning, scientific notation, creating and interpreting tables and graphs, solving linear and quadratic equations algebraically, solving systems of linear equations, linear and non-linear functions, and creating mathematical models of real-world problems using technology. (5 contact hours) Prerequisite: MAT025 or satisfactory basic skills assessment score / 3 non-degree credits. Offered: Fall, Spring, Summer

Intermediate Algebra
MAT040. A course in intermediate algebra designed to help prepare students for non-precalculus track mathematics. Topics include: factoring, rational expressions, rational exponents and roots, quadratic functions, variation, conic sections, relations and functions, exponential functions, and the development of word problem analysis and solution. Prerequisite: MAT030 or satisfactory basic skills assessment score. Letter grade or Pass-Fail / 3 non-degree credits. Offered: Fall, Spring, Summer

Elementary Algebra for STEM
MAT041. This course introduces the basic concepts in algebra necessary for students who plan to take intermediate algebra for STEM (Science, Technology, Engineering, and Mathematics). Topics include: properties and operations on real numbers, linear equations, interval notations, inequalities, absolute value, graphing, function notations, linear systems, exponents, polynomials, factoring, and word problem analysis. (4 contact hours) Prerequisite: MAT025 or satisfactory basic skills assessment score / 3 non-degree credits. Offered: Fall, Spring, Summer

Intermediate Algebra for STEM
MAT045. This developmental course prepares students for College Algebra, which is essential to the Natural Sciences, Technology, Engineering, and Mathematics curriculum. Topics include: graphing, polynomials, factoring, rational expressions, radical exponents, quadratic equations, variation, conic sections, functions, and logarithms. Development of problem solving skills is emphasized throughout the course. (5 contact hours) Prerequisite: (MAT030 or MAT041) or satisfactory basic skills assessment score / 3 non-degree credits. Offered: Fall, Spring, Summer

Early Childhood Education
The following ECE courses have been approved by the Massachusetts Office for Child Care Services.

Introduction to Early Childhood Education
ECE100. This course explores the role of the pre-school teacher and his/her responsibilities: forming a professional attitude, relating effectively with others, and managing successfully within the pre-school environment in daily learning and social situations. It includes observations of children in a child care setting. (12 hours observation/field work per semester) Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring

Introduction to Young Children with Special Needs
ECE105. This course focuses on children with special needs in early childhood settings. Based on a developmental perspective, course content includes the various areas of exceptionality in terms of causes, characteristics and general intervention, strategies for adapting the learning environment, modifying instruction and making curriculum accessible to all children through inclusion of those with special needs. Attention is given to State and Federal Legislation, the referral process, community resources, and effective ways to work with families. (6 hours observation/field work) Prerequisite: ECE100 or PSY201 / 3 credits. Offered: Fall, Spring

Child Growth and Development
ECE110. This course examines child development from conception to age 9 by considering the complex interaction between heredity and environmental factors. Children’s physical, social, emotional, and cognitive development are discussed, as well as the implications for developmentally appropriate practice. It includes the theories of Erikson, Piaget, and Vygotsky. Students are required to observe children in a child care setting. This course is restricted to applicants for State certification as a teacher of infants, toddlers, and/or preschool children. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Literacy and the Young Child
ECE115. This course describes how children acquire language and literacy, and how teachers can design classrooms and experiences to promote oral and written language development. The course stresses planning for individual children, including children with special needs and English language learners, as well as understanding the importance of the child’s family in language and literacy development. (6 hours observation/field work) Prerequisite: None / 3 credits. Offered: Fall, Spring

Teaching Infants and Toddlers
ECE200. This course emphasizes the development needs of infants and toddlers. Special focus includes planning curriculum for the very young, working with parents, special development needs of infants and toddlers, and planning their environment. (6 hours observation/field work) Prerequisite: PSY201 or ECE100 / 3 credits. Offered: Spring

Preschool Curriculum Planning
ECE201. This course explores curriculum planning for inclusive preschool settings. Participants develop a framework for planning, implementation, organization, and evaluation of activities in content areas such as art, math, science, music, language arts, and free play. The course emphasizes high-quality, developmentally appropriate practice, aligned with state and national standards and guidelines. (10 hours observation/field work) Prerequisite: ECE100 or PSY201 / 3 credits. Offered: Fall, Spring
Advanced Curriculum Development: Creative Experiences for Early Childhood Education
ECE202. Experiences at both the adult and child level designed to help students understand the creative process and appropriate ways of encouraging creativity in young children in inclusive settings. Students are required to try out their ideas with children. The emphasis is on art, as well as science, math, language arts, music, movement, and dramatic play. The course also explores the influence of international models, such as Reggio Emilia. (6 hours observation/field work) Prerequisite: ECE201 / 3 credits. Offered: Fall, Spring

Field Experience in Early Childhood Education
ECE206. This course gives students the opportunity to complete supervised field hours in a licensed and approved early childhood education setting. The course emphasizes high-quality developmentally appropriate practice, aligned with state and national standards and guidelines, including the National Association for the Education of Young Children (NAEYC) Professional Development Standards. Students must submit a CORI application prior to beginning the lab hours. (20 hours observation/field work, 5 class hours) Prerequisite: ECE100 and ECE200 or ECE201 / 1 credit; may be repeated for a maximum of 3 credits. Offered: Fall, Spring

Curriculum Strategies for Teaching Math and Science to Young Children
ECE211. Explore strategies, activities, and materials for teaching math and science to children in inclusive preschool and kindergarten settings. The course focuses on state and national standards and guidelines, as well as the constructivist approach to teaching science and math. (6 hours observation/field work) Prerequisite: PSY201 / 3 credits. Offered: Varies

Classroom Management: Skills and Strategies for Early Childhood Teachers
ECE221. This course explores classroom management strategies for inclusive toddler, preschool, and after-school settings; including creating a pro-social environment, resilience and risk factors, and using a positive, respectful approach to guiding children based on knowledge of child development. (6 hours observation/field work) Prerequisite: PSY201 or ECE110 / 3 credits. Offered: Fall, Spring

Practicum in Early Childhood Education Preschool
ECE230. This course provides the student with the opportunity to work directly with infants, toddlers, or preschool children in an inclusive early childhood education program. Coursework includes 150 hours (12 hours/week minimum) working in a Massachusetts licensed or NAEYC accredited child care facility, as well as a weekly seminar class. The practicum meets state requirements for 9 months child care experience. (150 field work hours; 14 class hours) Prerequisite: ECE105, ECE201, PSY201, (ECE200 or ECE202) & a minimum 2.0 GPA in ECE courses / 6 credits. Offered: Fall, Spring

Selected Topics in Early Childhood Education
ECE242. This course serves as a vehicle to either deepen students’ knowledge of subjects addressed in Early Childhood Education introductory courses or explore issues outside the traditional curriculum. Prerequisite: Any introductory-level social and/or behavioral science course / 1, 2, or 3 credits; may be repeated for credit; 3 credits maximum. Offered: Fall, Spring, Summer

Administration of Early Childhood Programs
ECE290. This course is designed to guide Early Childhood professionals in establishing or reinforcing existing programs for young children, to give a working knowledge of the concepts, ideas and methods necessary to administer these programs, including Mass. Dept. of Early Education and Care (EEC) regulations, budgets, and other financial issues, legal issues, family communication, and staff issues (hiring, firing, supervision, turnover, training). Meets EEC requirements for Director I. Note: Students should contact the Early Childhood Education Coordinator prior to registering for this course. Prerequisite: ECE201 or ECE202 or ECE221 or ECE230 or ECE291 / 3 credits. Offered: Fall

Leadership and Management in Early Childhood Education
ECE291. This course explores administrative issues relating to leadership in Early Childhood Education: management styles, staff development and supervision including teacher training, staff collegiality, retention and evaluation, as well as collaboration with parents and community. This course meets Director II specifications for EEC certification. Prerequisite: ECE110 or PSY201 / 2 credits. Offered: Fall, Spring

Earth Science

Introduction to Earth Science
ESC101. This is a one-semester, liberal arts and sciences course with a laboratory, designed to introduce the concept that planet Earth represents a dynamic, integrated system. The nature and characteristics of the atmosphere, lithosphere, hydrosphere, and biosphere are considered. (3 class hours / 2 laboratory hours) Prerequisite: (MAT030 or MAT035), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring

Fundamentals of Oceanography
ESC105. A general introduction to the scientific study of the ocean environment including the physical, chemical, geological and biological properties of the sea. Some field trips may be required. This course is intended for non-science majors. (3 class hours / 2 laboratory hours) Prerequisite: (MAT030 or MAT035), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer

Economics

Principles of Microeconomics
ECO118. Principles of microeconomics including functioning of competitive and non-competitive markets, price and wage theory, labor and agricultural economics, income distribution, and comparative economic systems. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer
Investments
ECO119. The course is intended to provide the student with an introductory fundamental understanding of the theoretical and practical concepts of investments. Areas that are covered are valuations of securities and debt instruments, risk/reward in decision making, construction of portfolios, and practical applications in investment strategies. The course enables the student to prepare for a career in finance, as well as to learn how to make rational decisions for personal investing. Prerequisite: (MAT030 or MAT035) / 3 credits. Offered: Varies

Emerging Markets Economics
ECO155. This interdisciplinary, hands-on course is designed to provide students with the understanding of the workings of the economy and the financial markets. It acquaints students with the tools and concepts of finance and macroeconomics and the ability to apply them to study the stock markets in an emerging economy. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Global Economics
ECO157. This course is designed to introduce students to contemporary global economic issues, as well as economic tools necessary to analyze them. Primary focus of the course addresses international trade while emphasizing the importance and practical applicability of related issues in international finance and international relations in day-to-day life. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

Environmental and Natural Resources Economics
ECO160. This course uses the basic tools of economic analysis to focus on issues pertaining to the natural environment and its resources. The topics covered include economic externalities, public goods, property rights, market failure, air and water pollution, solid waste management, sustainability concepts, the role of government, and benefit-cost analysis in social planning. Prerequisite: None / 3 credits. Offered: Fall

Education
Foundations of Education
EDU101. This course examines the philosophical, socio-cultural, historical, political, and developmental foundations of elementary education in the United States, as well as current issues and future trends. A 40-hour field-based experience in an elementary classroom (grade 1-6) is required. This course meets state Elementary Education Transfer Compact requirements. Students enrolling in this course must undergo a CORI (Criminal Offender Record Information) check. (2 class hours / 40 field hours) Prerequisite: ENL010 and ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall

Engineering
Intro to Engineering and Advanced Manufacturing
ENR101. Students are introduced to the world of engineering and manufacturing through activities that showcase how products are designed and built. Teams design, build, and test a weight-bearing structure, as well as reverse engineer a product to improve its design. Classroom and laboratory exercises are designed to expose the student to the different engineering and advanced manufacturing disciplines. Lab sessions provide hands-on exposure to the concepts discussed in the lecture sessions. This course does not require any prior engineering background. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a General Education elective. Offered: Fall

3D Mechanical Design I
ENR102. This is an introductory course for students interested in exploring careers as product engineers, architects, and designers. This course will prepare the student for the Certified SolidWorks Associate Exam (CSWA). The CSWA certification indicates a foundation in and apprentice knowledge of 3D CAD and engineering practices and principles. (3 class hours / 2 laboratory hours) Prerequisite: ENR101 / 4 credits. Offered: Spring

Circuit Theory & Analysis
ENR105. This course begins a student’s preparation for a career in electronics, renewable energy, and related fields; it is also well structured for those interested in expanding their background into the world of electronics. The course focus is on electrical circuit theory as well as an introduction to analog and digital signal processing. Laboratory experiments are used to reinforce basic concepts and develop laboratory skills, as well as to provide system-level understanding. This course does not require any prior engineering background. (3 class hours / 2 laboratory hours) Prerequisite: MAT041, ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Offered: Varies

Introduction to Robotics
ENR103. Students work in teams to design, build, program, and test increasingly complex electro-mechanical robots. The course teaches how robots move (locomotion and kinematics), how they sense (perception), and how they reason about their environment (planning). Lecture information is tied to lab experiments and sessions. Students are exposed to robotics related career options in the manufacturing, service, and medical industries. This course does not require any prior engineering background. (3 class hours / 2 laboratory hours) Prerequisite: MAT030, ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a General Education requirement. Offered: Fall, Spring

3D Mechanical Design II
ENR104. This is the second of a two course design series for students interested in exploring careers as product engineers, architects, and designers. This course will prepare the student for the Certified SolidWorks Associate Exam (CSWA). The CSWA certification indicates a foundation in and apprentice knowledge of 3D CAD and engineering practices and principles. (3 class hours / 2 laboratory hours) Prerequisite: ENR102 / 4 credits. Offered: Spring
Quality Manufacturing

ENR206. Quality manufacturing is about a philosophy and set of strategies for reducing waste as well as the time required to go from customer order to delivery of a product, with higher quality, less cost, space, and inventory. Learn the techniques for identifying and removing waste within the engineering and manufacturing process as well as methods for improving the "flow" or smoothness of work through a manufacturing environment. As waste is eliminated, quality improves while production time and cost are reduced. Prerequisite: ENR101 / 3 credits. Offered: Varies

Critical Reading and Thinking

ENL108. This course guides students to enhance their comprehension of written, spoken, and visual information by improving their critical thinking abilities. Through practicing habits of mind to strengthen analytical and reasoning skills, students learn to form well-supported arguments, draw thoughtful conclusions, make responsible decisions, and transfer acquired skills to their academic, professional, and personal life. Prerequisite: ENL020 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Technical Writing

ENL131. This course introduces students to technical and professional writing within a career setting. Students learn to write reports, instructions, summaries, e-mails, and memos using content and language appropriate to the reader. Students use technology tools to create document layout and design, and to report, interpret and organize statistical information and data. Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall
Selected Topics in Writing
ENL291. Selected Topics in Writing provides students the opportunity to explore and practice extensive writing within a writing specialty. Topics may include, among others, writing about photography, writing feature stories, writing commentary and opinion, writing about sports, writing poetry, or writing for children. The course is writing intensive. Specific content depends on the specialty chosen. Prerequisite: ENL102 / 3 credits; may be repeated once for credit. Offered: Varies

Peer Tutorial Practicum (Language and Literature)
ETU100. This is a training course for peer tutors. Through readings, journal responses, discussions, and practical experience, the course introduces students to the theories used in writing center work as well as the practical application of those theories. Tutors peer-critique, self-monitor, and tutor. The main objective is for students to become effective peer tutors and better writers. Prerequisite: Faculty recommendation and B+ or higher in a composition course / 1, 2 or 3 credits; may be repeated for credit; 3 credits maximum. Offered: Varies

Reading Tutorial Practicum
ETU101. In this two-semester course, students participate in a comprehensive training experience designed to thoroughly familiarize them with the tutoring process by means of videotape viewing, readings, discussion, and supervised practicum in the local elementary schools. (One credit (15 hrs): 6 classroom hours, 9 tutoring hours. Two credits (30 hrs): 6 classroom hours, 24 tutoring hours. Three credits (45 hrs): 6 classroom hours, 39 tutoring hours. Once a student has completed the six classroom hours of instruction in one semester, subsequent enrollment in the Reading Tutorial Practicum consists of 15, 30, or 45 supervised tutorial hours with no further formal classroom hours necessary. (Students may receive work-study money if they qualify.) Prerequisite: Faculty recommendation and B+ or higher in a composition course / 1, 2, or 3 credits; may be repeated for credit; 3 credits maximum. This is a two-semester course; credits are earned at the completion of the second semester. Offered: Fall-Spring

English for Speakers of Other Languages/English for Academic Purposes (ESOL/EAP)

English for Speakers of Other Languages I: Basic ESL010. This course introduces the literate non-native speaker of English to the four skills — reading, writing, speaking and understanding spoken English — to develop a basic command of Standard American English. Prerequisite: None / 4 non-degree credits. Offered: Fall, Spring

Academic Speaking and Listening for English Learners ESL100. This course is designed to help students who are learning English develop their listening and speaking skills for interactions in academic settings in an English-speaking college environment. Prerequisite: a CPT ESL listening test score of 40 or ESL010 or permission of instructor / 1 credit. Offered: Summer

English for Speakers of Other Languages II: Intermediate ESL102. This course is a continuation of ESL010 and provides the intermediate level non-native English speaker with instruction in reading, writing, speaking, and understanding spoken English. Emphasis is placed on developing the ability to read and discuss standard college English works; ability to recognize and produce correct patterns in sentences and paragraphs; and the ability to combine paragraphs into correct and coherent compositions. Prerequisite: ESL010 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

English for Speakers of Other Languages III: Advanced ESL201. This course is a continuation of ESL102 ( ESL II) and provides the advanced level non-native English speaker with instruction in reading, writing, speaking, and understanding standard American English. Emphasis is placed on developing the ability to read and write essays from college-level English works; ability to produce short essays and coherent compositions; and the ability to discuss materials written at the college level. Prerequisite: ESL102 or satisfactory basic skills assessment score / 3 credits. Offered Fall, Spring

Environmental Technology
Survey of Environmental Technology ENV101. A history of Environmental Technology is presented with emphasis on the current applications of the best available technology. The diverse environmental career opportunities are presented through field trips and guest speakers. Prerequisite: None / 3 credits. Offered: Fall, Spring

Quantitative Methods for Environmental Analysis ENV105. Designed for environmental technology students. Emphasis is on mathematical skills essential in scientific applications. Mathematical and statistical skills using a scientific calculator and computer are used to assess current environmental data sets. Conclusions are drawn based on these data assessments. Prerequisite: (MAT030 or MAT035) or satisfactory basic skills assessment score/ 3 credits. Offered: Fall

Environmental Chemistry ENV115. Discussion and study of the relationship between chemistry and contemporary environmental topics, including energy and the environment, air, soil, oil, solid and water pollution, and agricultural chemistry. Prerequisite: CHM106 / 3 credits. Offered: Fall

Introduction to Environmental Science ENV118. A study of environmental interactions and the impact of humans on the environment. The use of natural resources, including land, air, water, mineral and biological resources, is examined. Local and global examples are presented to enable students to better understand and evaluate contemporary environmental problems and the application of science to their solution. The corresponding laboratory component provides students with the practical experience of measuring, recording and interpreting environmental data. Interdisciplinary knowledge is used to understand environmental problems. (3 class hours/2 laboratory hours) Prerequisite: (MAT020 or MAT025), ENL020, and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring, Summer
The Process of Environmental Management and Decision-Making
ENV122. This course is an introduction to the process of environmental management and decision-making. It incorporates a modular approach to instructing students on issues of environmental protection throughout Cape Cod by focusing on wetlands, habitat, land-use planning, and conservation. Students explore watershed management and remediation, focusing on wastewater, water supply and storm water issues. Students also learn about environmental health and safety, focusing on prevention, compliance and environmental mediation, and zoning issues. Prerequisite: None / 3 credits. Offered: Fall, Spring

Coastal Ecology
ENV125. This is an introduction to coastal marine habitats, their species, and their ecological relationships. Students develop an understanding of the diversity of living things along the Cape Cod shoreline. Students also examine the wide diversity of habitats and their differences on the Cape. This course includes extensive lab and field work. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Coastal and Shelf Oceanography
ENV126. This course provides an overview to the oceanography of coastal and shelf systems. Throughout the course, the interdisciplinary aspects of oceanography are emphasized by covering many areas of study including biology, chemistry, geology, physics, history, and ecology. Students gain a basic understanding and appreciation of the effects of natural marine processes as well as consequences of human activity. Emphasis is on near-shore, shallow-water systems. Prerequisite: (MAT020 or MAT025) or satisfactory basic skills assessment score, ENV118, and ENV125 / 3 credits. Offered: Spring

Projects in Coastal Ecology
ENV127. This is an advanced class focusing on field studies of coastal marine habitats and their species composition. Students are involved in extensive field and lab surveys of several sites on Cape Cod. They examine both the biological and physical features of the coastal marine environment. Students work in small teams collecting physical (slope, particle size) and chemical data (pH, salinity, nitrates), plant and animal surveys, and recording data to analyze in the classroom. Prerequisite: ENV118 and ENV125 / 3 credits. Offered: Fall

Coastal Zone Management Laws and Regulations
ENV135. This introductory course covers the issues and regulations related to the coastal environment and its resources. The course uses an interdisciplinary approach that combines the scientific issues with their economic and social impact. Topics covered include nitrogen loading, fisheries management, aquaculture, wastewater impact, marine sanctuaries, public access, renewable energy projects, coastal flooding and erosion, and sustainable development. Current research is examined and several guest speakers will present. Prerequisite: ENV118 and ENV125 / 3 credits. Offered: Spring.

Introduction to Water: Concepts and Technologies
ENV140. A study of the physical and chemical properties, human uses, hydrology and ecology of groundwater, marine, estuarine, standing and flowing water systems, focusing on the science of current water-related issues and the methods and technologies used in their solution. The basic concepts of water quality monitoring, water supply, and wastewater technologies are emphasized. Some field trips may be required. Prerequisite: None / 3 credits. Offered: Fall

Industrial Wastewater Treatment
ENV142. This course provides an overview of the basic concepts of physical and chemical treatment, the function of related equipment and support systems and the environmental responsibilities required to safely and properly operate, maintain and manage an industrial wastewater treatment facility. This course covers typical industrial wastewater treatment processes; their purpose, their function, and their safe and efficient operation and prepares students to take a Massachusetts Industrial Wastewater Certification Exam (levels 1-4). Prerequisite: ENV118 and ENV140 / 3 credits. Offered: Varies - at Massachusetts Maritime Academy.

Wastewater Treatment Plant Operation
ENV145. The course covers the specific processes, problem-solving and operations in municipal wastewater treatment plants. Students are taught the operating parameters, data collection and analysis; the decision-making and process control of complex biological systems; and maintenance fundamentals required of Grade 4 Certification level operators. Prerequisite: ENV118 and ENV140 / 4 credits. Offered: Varies - at Massachusetts Maritime Academy.

Water Supply
ENV146. This course is a study of the principles and practice of water supply. This course provides an introduction to the physical and chemical principles of drinking water supply, the functioning of related equipment and support systems, and the responsibilities required to safely operate and maintain a water supply system. May be taken for 4 CEUs by current employees in the Waterworks industry. Prerequisite: ENV118 and ENV140 / 3 credits. Offered: Spring

Air Pollution Issues
ENV152. This course introduces the concepts and terms essential to understanding the issues behind the need for air pollution control. Basic atmospheric processes is presented as they affect delivery and dispersion of pollutants. The health effects of various pollutants and air toxins are presented in order to understand the purpose of regulations. The increasing concerns regarding indoor air quality are presented along with approaches to investigation and control. Prerequisite: ENV118 and CHM106 / 3 credits. Offered: Varies

Occupational Health and Safety (OSHA) through Hazardous Waste Management
ENV158. This course covers issues involved in the determination, treatment and reduction of hazardous wastes and the federal regulations regarding handling of hazardous wastes, the risks to society from hazardous wastes, and treatment techniques employed to mitigate their effects. The techniques covered include thermal, physio-chemical, biological and landfill disposal as well as the ways and means of reducing the generation of hazardous wastes. 40-hour (OSHA) HAZWOPER certification is awarded upon successful completion of this course. Prerequisite: None / 3 credits. Offered: Spring

Geographic Information Systems (GIS) I
ENV163. GIS I is a two-part course that focuses on the designing and building of a map using a relational database. The course will focus on the principles of data base management as related to cartography and GIS. The students will be provided with the fundamental topics for each subject in class. Prerequisite: (MAT020 or MAT025), ENL020, and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring
Geographic Information Systems (GIS) II

ENV164. The fourth and final course in the GIS certificate is designed to build on the concepts developed in ENV163. The course proceeds through the concepts of GIS in the lecture. Students choose a project and apply the concepts to the project as the course proceeds. Projects are chosen from many topics in GIS analysis: coastal zone management, hazardous materials management, environmental planning, urban planning and site assessment. Prerequisite: ENV118, ENV160 and ENV163 / 3 credits. Offered: Spring

Renewable Energy Sources

ENV170. This course provides an overview of renewable energies including solar energy, wind power, hydropower, biomass, hydrogen and fuel cells. Students learn the basic principles of each technology for new and existing construction. They study government regulations, analyze renewable energy systems, calculate savings, backup energy, and financing options. They investigate the potentials of renewable energy technologies to help solve environmental and economic problems with society. Prerequisite: (MAT020 or MAT025), ENL020, or ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring, Summer

Energy Efficiency and Conservation Methods

ENV171. This course provides students with the information to identify and explain all of the energy efficiency/conservation methods available for energy use reduction. Energy-consuming facilities, both domestic and commercial, are analyzed by the students for energy efficiency opportunities. The students calculate energy savings and environmental impacts for most energy efficiency methods in order to identify and assess energy conservation opportunities. In addition, the students demonstrate the appropriate usage of energy monitoring and measuring equipment commonly used by energy specialists and energy auditors. Prerequisite: (MAT020 or MAT025), ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall

Commercial Energy Audits

ENV172. This course offers an interactive approach for students to understand, compile, and conduct an energy audit for commercial facilities. It has been customized for the Cape Cod region and emphasizes regional issues. Prerequisite: ENV171 / 3 credits. Offered: Spring

Introduction to Solar Energy

ENV173. Students in this course gain an understanding of our solar energy resource and how it can be utilized for a variety of energy demand applications in residential, commercial, and municipal buildings. The benefits and limitations of various solar energy technologies that are commonly used to produce heat, hot water, and electricity are examined. Students learn how to properly site, size, design, and specify solar hot water and solar electric systems. Students also learn how to perform an economic and environmental analysis of proposed systems. Prerequisite: (MAT020 or MAT025), ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Spring

Introduction to Wind Energy

ENV177. This course provides an in-depth introduction to wind power as a sustainable form of energy. It examines the history, current applications, and future of wind power. Students gain a basic understanding of the fundamental science behind harnessing usable energy from the wind. A study of the process for siting, developing, constructing, operating, and maintaining wind energy projects of different scales - from home and small commercial to municipal and utility scale. Prerequisite: (MAT020 or MAT025), ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Spring

Photovoltaic Installation

ENV178. This course introduces students to the fundamentals of photovoltaic (PV) system installation and maintenance procedures. The class is divided between classroom based lectures/activities and project based activities involving the installation of a residential scale PV system. Students who complete this course are eligible to take the North American Board of Certified Energy Practitioners’ Entry Level Certificate of Knowledge of PV Systems Examination (for an additional fee). Prerequisite: ENV173 / 3 credits. Offered: Varies

Solar Thermal Installation

ENV179. This course introduces students to the fundamentals of solar thermal system installation and maintenance procedures. The class is divided between classroom-based lectures/activities and project-based activities that involve the installation of a residential scale solar thermal system. This course is approved by the North American Board of Certified Energy Practitioners and counts towards the training requirements for becoming a certified Solar Thermal System Installer (additional field experience is required to be eligible for certification). Prerequisite: ENV173 / 3 credits. Offered: Varies

Small Wind Installation

ENV180. This course introduces students to the fundamentals of small wind-electric system installation and maintenance procedures. The class is divided between classroom-based lectures/activities and project-based activities that involve the installation of a residential-scale wind system. This course is based in part on the Task Analysis for the North American Board of Certified Energy Practitioners Small Wind Energy Systems Installer Certification. Prerequisite: ENV177 / 3 credits. Offered: Varies

Introduction to Green Building

ENV181. This course provides a framework for making practical design and construction decisions that are environmentally responsible by focusing on residential design for Cape Cod, including new construction and renovations/additions. Topics include site orientation, building science fundamentals, passive solar design, water and energy efficiency, healthy indoor environments, green materials and resources, and certification programs in the industry. Students learn to prioritize numerous types of green building strategies by examining case studies and field experiences. Prerequisite: (MAT020 or MAT025), ENL020, and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Varies

Environmental Instrumentation

ENV201. This course exposes the student to a variety of analytical techniques and instruments utilized in environmental chemical analysis. It is designed to couple theory of equipment operation with a basic understanding of the chemical principles involved. The laboratory time is divided between practical hands-on benchwork and field experiences. (1 class hour / 4 laboratory hours) Prerequisite: ENV105 and ENV115 / 4 credits. Offered: Spring

Environmental Technology Internship/Cooperative Experience

ENV260. This course involves a range of hours of monitored field experience that is consistent with the student's career goals. Students keep journals and write proscribed “analysis” papers as they progress during the course of the semester. Time commitment is based on the number of credits, 70 hours per credit. Prerequisite: ENV118 or ENV170 and permission of instructor / 1, 2, 3, or 4 credits. Offered: Fall, Spring, Summer
**Film**

**Introduction to Film**

*COM20.* (formerly COM220) This course provides the student with an appreciation of the film experience. Particular attention is given to important techniques, theories, and genres which influenced the technical and aesthetic development of the medium. Concepts are illustrated through the viewing of classic American and international cinema. (4 class hours) **Prerequisite:** ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. **Offered:** Fall

**The American Film**

*COM21.* (formerly COM121) This course provides the student with an appreciation of the film experience through a survey of American film from historical, aesthetic, economic, technological, critical, and appreciative viewpoints. Particular attention is given to important techniques, theories, and genres. Concepts are illustrated through viewing classic American cinema. (4 class hours) **Prerequisite:** ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. **Offered:** Fall, Spring

**International Cinema**

*COM22.* This course is a survey of the development of international cinema from historical, aesthetic, economic, technological, critical, and appreciative viewpoints. Particular attention is given to important techniques, theories, and genres. (4 class hours) **Prerequisite:** ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. **Offered:** Spring

**Documentary Film**

*COM24.* Filmmaker John Grierson defined documentaries as “the creative treatment of reality.” This course looks at the history and development of the documentary film, with a particular focus on the varying notions of truth, art, reality. Students in this class learn how to look at documentaries with a critical eye by not only studying the subject, but also by participating directly in the making of an actual documentary video. **Prerequisite:** ENL101 / 3 credits. **Offered:** Spring

**Fire Science**

**Fire Fighting Tactics and Strategy**

*FSC103.* This course is concerned with basic firefighting tactics and strategy; methods of attack; preplanning of fire problems including necessary equipment and manpower. Some fire problems are presented for analysis and study, consistent with accepted practices from authoritative sources. The concepts of I.C.S. and R.I.C. are discussed throughout the class. **Prerequisite:** FSC150 or FSC100 / 3 credits. **Offered:** Varies

**Hazardous Materials**

*FSC105.* This course reviews the fundamental physical and chemical principles which govern the behavior of hazardous materials. Specifically, the course deals with identifying hazardous materials and the hazards of solids, dusts, water reactive materials, liquids, gases, toxic materials, plastics, corrosives, oxidizing agents, explosives, radioactivity, LP gases, cryogenics, general hazards and electricity. Handling, transporting, storage and recommended firefighting practices within extreme fire hazard areas are discussed. Laboratory demonstrations illustrate and supplement the class work. **Prerequisite:** CHM106 or (CHM101 or CHM151) or CHM109 / 3 credits. **Offered:** Varies

**Hydraulics for the Fire Service**

*FSC107.* This course is concerned with the fundamentals of hydraulics and fluid mechanics as they relate to the firefighter and individuals involved in Fire Protection. Subjects to be studied include: principles of fluid statics, fluid motion, water supply testing, fire pump operation and fire suppression systems. **Prerequisite:** FSC150 or FSC100 and (MAT030 or MAT035) or satisfactory basic skills assessment score / 3 credits. **Offered:** Varies

**Fire Investigation and Evidence**

*FSC108.* This course covers the methods used in determining the causes and circumstances of fire. The collecting and preserving of evidence are covered; as well as the preparation of evidence for court. **Prerequisite:** FSC150 or FSC100 / 3 credits. **Offered:** Varies

**Fire Department Management and Planning**

*FSC109.* An exploration of organization principles with emphasis on fire department organization; a study of history, types, methods, and principles of fire department organization; insurance and fire defense, personnel and equipment, water supply, departmental functions, and administrative problems. **Prerequisite:** FSC114 / 3 credits. **Offered:** Varies

**Fire Codes and Ordinances**

*FSC110.* This course reviews the codes which influence the field of fire prevention including the fire prevention regulations of the Commonwealth of Massachusetts (527 CMR). Also included are Chapters 48, 143 and 148 of the General Laws of the Commonwealth, as well as the Massachusetts Building Code, and the codes of the National Fire Protection Association. **Prerequisite:** None / 3 credits. **Offered:** Varies

**Fire Company Management**

*FSC114.* A study of scope and functions of the fire company officer in the fire department. Topics discussed include: the role of the fire service, departmental procedures, administrative and management procedures, training, public relations, tactics and strategy, and fire prevention. **Prerequisite:** FSC150 or FSC100 / 3 credits. **Offered:** Varies

**Introduction to Technical Rescue**

*FSC115.* The student receives instruction in the basic concepts of technical rescue. An explanation of related equipment, regulations and procedures to supervise and conduct technical rescue operations are explained. **Prerequisite:** None / 3 credits. **Offered:** Varies

**Introduction to Incident Management**

*FSC120.* This course introduces the philosophy of emergency scene management, the National Incident Management System (N.I.M.S.), planning and preparation in anticipation of a likely emergency, and management of specific types of emergency situations including a review of lessons learned from historical incidents. This course is intended to acquaint students with the basic management tools needed to operate as a command officer at the scene of an emergency or disaster. **Prerequisite:** ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. **Offered:** Varies

**Shipboard Firefighting**

*FSC130.* This course is designed to give the students an understanding of the maritime industry by providing information on maritime terminology, ship construction, firefighting shipboard fire protection systems, and shipboard firefighting. The course focuses on the necessary tactics and strategies needed to deal with a maritime fire as well as the various agencies that can provide assistance in dealing with a shipboard fire. Students are given a tour of a ship, during which time the systems are explained and the shipboard firefighting problems discussed. **Prerequisite:** None / 3 credits. **Offered:** Varies
Principles of Emergency Services
FSC150. (replaces FSC100) This course provides an overview of fire protection and emergency services; career opportunities in fire protection 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, fire strategy, and tactics; and life safety initiatives. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Varies

Fire Prevention
FSC151. (replaces FSC101) This course provides fundamental knowledge relating to the field of the fire prevention. Topics include history and philosophy of fire prevention, organizations and operation of a fire prevention bureau, use and application of codes and standards, plan review, fire inspections, fire and life safety education, and fire investigation. Co-requisite: FSC150 or FSC100/ 3 credits. Offered: Varies

Fire Protection Systems
FSC152. (replaces FSC102) 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. Co-requisite: FSC150 or FSC 100 / 3 credits. Offered: Varies

Building Construction for the Fire Protection
FSC153. (replaces FSC104) This course provides the components of building construction related to fire fighters and life safety. The elements of construction design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. Co-requisite: FSC150 or FSC100/3 credits. Offered: Varies

Principles of Fire and Emergency Services Safety and Survival
FSC154. This course introduces the basic principles and history related to the national firefighter life safety initiatives focusing on the need for cultural and behavioral change throughout the emergency services. Prerequisite: FSC150 or FSC100 / 3 credits. Offered: Varies

Fire Behavior and Combustion
FSC155. This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. Co-requisite: FSC150 or FSC100 / 3 credits. Offered: Varies

Special Topics in Fire Science
FSC200. This course serves to deepen student’s knowledge of subjects in Fire Science introductory courses and explore timely issues outside the established curriculum. Prerequisite: Any introductory-level Fire Science course / 1 credit; may be repeated for a maximum of 3 credits. Offered: Varies

Fitness
Also see Health Sciences and Nursing.

Decision Making in Health
FIT105. The course examines information, concepts and knowledge for influencing changes in health-related behavior so that the student may make decisions that will affect him/her personally throughout the life cycle. The course includes in-depth study and discussions in the areas of health as it affects people psychologically, psychologically, and sociologically. It assists the students in evaluating their beliefs, attitudes, and values toward their own personal health in a rapidly changing environment. Prerequisite: None / 3 credits. Offered: Varies

Fitness and Sports Nutrition
FIT115. This course provides information about the relationship between nutrition and fitness/sports performance. It is of interest to professionals who advise athletes and to the general population interested in improving health and physical performance through sound nutritional practices. Topic examples include carbohydrate metabolism, weight management, body composition assessment, eating disorders, ergogenic aids, and pre-/post- and competition meals. Prerequisite: None / 3 credits. Offered: Varies

Personal Fitness
FIT117. Students assess their current level of health-related fitness and develop a physiologically sound program of physical activity to meet their needs and interests. The course emphasizes the concept of physical fitness as a lifetime commitment and stresses the acquisition of specific knowledge, skill, and motivation necessary to meet this commitment. Prerequisite: None / 3 credits. Offered: Fall, Spring

Lifeguard Training (LGT)
FIT133. The course affords students the opportunity to develop the knowledge and skills associated with safety, supervision and rescue in an aquatic environment. Emphasis is placed on the development of skills designed to save the life of another in an aquatic environment. Those successfully completing the course will be certified by the American Red Cross in Lifeguard Training (R94) (including First Aid certification), CPR for the Professional Rescuer and Waterfront Lifeguarding. LGT Certification indicates the minimum skills training for a person to qualify as a non-surf lifeguard. Students must be able to pass a swimming proficiency test- completed at 2nd class meeting. Prerequisite: None / 3 credits. Offered: Fall, Spring

Survey of Lifetime Activities
FIT142. The course surveys the fundamental skills, specific knowledge, and relative values of selected leisure sports. The course focuses on the examination of personal skills, interests, and needs as criteria for the selection of and participation in leisure sports and the constructive use of leisure time. Class format includes an introduction to participation in selected leisure sports, discussion of class activities and related leisure concepts, and small group and individual assignments. Prerequisite: None / 3 credits. Offered: Varies.

Pilates Mat I
FIT164. Pilates Mat I is designed to expose the student to the Pilates method of body conditioning with a unique system of stretching and strengthening exercises developed over 90 years ago by Joseph Pilates. Pilates strengthens and tones muscle, increases flexibility, and develops better posture. The student learns the basic beginning sequence of exercises and gains an understanding of muscle groups as they relate to Pilates. Prerequisite: None / 1 credit. Offered: Fall, Spring

Kripalu/Hatha Yoga I
FIT167. A five-week course designed to expose the student to basic yoga philosophy, breathing exercises, simple postures and relaxation techniques. The student also learns about the major muscles and bones, as well as the circulatory and nervous system of the human body in relation to yoga. Prerequisite: None / 1 credit. Offered: Fall, Spring
Kripalu/Hatha Yoga II
FIT168. A five-week course designed for the student who has completed FIT167. New postures are introduced, and postures are held for longer periods of time. Additional breathing techniques are incorporated. Students develop a deeper understanding of how the body functions, and how yoga affects these functions. Relaxation techniques are further developed. Prerequisite: FIT167 / 1 credit. Offered: Fall, Spring

Adventure Concepts
FIT170. This course explores the use of the adventure paradigm (model) as a means of promoting effective intrapersonal and interpersonal behavior. Using an interdisciplinary approach, the course examines the relationship of risk, goal setting, and skill development/application to personal and social growth. Adventure activities such as rappelling, group problem solving tasks, and individual initiative projects are used to provide a common experiential base for the discussion of course concepts. Prerequisite: None / 3 credits. Offered: Fall, Spring

French
Also see International Studies.

Conversational French
FRN100. This conversational French course is designed to introduce the non-native speaker of French to the four basic skills necessary to developing a working knowledge of French: understanding, speaking, reading, and writing. The emphasis is on speaking and understanding spoken French. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Varies

Elementary French I
FRN101. This is the first semester of a two-semester college elementary French sequence. It is for beginning students of French. The text and ancillary materials provide a thorough four skills approach: speaking, reading, writing, and understanding spoken French. The purpose of this course is to provide students a sound basis for learning French as it is spoken and written today. (5 class hours) Prerequisite: FRN101 or permission of the instructor / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Intermediate French I
FRN201. This course is for students who have completed one year of Elementary French or two years of high school French. Students read, discuss, and write about francophone culture and language in French. Prerequisite: FRN102 or 2-4 years of high school French / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Intermediate French II
FRN202. Intermediate French II is for students who have completed Intermediate French I or three to four years of high school French. Students read, discuss and write about francophone culture and language in French. (5 class hours) Prerequisite: FRN201 or 3-4 years of high school French / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Advanced French: Survey of French Literature I
FRN301. This course is a survey of selected French literary works. These selections serve as a basis for classroom discussion and writing assignments. Conversation and composition polish and develop students' abilities in all four language skills: reading, writing, listening, and speaking. Prerequisite: FRN202 / 3 credits. Offered: Fall

Advanced French: Survey of French Literature II
FRN302. This course is a survey of selected contemporary French literary works. These selections serve as a basis for classroom discussion and writing assignments. Conversation and composition polish and develop students' abilities in all four language skills: reading, writing, listening, and speaking. Prerequisite: FRN202 / 3 credits. Offered: Spring

Freshman Seminar
FSM101. This course increases students' success in college by assisting them in obtaining skills and the knowledge of resources necessary to reach their educational goals. Prerequisite: None. Letter grade or Pass-Fail / 1 credit. Offered: Fall, Spring

Geography

American Geography
GEO101. Comprehensive, systematic study of population, natural resources, and potentialities of the United States and Canada. Evaluates these nations against a background of world economics and political affairs. Prerequisite: None; ENL020 and ENL050 or satisfactory basic skills assessment scores recommended / 3 credits. Offered: Varies

Geography: Culture and Environment
GEO104. This course examines the differences and spatial interactions of various cultures, technologies, and regions. The economic and social possibilities of local, extra-local, and regional environments are viewed from the perspective of their resident human populations. The concept of a world region is introduced and used as framework by which to understand the contemporary issues associated with cultural geography. The basic concepts of cultural geography are introduced and the analytical tools of cultural geography are reviewed. The successful student is conversant with the basic tools and concepts of cultural geography, the analytical perspectives of the discipline, as well as the broad cultural patterns of the cultural regions of the world. Prerequisite: None; ENL020 and ENL050 or satisfactory basic skills assessment scores recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Varies

German

Conversational German
GER100. This basic conversational German course is designed to introduce the non-native speaker of German to the four basic skills necessary to develop a working knowledge of German: understanding, speaking, reading, and writing. The emphasis is on speaking and understanding spoken German. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring
Elementary German I
GER101. The first semester of a two-semester college elementary German sequence for beginning students of German. The text and ancillary materials provide a thorough four-skills approach: speaking, reading, writing, and understanding spoken German. This course is not intended for students whose native language is German. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Elementary German II
GER102. This is the second semester of a two-semester college Elementary German sequence. It is for beginning students of German. The text and ancillary materials provide a thorough four-skills approach: speaking, reading, writing, and understanding spoken German. Prerequisite: GER101 / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Austria: Vienna & Salzburg
GER126. This one-week study tour emphasizes the history, art, and culture of Austria in the early 1900s. Students come to understand the political and artistic dynamics of a world caught between the traditions and power of an old empire and the beginnings of the industrial era, which brought forth a new generation of artists who celebrated the old empire and the beginnings of the industrial era. Students must participate in all study tour activities. Prerequisite: None / 3 credits. Offered: Varies

Intermediate German I
GER201. This course is for students who have completed one year of elementary college German or two to four years of high school German. Students read, discuss, and write about German culture and language in German. Prerequisite: GER102 or 2-4 years of high school German / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Intermediate German II
GER202. This course is for students who have completed Intermediate German I or three to four years of high school German. Students read, discuss and write about Germanic culture and language in German. Students must have college-level reading and writing skills in their native language. Students are expected to be able to greet and respond to greeting and introductions, engage in conversation, express likes, dislikes and needs, describe and compare, narrate a short anecdote using past, present, and future tenses, write simple paragraphs, and read and understand some details and important ideas in authentic texts. Prerequisite: GER201 / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Health Sciences
Also see Fitness and Nursing.

Advanced Concepts for Nursing Assistants
CNA122. (formerly HEA112) This course is designed to teach advanced skills to nursing assistants and home health aides working with more acutely ill patients in Medicare (sub-acute) units in nursing homes, in home care, and in hospitals. Prerequisite: CNA117 or permission of instructor / 1 credit. Offered: Varies

Pediatrics and Parenting
CNA128. (formerly HEA128) This course is designed to prepare nursing assistants/home health aides to care for children in community settings. Topics include health promotion, parenting, hospice care, and care of the sick and disabled child and adolescent. A holistic approach to families is used to assist in meeting the physical, psychological, emotional, and spiritual needs of children and their careproviders. Prerequisite: CNA117 or permission of instructor / 3 credits. Offered: Varies

EKG Technician
DTC102. This 30-hour course prepares the student to function as an EKG technician and assist with Holter monitoring and stress testing. Upon successful completion of this course, the student is eligible to take the national certification exam for EKG technicians. Prerequisite: None / 2 credits. Offered: Fall, Spring

Fundamentals of Phlebotomy
DTC104. This course is a combination of lecture and lab which presents the theory, application and procedures of phlebotomy skills. The student obtains knowledge of specific anatomy, safety, quality control, Point of Care Testing, and processing of specimens. Applicants must attend an information session and advising session prior to admission. Prerequisite: None / 6 credits. Offered: Fall, Spring

Phlebotomy Practicum
DTC204. A course combined with completion of DTC104 prepares the student to function as a phlebotomist and meets the eligibility criteria of the American Society of Clinical Pathologists (ASCP) for certification. This course is a combination of 120 hours of internship with 3 hours scheduled on-campus seminars. Prerequisite: DTC104 with passing grade of 75% or better, successful demonstration of skill proficiency and recommendation of faculty / 2 credits. Offered: Fall, Spring

Emergency Medical Technician: EMT
EMS101. This course is designed to train participants to work with existing agencies that provide emergency medical services. Included in these services are first-aid procedures, operation of emergency equipment, and knowledge of communications systems associated with emergency and rescue operations. Students gain knowledge and skills relating to medical and emergency technology within classroom and laboratory settings. The students are eligible for State and National certification upon successful completion of course and state examination. Prerequisite: None / 5 credits. Offered: Fall, Spring

Advanced Pre-Hospital Training Program: Paramedic
EMS201. This course covers the roles and responsibilities of the EMT/Paramedic including history and physical assessment, pathophysiology and management of shock, cardiac, respiratory, neurological, and abdominal emergencies, and overview of emergency medical services communication systems. Students perform skills under the supervision of a clinical preceptor in a variety of clinical sites, including critical care units, operating rooms, emergency departments, and renal dialysis departments. Applicants must be currently certified as an EMT. Applicants are required to attend an information session. Special tuition is charged. Prerequisite: ENL020 and (MAT020 or MAT025) or satisfactory basic skills assessment scores / 7 credits. Offered: Fall
Advanced Pre-Hospital Training Program:
Paramedic II / Paramedic Clinical Field Experience
EMS202/602. Assessment and management of emergencies and obstetrics, gynecology, trauma, pediatrics, adolescent medicine, and geriatrics. Students perform skills under the supervision of a clinical preceptor in a variety of clinical sites, including critical care units, operating rooms, emergency departments, pediatric intensive care units, labor and delivery rooms, and psychiatric units. Students respond to emergency medical service calls and perform paramedic skills as part of an advanced life support ambulance crew under the supervision of a field preceptor. Special tuition is charged. Prerequisite: EMS201 / 8 credits. Offered: Spring

Stress Management for Optimal Health
HEA120. A comprehensive approach to the subject of stress and its effects on health and disease. Stress concepts are addressed within a holistic framework appreciating the physiological, psychological, emotional, social, and spiritual aspects of individuals. Common physical, intrapersonal, interpersonal, environmental, and global stressors are assessed. Current stress interventions are introduced. Emphasis is on integrating knowledge from several disciplines to provide an informed scientific foundation for stress management. Prerequisite: None; PSY101 recommended / 3 credits. Offered: Fall, Spring

Standard First Aid and Basic Life Support
(Cardiopulmonary Resuscitation)
HEA130. (formerly FIT130) The course provides participants with a basic knowledge of First Aid skills for treatment of illness or injury, as well as instruction in Basic Life Support for the healthcare provider (CPR) according to the guidelines of the American Heart Association (AHA). Upon successful completion of the course, students receive AHA certification in both Standard First Aid and CPR. Prerequisite: None / 1 credit. Offered: Fall, Spring

Advanced First Aid & Emergency Care/Basic Life Support/First Responder
HEA132. (formerly FIT132) The course provides comprehensive and advanced coverage of first aid skills for treatment of illness or injury, as well as Basic Life Support/Healthcare Provider (BLS/HCP) for the professional rescuer. Upon successful completion of the course, the participants receive certification as a First Responder in accordance with Massachusetts General Law chapter 111: Section 201 and Basic Life Support for the Healthcare Provider in accordance with the standards established by the Committee on Cardiopulmonary Resuscitation and Emergency Cardiac Care of the American Heart Association. Prerequisite: None / 3 credits. Offered: Fall, Spring

Essential Skills for the Health Professional
HEA134. In this introductory course, students explore basic concepts surrounding career opportunities in the health professions while learning about and understanding the basic skills required for entry into a health career. Understanding one's role in a health career, making effective decisions to manage a personal career plan, assessing personal qualifications, interests, knowledge, values and skills necessary to succeed in a health career are key to this course. The student develops essential work habits desired by employers in the health care field. Prerequisite: ENL020 & MAT035 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Introduction to Complimentary Healing Practices
HEA135. (formerly MTC135) In an experiential teaching/learning format, this course provides an educational learning experience of complementary and alternative medicine (CAM) health practices now being utilized by a growing number of healthcare consumers. Presentations and demonstrations by practitioners in areas such as herbal medicine, traditional Chinese medicine/acupuncture, chiropractic, and massage therapy, are an integral part of the course. The history and development of selected CAM practices and systems, how they work, and their relationship to traditional Western medicine are discussed. The concept of “wellness” versus disease treatment, and the mind-body connection explored. Prerequisite: None / 3 credits. Offered: Fall, Spring, Summer

Pharmacology
HEA200. This course addresses the interaction between substances used as drugs and human body systems. Knowledge of natural sciences, pharmacokinetics, and pharmacodynamics between chemical entities and receptors, and pharmacological concepts of administration, dosage and patient safety are stressed. Emphasis is placed upon mechanisms of action, side effects, and drug interactions. Prerequisite: Acceptance into the Nursing program; Co-requisite: NUR107 and (BIO108 or BIO252) or permission of the instructor / 3 credits. Offered: Fall, Spring, Summer

Nutrition
HEA201. Principles of nutrition are discussed in detail and related to many different settings. Topics of discussion include: My Pyramid; nutritional labeling; the (6) nutrients and how each is ingested, digested, metabolized, and transported throughout the human body; nutritional counseling of many different types of patients, such as the cancer patient, geriatric patient, infant, child and adolescent; and food safety. An introductory course for individuals interested in pursuing a Dietetics major. Prerequisite: CHM109 and (BIO107 or BIO251) / 3 credits. Offered: Fall, Spring, Summer

Essentials of Pharmacology for Allied Health Professionals
HEA202. This course provides instruction in concepts and application of pharmacological principles. The focus of the course is on drug classifications, principles and procedures of medication administration, mathematical systems and conversions, calculation of drug problems and medical and legal responsibilities of the allied health professional. Prerequisite: BIO105 & BIT103 / 2 credits. Offered: Spring

Fundamentals of Medical Assisting
MAC101. This introductory course for the Medical Assisting certificate is designed to bring together a learning community of students to explore the role of the professional medical assistant, the health care team, the history of the profession, and credentialing requirements. They learn to obtain patient histories, vital signs, principles of infection control, etc. Prior to admission to this course the student must attend an information session and an advising session. Prerequisite: BIT103 and BIO109 / 3 credits. Offered: Fall
Medical Assisting Clinical Procedures and Clinical Practicum
MAC204. This seven-credit course is designed to teach basic medical assisting clinical skills and provide practical experience in a clinical setting to complement the clinical and office skills required by the credentialing agency (Commission for Accreditation of Allied Health Education Programs- CAAHEP). The course is divided into lecture, laboratory practice, clinical practicum, and seminar. Prerequisite: a grade of C or higher in MAC101; co-requisite: BIT203 / 7 credits. Offered: Spring

History

U.S. History to 1865
HIS103. This introductory survey of United States history from the European invasion of North America through the mid-19th Century period of the Civil War and Reconstruction addresses major social, cultural, political, and economic developments with emphasis on their relation to contemporary United States institutions and trends. Prerequisite: None; ENL020 and ENL050 strongly recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

U.S. History since 1865
HIS104. This introductory survey of United States history from Reconstruction to the present addresses major social, cultural, political, and economic developments with emphasis on their relation to contemporary United States institutions and trends. Prerequisite: None; ENL020 and ENL050 strongly recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

The U. S. since 1945
HIS108. This course is a contemporary history of the United States (since World War II) at home and abroad. It provides an in-depth investigation of the events, developments, personalities, and meanings of the changes of the past years. Prerequisite: None; ENL020 and ENL050 or satisfactory basic skills assessment scores strongly recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

World History I
HIS119. This survey course explores the economic, political, cultural, and social developments in world history from the rise of civilization to 1500 Current Era (CE) in Asia, Africa, Europe, Oceania, the Middle East, and the Americas. The course highlights issues in geography, trade, religious and cultural movements, and social and political change that influenced the historical evolution of various world societies and their interrelationships within a global context. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a Behavioral and Social Sciences general education requirement. Offered: Fall, Spring, Summer

World History II
HIS120. This survey course explores the economic, political, cultural, and social developments in world history from 1500 Current Era (CE) to the present in Asia, Africa, Europe, Oceania, the Middle East, and the Americas. The course highlights issues of geography, trade, religious and cultural movements, and social and political change that influenced the historical evolution of various world societies and their interrelationships within a global context. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a Behavioral and Social Sciences general education requirement. Offered: Fall, Spring

History of China
HIS141. The course is a survey of Chinese history and culture beginning with the first Chinese Dynasty through the Communist Revolution in the 20th Century. Students examine the historical, political, economic, and social factors that eventually developed modern China. Upon completion of the course, students have a better understanding of how the Chinese view the world, especially the United States and the American people. Prerequisite: None; ENL020 and ENL050 strongly recommended / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

European History I
HIS160. (formerly HIS157) This course provides a general overview of major topics of European History from ancient times up to 1600 Current Era (CE). Students focus on cultural, religious, political, and economic developments that formed the basis of modern European culture and society and influenced the Americas and other regions. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

European History II
HIS162. (formerly HIS158) This course provides a general overview of European History from 1600 to the present. Students focus on cultural, religious, political, and economic developments that formed the basis of modern European culture and influenced the United States and other nations. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

Ancient History
HIS206. This survey course examines the development of the earliest civilizations of the Near East and Europe, including Mesopotamia, Egypt, Greece and Rome, including their major historical periods; cultural contributions; and social, political, and economic organization. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Summer

Medieval History
HIS207. Students survey the elements of medieval history from the fall of the Roman Empire in the West to the coming of the Renaissance. This course emphasizes the development of the medieval church, the growth of feudalism and its origins, the social and political ideas which continue to affect our civilization. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

Women in United States History
HIS215. This course is a survey of the roles and status of women in American society from colonial times to the present. The contributions of women to the development of the United States are examined with particular emphasis upon multiculturalism, legal status, economic opportunities, reproduction and family life. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

History of Japan
HIS216. This course is a survey of the history of Japan from ancient times up to the present. The course explores the different periods and transformations of Japanese society and culture, focusing on art, literature, religion, government, relations with China, Korea and the West, World War II and Japanese imperialism, the post-war economic boom, and the current global popularity of Japanese pop culture. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer
The Civil War
HIS217. This course addresses a crucial era in United States history: the Civil War. The class covers three major areas of historical inquiry: a) the events that led up to the war including sectionalism and slavery; b) the war itself including an overview of military events, the political and economic impact of war, and the social history of war; and c) Reconstruction, the process by which the nation sought to rebuild after the war. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Summer

History of the Middle East
HIS227. This course explores the development and interactions of cultures in the region now referred to as the “Middle East” – Southwest Asia – and adjacent regions that today share many aspects of culture. The course covers the early civilizations of Mesopotamia, travel through the rise (and fall) of empires that spread through the region (such as the Persian, Islamic, Mongol, Ottoman and Safavid empires), explore the period of direct and indirect Western (European and American) intervention, the rise of fundamentalism and the Arab Spring. Prerequisite: ENL101 and a 100-level history course / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

Women in European History
HIS228. This course explores women’s real and perceived roles and status in society from Ancient Greece to modern times. The course focuses on women’s roles in the development of European history. Students explore how history has impacted the lives of women of different social and cultural groups, and how women have impacted history. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall

Selected Topics in History
HIS241. This course serves as a vehicle to either deepen students’ knowledge of subjects addressed in History introductory courses or explore issues outside the traditional curriculum. Prerequisite: Any introductory-level History course / 3 credits; may be repeated once for credit. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Varies

Vietnam: America’s Longest War
HIS253. This course is a historical study of the U.S. involvement in the Vietnam War. Students gain a basic understanding of America’s involvement in the Vietnam War, its impact on those who served, as well as the impact on current U.S. thinking. Guest speakers who participated in the war provide personal insight. Prerequisite: ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

African-American History
HIS258. This survey course addresses African Americans in United States history, thought, and culture from slavery to the present. Topics addressed include slavery and emancipation, civil rights, religion, arts and literature, and gender. Prerequisite: HIS103 or HIS104 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Varies

Homeland Security
Introduction to Homeland Security
HSC101. This course is a comparative examination of the relationship of the criminal justice system to business and industrial security, with a focus on the role private security plays in Homeland Security. The course closely examines the role of private security in protecting people and assets. Prerequisite: ENL050 or satisfactory basis skills assessment score / 3 credits. Offered: Fall

Maritime Security
HSC102. This course provides an examination of regulations, vulnerabilities, and threats relating to commercial maritime transportation, including cargo and seaport security, as well as issues of privacy, stowaways, terrorism, and international disputes. Prerequisite: ENL050 or satisfactory basic skills assessment Co-requirement: HSC101 / 3 credits. Offered: Fall

Management of Incidents
HSC103. This course is a basic incident management course that could apply aspects of local and state governments, but concentrates on the law enforcement aspect. The course examines overall management techniques, coordination of rescue efforts, National Incident Management System (NIMS) and the Unified Command System. Prerequisite: HSC101 / 3 credits. Offered: Spring

Cybercrime
HSC104. This course provides students with basic information on how commonly encountered high-technology crimes are committed as well as basic investigation strategies including the collection of evidence and computer forensics focusing on the network. Crimes dealing with computers, telephones, check-reading machines, credit card machines, and other technology are discussed. Issues dealing with jurisdiction and legislation to expressly criminalize cybercrime are discussed. Prerequisite: HSC101 or BIT187 / 3 credits. Offered: Spring

Horticulture
Plant and Soil Science
HOR101. This course provides an in-depth introduction to plant classification, anatomy, physiology, nutrition and reproduction. Chemical and physical properties of soil, as well as the relationship between soils and plant growth, are emphasized. (3 class hours / 2 laboratory hours) Prerequisite: (MAT020 or MAT025), ENL020, ENL050, or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Spring

Entomology and Plant Diseases
HOR102. A survey of the common insect pests and pathogens of ornamental plants, including a review of the basic principles of entomology and plant pathology. Topics include biological diversity, taxonomy, morphology, physiology, ecology, behavior, insect/human relationships, pesticides, biological control, and the causes, nature and control of plant pathogens. A ‘least is best’ philosophy is emphasized, regarding use of pesticides in controlling the various competitions for plant health. Integrated plant management is the basis for control strategy. Prerequisite: None / 3 credits. Offered: Fall

Woody Plant Identification and Culture
HOR103. The identification and culture of native and ornamental plants that are typically pruned, fertilized, and used in landscape design are discussed. Plant requirements, characteristics and placement, as well as susceptibility to diseases and pests are reviewed. Methods of pruning, fertilizing and special needs are discussed. Prerequisite: None / 3 credits. Offered: Fall
Turf Management
HOR104. An introduction to the establishment and maintenance of turf grass. Turfgrass and weed identification, cultural practices and maintenance will be included. Insect and disease life cycles and control will be reviewed. Integrated pest management (IPM) is emphasized. Prerequisite: None / 3 credits. Offered: Spring

Equipment Maintenance and Operation
HOR105. Introduction and training in the repair, maintenance and safe operation of golf course and landscaping equipment. Maintenance and trouble-shooting procedures of small and large gasoline and diesel engines and basic welding are emphasized. Students learn the techniques of mowing a golf green and are instructed in the operation of a front-end loader tractor. Methods and maintenance of irrigation systems are also included. Prerequisite: None / 3 credits. Offered: Fall

Horticulture Practicum
HOR106. Work in an area of horticulture in a business, government or non-profit organization for at least 150 hours to receive practical training in the horticulture field. Students have an opportunity to develop and pursue challenging work experiences which relate directly to their individual career plan. A minimum of 150 hours in horticulture-related employment and a bi-weekly meeting with the Horticulture Program Coordinator. Prerequisite: Enrollment in an Horticulture certificate program. Pass-Fail / 1 credit. Offered: Fall, Spring, Summer

Floral Design
HOR107. This course is an introduction to the identification, care, handling and designing of floral crops. It makes the student aware of the various business challenges of a retail florist operation and makes them capable of successfully dealing with those challenges. Emphasis is placed on preparing the student with the skills to work as a floral designer. Prerequisite: None / 3 credits. Offered: Varies

Herbaceous Plant Identification and Culture
HOR201. The identification and culture of herbaceous annuals, perennials, groundcovers and vines are discussed. Students review propagation, placement and pest vulnerability of herbaceous plants commonly used in the landscape. Prerequisite: HOR101 / 3 credits. Offered: Spring

Landscape Design and Construction
HOR202. Introduction to landscape design including site analysis, estimation of costs of installation, selection of site furnishings, and construction of walks, steps and walls. Prerequisite: HOR103 / 3 credits. Offered: Spring

Hospitality Management
Fundamentals of Professional Cooking
CUL150. (formerly HRM150) This course is an introduction to the management of food preparations, sanitation, and costing. Principles of cookery and their relation to methods of preparations, nutrition, cost control, kitchen organization, and management are emphasized. Co-requisite: HRM111 / 4 credits. Offered: Fall, Spring

Baking I
CUL180. An introduction to the principles of professional baking including: the chemistry of baking, terminology, scaling and measuring, and equipment use. Preparation includes a variety of breads and pastries with emphasis on proper production methods, baking methods, and final product presentation and display. Students are responsible for required supplies and materials. (1 class hour / 4 laboratory hours) Prerequisite: None / 3 credits. Offered: Fall, Spring

Dining Room Operations and Service
CUL210. This course provides an introduction and practical application into the operation of a dining room with emphasis on quality guest service. Topics include: "front of the house" organization, methods of table service, menu terminology, table arrangement, requirements for supplies and equipment, suggestive selling techniques, and revenue control and analysis. Personnel issues include hiring, training, writing personal resumes, and strengthening interview skills. Students serve meals prepared in a restaurant setting during the course of the semester. Culinary Arts Certificate students should take CUL210 concurrently with CUL220. (2 class hours / 4 laboratory hours). Prerequisite: CUL150 or HRM140; Corequisite: CUL220 / 4 credits. Offered: Fall, Spring

Advanced Culinary Arts
CUL220. A continuation of CUL150, this capstone course builds upon basic skills and introduces more advanced culinary skills, ethnic, regional and international cuisine, and stresses communication in an operating food production environment. Additionally, students are required to develop and execute menus developed in class, and include purchasing and menu specifications, proper ordering, receiving and storage of foods, and analysis of business activity from a monetary perspective. Limited to Culinary Arts Certificate students. (2 class hours / 4 laboratory hours). Prerequisite: HRM140 or HRM150/CUL150 / 4 credits. Offered: Fall, Spring

Foodservice Sanitation
HRM111. This course provides the future hospitality manager with certification in Applied Foodservice Sanitation from the National Institute for the foodservice industry. A state-mandated certificate is awarded at the successful completion of the National Foodservice exam. Prerequisite: None / 1 credit. Offered: Fall

Food and Beverage Management
HRM130. This course covers the essentials of food and beverage management. An awareness of management objectives is developed through the examination of organizational structures of food service. Students study topics such as menu pricing, break-even analysis, and cost-volume-profit theory. Emphasis is placed on forecasting and achieving profitability. Prerequisite: (MAT020 or MAT025) or satisfactory basic skills assessment score / 3 credits. Offered: Spring

Introduction to Hospitality Management
HRM140. Students are introduced to the operation of businesses in the hospitality field. Emphasis is on the development cycle of the industry, current trends, and analysis of management responsibilities. Prerequisite: ENL020 or satisfactory basic skills assessment score / 3 credits. Offered: Fall

Casino Management
HRM170. This course introduces the student to the history of the gaming industry and the basics of casino management. The course emphasizes ethics in the gaming industry, the economics of the industry, and its interface with hotel and restaurant organizations. An overview of the industry, gaming control law, and career opportunities are highlighted. Prerequisite: ENL020 or satisfactory basic skills assessment score / 3 credits. Offered: Fall
Human Services

Introduction to Human Services
HUS101. This course is an introduction to the historical, political and social aspects of Human Services. Topics include themes and purposes of Human Services, theoretical orientations, history and evolution of the Human Services profession, skills and intervention strategies for generalist practice, the helping process, working within a system, and child and family services, mental health, substance abuse and treatment. Also covered are professional concerns including ethical standards, decision making, confidentiality, and clients’ rights. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Introduction to Alcohols and Substance Abuse
HUS104. This course explores the causes and consequences of addiction as it relates to all aspects of society. This course briefly discusses the impact on the healthcare system, family system, and legal system. Historical implications and response to changes over time are reviewed. Topics regarding intervention, treatment, education, and prevention are discussed. Competencies and requirements for licensure in Massachusetts are explained. Addiction issues related to diverse populations are presented. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring

Human Services Practicum
HUS206. The course establishes learning opportunities in the field of human services. Based on National Community Support Skill Standards students are required to spend 100 clinical hours in a human services agency. In addition, students participate in a weekly class to process clinical experiences and focus on skill building in treatment planning, counseling, client engagement strategies, client education, consultation with other professionals and documentation. One hundred (100) hours in a clinical setting are required. CORI/SORI required. Prerequisite: By permission of Human Services Coordinator and HUS206. Co-requisite: PSY101, HUS229 & PSY208 / 4 credits. Offered: Varies

Advanced Human Services Practicum
HUS207. Students are required to spend 100 clinical hours in the role of a human service provider and participate in the 12 National Community Support Skill Standards in a Human Services setting throughout the semester. In addition, students participate in a weekly class to process clinical experiences with clients, services provided, and agency interaction. The advanced experience and course addresses innovative clinical situations in individual and group settings. CORI/SORI required. By permission of Human Services Coordinator and HUS206. Prerequisite: By permission of Human Services Coordinator and HUS206. Co-requisite: PSY101, HUS229 & PSY208 / 4 credits. Offered: Varies

Introduction to Social Welfare
HUS229. (formerly SOC229) This course includes an analysis of the conceptions of social work, social welfare and social service delivery systems from both historical and contemporary perspectives. Includes critical examination of the values, the social justice mandate as well as issues of cultural diversity that effect and inform the practice of social work. Social work is presented as a profession that integrates science, clinical awareness, and human understanding in practice intervention, policy development, and research. Contemporary issues and problems in various fields of social work practice are explored with particular emphasis on the role of the generalist social work practitioner. Prerequisite: PSY101 or SOC106 / 3 credits. Offered: Varies

Special Events and Operations Management
HRM250. As the capstone course for Hotel Restaurant Management students, the focal point of this course is the planning, organizing and execution of special events that include: a theme, specialized menu, entertainment, dining room decorations, and uniforms reflected in the actualities of the hospitality industry. Beyond food purchasing, production and services, students are responsible for revenue control and analysis. Group work, as a class and in individual specialized groups, emphasizes completing assigned tasks. Students serve meals prepared in a restaurant setting during the course of the semester. (2 class hours / 2 laboratory hours) Limited to HRM students. Prerequisite: CUL150 or HRM140 / 3 credits. Offered: Spring

Hospitality Cooperative Work Experience
HRM262. The core content of this course involves 300 hours of monitored field experience which is consistent with the student’s career goals. Students keep journals and write prescribed ‘analysis’ papers as they progress during the course of the semester. Prerequisite: 9 credits in CUL/HRM curriculum / 3 credits. Offered: Fall, Spring, Summer

Humanities

Humanities: Perception Through the Arts
HUM102. This course is an introduction to humanistic studies; it examines works of the human spirit (in music, painting, philosophy, sculpture, architecture, drama, poetry) which have influenced our civilization and who we are as individuals. Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Hospitality Marketing
HRM230. Marketing of hospitality industry is studied through the exercise of strategic marketing planning. Understanding of the marketing concept and how it is applied to the mission statement, research techniques, situation analysis, positioning, and the tools of marketing. Prerequisite: HRM140 and ENL101 / 3 credits. Offered: Spring

Hospitality Operations
HUS215. This course focuses on front desk operations and management’s relationship to the front office. Methods of revenue management are applied to areas of price structure, occupancy patterns and income. Legal contract and liability issues specific to the lodging industry are also covered. Prerequisite: HRM140 / 3 credits. Offered: Fall

Hospitality Marketing
HRM230. Marketing of hospitality industry is studied through the exercise of strategic marketing planning. Understanding of the marketing concept and how it is applied to the mission statement, research techniques, situation analysis, positioning, and the tools of marketing. Prerequisite: HRM140 and ENL101 / 3 credits. Offered: Spring

Hospitality Cooperative Work Experience
HRM262. The core content of this course involves 300 hours of monitored field experience which is consistent with the student’s career goals. Students keep journals and write prescribed ‘analysis’ papers as they progress during the course of the semester. Prerequisite: 9 credits in CUL/HRM curriculum / 3 credits. Offered: Fall, Spring, Summer

Humanities

Humanities: Perception Through the Arts
HUM102. This course is an introduction to humanistic studies; it examines works of the human spirit (in music, painting, philosophy, sculpture, architecture, drama, poetry) which have influenced our civilization and who we are as individuals. Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Advanced Addiction Practicum
HUS208. The class establishes learning opportunities in the field of addictions. Students spend 100 hours throughout the semester in a human services addictions agency to apply the knowledge, values, concepts, and skills of the addiction profession. Students participate in a weekly class to process clinical experiences and focus on skill building in treatment planning, counseling, client engagement strategies, client education, consultation with other professionals and documentation. One hundred (100) hours in a clinical setting are required. CORI/SORI required. Prerequisite: By permission of Human Services Coordinator and HUS206. Co-requisite: PSY101, HUS229 & PSY208 / 4 credits. Offered: Varies

Introduction to Social Welfare
HUS229. (formerly SOC229) This course includes an analysis of the conceptions of social work, social welfare and social service delivery systems from both historical and contemporary perspectives. Includes critical examination of the values, the social justice mandate as well as issues of cultural diversity that effect and inform the practice of social work. Social work is presented as a profession that integrates science, clinical awareness, and human understanding in practice intervention, policy development, and research. Contemporary issues and problems in various fields of social work practice are explored with particular emphasis on the role of the generalist social work practitioner. Prerequisite: PSY101 or SOC106 / 3 credits. Offered: Varies
Mental Health, Substance Abuse, and Families

HUS230. (formerly HUS102) Mental Health, Substance Abuse, and Families reviews assessment, intervention, and treatment in dual diagnosis families, from a systems model. Topics include needs, concerns, and resistance in individual members and the family as a whole. Discussions revolve around the dynamics of codependency; a comparison of approaches to family recovery; treatment techniques appropriate to the different phases of family recovery; and strategies to help prevent family relapse. Prerequisite: (PSY101 or SOC106), HUS101, and HUS229 / 3 credits. Offered: Spring

Treatment Modalities in Human Services

HUS231. (formerly HUS106) This course introduces the most commonly used and widely accepted treatment and relapse prevention methods in the mental health and alcohol/substance abuse field. The course explores the role of the social service worker and treatment modalities utilized in the school, prison, outpatient, inpatient, and day treatment areas as they apply to the different special populations. The populations discussed include children, adults, elderly, dual diagnosis, incarcerated, and those with addictions. Service Learning may be used for experiential learning. Prerequisite: PSY101, HUS101, HUS229 / 3 credits. Offered: Fall, Spring

Information Technology - Database

Database Applications

GIT150. Students acquire an in-depth, hands-on understanding of a PC-based relational database. Using Microsoft Access®, students create and edit tables, forms, and reports; sort, query and graph data; and attach, import and export data to/from other applications. Data normalization techniques are studied. Students, working individually and in teams, design and implement database applications. This course prepares students for the Microsoft Office Specialist Access exam. Prerequisite: GIT108 or GIT110 or equivalent skill level in Windows / 3 credits. Offered: Fall, Spring

Database Design and Development

BIT250. Students study and apply the functions of a database management system (DBMS), file systems, the relational model, query by example (QBE), introductory structured query language (SQL), entity relationships, normalization techniques, database design, and multi-user and network considerations. In addition, database administration, advanced database design, disaster recovery, and current trends in database technology are reviewed. Students develop advanced database applications using a Windows-based application such as Microsoft Access®. Prerequisite: GIT150 / 3 credits. Offered: Fall

SQL & SQL Server for Developers

BIT251. Students learn the essential Structured Query Language (SQL) skills necessary to become a Database Administrator (DBA.) SQL Server and Management Studio are used to manipulate data, implement database designs, manage database security, and use database features including scripts, functions, and transactions. Prerequisite: GIT150 / 3 credits. Offered: Spring

Information Technology - General

Microcomputer Applications Software

GIT110. This course focuses on the use of the microcomputer in various business settings. A lab/lecture environment is used to enable students to learn the Windows operating system and four commonly used software packages selected from applications in word processing, spreadsheets, databases, and presentation graphics. Students are introduced to the software and then progress through various challenging assignments, including integrating applications. Basic concepts in Internet usage, including electronic mail, are an integral part of the course. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score and (GIT101, GIT102 or 30wpm) / 3 credits. Satisfies a General Education elective. Offered: Fall, Spring, Summer

Introduction to the Internet

GIT180. This course is designed to provide the student with both a theoretical and practical overview of the Internet. Students are prepared to perform confidently in business, educational, and personal areas of interest using many Internet services including: Telnet, File Transfer Protocol (FTP), Newsgroups, and the World Wide Web (WWW). Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Varies

Information Technology Foundations

BIT112. This survey course introduces students to all aspects of the Information Technology (IT) industry and is intended for students wishing to make informed choices for careers in IT. Students receive an overview and understanding of the core aspects of Information Technology including Network and Infrastructure Systems, Information Support and Services, Interactive Media and Programming and Software Development. The focus of this course is an understanding and appreciation of the duties of information technology professionals and how each IT area relates to and interacts with the others. Upon completion of this course, students have the knowledge necessary to make educated choices about continued study in IT as well as understanding the impact of technology on society and organizations of all types. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Varies

Microcomputer Hardware

BIT113. Students learn the anatomy of a microcomputer by disassembling, assembling, upgrading and customizing a PC. Students evaluate purchasing vs. building a PC. The role of the BIOS and CMOS in the POST and BOOT processes is explored. System boards, processors, memory, and peripherals, including input, output, multimedia, network and data devices are studied. Students learn troubleshooting, safety, basic operating systems procedures, and security and preventive maintenance techniques. Customer service is stressed. This course covers the hardware material for the Comp TIA A+ Essentials certification exam. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring

Operating Systems

BIT115. Students develop competency installing, configuring, upgrading, and supporting Windows operating systems. Students learn through comparison, the differences and similarities between various operating systems. Students study operating system structure, file systems, directory commands, file attributes, GUI and command line interfaces, operating system utilities, and security. Communication, team building, and professionalism are stressed. This course covers the operating system material for CompTIA A+ certification exams. Prerequisite: GIT110 / 3 credits. Offered: Fall, Spring
Information Technology Field Project
BIT260. Students have a practical, hands-on experience developing a real-world computer application. This course must be taken in conjunction with an advanced-level IT course. (1 hour per week of consultation with the assigned faculty member; a minimum of 15 hours of independent work). Prerequisite: Permission of IT Coordinator / 1 credit; may be repeated once. Offered: Varies

Information Technology Cooperative Work Experience
BIT261. The student works in an information systems office for 150 hours to gain practical training in one of the varied aspects of information technology. All students in Information Technology tracks are encouraged to take a cooperative work experience. Limited to students enrolled in the Information Technology program. Prerequisite: Completion of at least 2 semesters of Business & IT courses and/or comparable practical work experience. Permission of IT Coordinator / 3 credits; may be repeated once for credit. Offered: Fall, Spring, Summer

Information Technology - Networking

Networking Essentials
BIT187. Using a hands-on approach, students learn principles and practices of designing, installing, maintaining, upgrading, and troubleshooting peer-to-peer and client-server networks. Students study network operating systems theory, topologies, and protocols including planning, designing, and managing networks. Students reinforce their knowledge through interactive activities, labs and simulators. This is the first of two courses needed to prepare for the Cisco Certified Entry Networking Technician (CCENT) exam. Co-requisite: BIT115 / 3 credits. Offered: Fall, Spring

Wireless Networking
BIT236. Using a hands-on approach, students learn the fundamentals of planning, installing, maintaining, and troubleshooting a network supported by unbounded media. Assuming no prior knowledge of wireless networks and devices, students are prepared to apply and support wireless technology in personal, LAN, and WAN networks. Many of the skills required for the Certified Wireless Network Administration (CWNA) exam are covered while exploring all current IEEE wireless protocols. Prerequisite: BIT187 / 3 credits. Offered: Fall

Windows Server Administration
BIT237. Using a hands-on approach, students learn current Windows Server architecture, installation, configuration, upgrading, proactive maintenance, security and environmental issues, troubleshooting and problem determination, and disaster recovery. Concepts covered include the differences between versions of Windows, installation, protocols, devices and drivers, disk and data storage, user and computer accounts, domain user and group accounts, group policy, and file system access and security. This course begins preparing students for MCSA/ MCSE Certification Exams. Prerequisite: BIT187. NOTE: Open for credit to students who have completed BIT223; not open for credit to students who have completed BIT223 and BIT234 / 3 credits. Offered: Fall

Advanced Networking Essentials with Cisco
BIT239. This course covers the structure of the Internet for communications, operations of routers, and network device implementation for basic WAN connectivity. Students use simulation to analyze, configure, verify and troubleshoot networking protocols and services. Students successfully completing this course are prepared for the Cisco Certified Entry Networking Technician (CCENT) industry exam. Prerequisite: BIT187 / 3 credits. Offered: Spring

Security+
BIT240. This course covers fundamental principles for securing a network and managing risks. Using a hands-on approach, students learn access control, identity management and cryptography, as well as a selection of appropriate mitigation and deterrent techniques to address network attacks and vulnerabilities. This course prepares students to take the CompTIA Security+ certification exam. Prerequisite: BIT187 / 3 credits. Offered: Varies

Information Technology - Office Technology

Typing
GIT101. Students learn to master the computer keyboard, develop speed and accuracy, and prepare basic business documents. Prerequisite: None / 3 credits. Offered: Fall, Spring

Computer Keyboarding
GIT102. Learn to touch-type correctly on a microcomputer. Attention is given to developing accuracy and, as time permits, increasing speed. Hands-on preparation of a letter and a research paper are included. Prerequisite: None; Pass-Fail. 1 credit. Offered: Fall, Spring

Windows Operating System
GIT108. This course provides an introduction to the Windows operating system and the hardware of a typical microcomputer system. Skills needed to navigate the Windows desktop, manage disks and files, and use Windows applications are explored. The WordPad and Paint programs are utilized as office tools. Students become proficient users of pointing devices. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 1 credit. Offered: Fall, Spring

Spreadsheet Applications for Business
GIT125. Students gain a conceptual and practical understanding of electronic worksheets utilizing the spreadsheet, data management, graphics, and application development components of a Windows-based spreadsheet program. Students complete a variety of exercises designed to develop mastery of the major components of the spreadsheet program as it is used in the business office environment. This course covers the material for the Microsoft Office User Specialist Excel Expert Exam. Prerequisite: GIT110 and ACC111 or ACC201 / 3 credits. Offered: Fall, Spring

Advanced Word Processing Applications
GIT220. Students learn proficiency using many of the advanced functions and special features of a comprehensive word processing package. Course content includes: tabs, print styles and sizes; macros; data manipulation; basic mathematical computations; special text features like outline, columns, and merges; and graphic elements. GIT110 and GIT220 cover all the material for the Microsoft Office Specialist Word Expert Certification exam. Prerequisite: GIT110 / 3 credits. Offered: Spring

Medical Terminology
BIT103. Medical terminology is the study of the principles of medical word building to help the student develop the extensive medical vocabulary used in health care occupations. Students receive a thorough grounding in basic medical terminology through a study of root words, prefixes, and suffixes. The study focuses on correct pronunciation, spelling, and use of medical terms. Anatomy, physiology, and pathology of disease are discussed yet no previous knowledge of these topics is necessary. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a General Education elective. Offered: Fall, Spring, Summer
Standard Office Procedures
BIT202. Students develop the concepts and skills needed to function effectively in an administrative assistant position. The course includes the following: human relations; customer service; communication services; meetings, minutes, and agendas; travel arrangements and itineraries; financial statements and reports; professionalism; machine transcription; and resumes and interview techniques. Prerequisite: GIT110 / 3 credits. Offered: Spring

Medical Office Procedures
BIT203. Students prepare for immediate and long-term success as administrative assistants and medical assistants in a medical office environment. The course includes the following: an overview of the healthcare industry, client/patient relations and communication, health information management, medical practice management, and professional workplace behavior. Students acquire skills in a medical office software package and explore ethical/legal issues in modern medicine. Prerequisite: GIT110 and BIT103 / 3 credits. Offered: Fall, Spring

Medical Coding and Billing
BIT207. This course is designed to teach the student the current medical coding practices used for third-party billing. ICD-9-CM and CPT and HCPCS II coding are covered along with an in-depth study of insurance companies, Medicare, insurance claim forms, accounts receivable, and legal issues relating to medical record keeping. Prerequisite: BIT103 / 3 credits. Offered: Fall, Spring

Advanced Medical Coding and Billing
BIT208. Students continue their mastery of diagnostic and procedural coding and billing through complex case studies and use of authentic medical records. Students are introduced to International Classification of Diseases ICD-10CM and other diagnosis coding systems such as DSM-IV. Code auditing for regulatory compliance is emphasized. Prerequisite: BIT207 / 3 credits. Offered: Varies

Pharmacology for Medical Coding
BIT209. Students learn basics of pharmacotherapy as it relates to the duties of a medical coder. Drug classifications and matching drugs to common conditions and laboratory findings are emphasized. Prerequisite: BIT103 / 1 credit. Offered: Varies

Information Technology - Software Development
Visual Basic Programming
BIT175. Students learn the design processes and development tools available in Visual Basic using the .NET Framework. This knowledge is applied to build and execute Windows-based applications. Screen design, process controls and software interfacing are covered in addition to Visual Basic syntax. Prerequisite: (MAT030 or MAT035) or satisfactory basic skills assessment score and GIT110 / 3 credits. Satisfies a General Education elective. Offered: Fall, Spring

Foundations of Game Development
GIT160. This course offers a thorough and insightful introduction to the game development industry. Students learn about the evolution of game development and examine content creation and the concepts behind the development of story, character, environment, level design, user interface, and sound. Game platforms, level design, interface design, project management, serious games, game accessibility, and online applications are explored. Prerequisites: ENL050, ENL020, and (MAT030 or MAT035) / 3 credits. Offered: Fall

Application Development for Mobile Devices
BIT266. This course offers a practical introduction to the mobile device app development industry. Students learn about the operating systems of mobile devices, limitations and challenges of developing mobile applications and create and submit an app to the app marketplace. Prerequisite: ENLO20 and ENL050 or satisfactory basic skills assessment scores and (CSC110 or CSC120 or BIT175) / 3 credits. Offered: Spring

Information Technology - Web Design
Web Site Design and Scripting
GIT183. Learn the basics of web site design including text formatting, graphics, animations, color, layout, linking. This project-based course requires the student to develop a well-designed web site using HTML, DHTML, and Javascript. Prerequisite: GIT110 / 3 credits. Offered: Fall, Spring

Web Authoring and Graphic Tools
GIT184. In this hands-on, project-based course, students learn to do the following: create dynamic, media-rich web sites using a graphical user interface authoring tool; design and prepare graphics for the Web using Adobe Photoshop; and use Adobe Acrobat to produce and distribute documents over the Web. Prerequisite: GIT110 / 3 credits. Offered: Fall, Spring

Web Site Development Practicum
BIT221. Students work with faculty, departments, or non-profit organizations planning, designing and implementing interactive, dynamic web sites. This course has both service-learning and interdisciplinary facets and may be taken for honors credit. Prerequisite: GIT183, GIT184 / 3 credits. Offered: Fall, Spring

JavaScript and jQuery Web Scripting
BIT284. Building on HTML, DHTML, and CSS skills, students learn to use JavaScript and jQuery to create dynamic web sites. XML, AJAX, JSON, and Blogger and API’s for YouTube, Twitter, and Flickr are introduced. Prerequisite: GIT183 / 3 credits. Offered: Varies

PHP and MySQL for Web Development
BIT286. Students build on JavaScript, programming, database, HTML, DHTML, and CSS skills. This course introduces the web developer to the PHP scripting language and the MySQL database system and enables students to plan and develop end-to-end database-driven web sites and applications. Prerequisites: GIT183 and GIT150 / 3 credits. Offered: Varies

Interdisciplinary Studies
The College Experience
COL101. This theme-based seminar is designed to help students develop the skills and confidence necessary to succeed in college, the world of work, and life. In this course, students will examine theories and practices associated with academic success. Areas of study include education and career planning, study skills, effective communication, critical and creative thinking, information literacy, personal management, development of community and awareness of diversity, technology, and leadership. Modeled on the “workshop format” in which students learn by doing, students will be actively engaged in group activities and team projects. Prerequisite: ENL010 / 3 credits. Satisfies a General Education elective. Offered: Fall, Spring, Summer
**Experiential Learning Internship and Seminar EXP101.** This course combines an internship experience, where students work in an industry/occupation of interest, with a seminar focusing on practices associated with successful job performance and career advancement. Students reflect upon their experience and examine their potential for career satisfaction and success through interest, skill, value and personality assessments. Students study workplace systems and gain an understanding of professional behaviors and communication practices. Students are responsible to secure site placement; the office of Career Services & Experiential Learning is available to assist with the process. Site placement typically requires 8-15 weeks of preparation; students should plan accordingly. (100 hour internship plus seminar or 150 hour internship plus seminar) Prerequisite: ENL101 and interview with instructor / 3 or 4 credits. Offered: Fall, Spring, Summer

**Honors Colloquium HON200.** Honors students experience an interdisciplinary, team-taught colloquium on a current global issue. Students refine their research, writing, critical thinking, and collaborative learning skills as they investigate the topic from a multi-disciplinary perspective. Students complete research projects integrating their findings and present results to an audience. Presentation of Honors research in the Honors Colloquium is required at both the local Honors Reception and at the Annual Undergraduate Research Conference at the Commonwealth Honors College in Amherst. Prerequisite: Twelve successfully completed credits at Cape Cod Community College which include ENL101 and three Honors credits and a 3.2 GPA / 3 credits; may be repeated once for credit.

**BIO204. Introduction to Public Health**
**BIT103. Medical Terminology**
**BIT175. Visual Basic Programming**
**COM209. Event Planning**
**ENR101. Intro to Engineering & Advanced Manufacturing**
**GIT110. Microcomputer Applications Software**
**SLR101. Service Learning Option**

**International Studies**

**Semester Abroad Programs**

As a member of the College Consortium for International Studies (CCIS), the College offers the opportunities for students to take part in high-quality, low-cost, fully accredited study abroad programs around the world. Study abroad programs include year-long, semester, and summer courses where students may earn college credit. Study abroad programs are open to Cape Cod Community College full- and part-time students, to students from other colleges, and often to members of the community. Cape Cod Community College also offers a variety of short-term courses facilitated by our faculty. Students typically earn one to three credits per course. Frequently, short-term courses are offered for non-credit to members of the community.

**International Business: A European Experience BUS225.** This course is to be offered at an overseas location in Europe. It is designed to provide the American student with direct contact with contemporary business courses as well as site visits at a variety of European business places. Emphasis is placed on doing business overseas, currency issues, cultural issues, comparative marketing techniques, and basic international law. Prerequisite: BUS100 or any 3-credit Business course (recommend ECO117 or ECO118 or BUS120) and permission of instructor / 3 credits. Offered: Varies

**Short-Term Courses Abroad**

**Immersion Study in French Language/Civilization FRN122.** Students study French language and civilization in a Francophone country. Traditional class work is supplemented by cultural activities and field trips. Prerequisite: None / 3 credits. Offered: Spring

**Travel and Study in a Spanish Speaking Country SPN126.** This is an educational field trip for Spanish language students enrolled at Cape Cod Community College. Visits could include Spain, Puerto Rico, Costa Rica, Ecuador, or any other Spanish speaking country. (one week to 10 days) Corequisite: Any credit Spanish class at Cape Cod Community College / 1 credit. Offered: Spring

**Italian**

**Conversational Italian ITL100.** This basic conversational Italian course is designed to introduce the non-native speaker of Italian to the four basic skills necessary to develop a working knowledge of Italian: understanding, speaking, reading, and writing. The emphasis is on speaking and understanding spoken Italian. This course counts toward graduation but does not fulfill a general education distribution requirement. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

**Conversational Italian II ITL125.** This course is designed to provide continued practice and mastery for the non-native speaker of Italian in the four basic skills necessary to developing a working knowledge of Italian: understanding, speaking, reading, and writing. Prerequisite: ITL100 / 3 credits. Offered: Spring

**Immersion Study in Italian Language/Civilization ITL122.** Students study Italian language and civilization in an Italian speaking country. Forty hours of traditional class work is supplemented by cultural activities and field trips. Prerequisite: None / 3 credits. Offered: Varies

**Laboratory for Transfer Students**

**Special Laboratory in the Life Sciences BIO101.** A laboratory portion of existing life science courses that provides a laboratory experience for only those students who are transferring in credits for life sciences courses that do not match the traditional four-credit format (3 credits lecture, 1 credit laboratory). The life sciences course laboratory selected must closely match the transferred life science course and must have the explicit approval of both the laboratory instructor and the Dean of Science, Technology, Mathematics & Business. Only if seating is available will students be allowed to register for the appropriate laboratory section during the ADD period. Students who transfer in more than one life science course may register twice (but, not for the same laboratory experience) for BIO199. Students with laboratory deficiencies in life sciences courses taken at CCC will not be allowed to register for BIO199, since the life sciences courses at CCCC are designed and taught such that the laboratory and lecture are non-separable. Prerequisite: Completion of the non-lab portion of a transferred life sciences course and permission of the Academic Dean / 1 credit. Offered: Varies
Special Laboratory in the Physical Sciences
PHY199. A laboratory portion of existing physical science courses that provides a laboratory experience for only those students who are transferring in credits for physical sciences courses that do not match the traditional four-credit format (3 credits lecture, 1 credit laboratory). The laboratory selected must closely match the transferred physical science course, and must have the explicit approval of both the laboratory instructor and the Dean of Science, Technology, Mathematics & Business. Only if seating is available will students be allowed to register for the appropriate laboratory section during the ADD period. Students who transfer in more than one physical science course may register twice (but, not for the same laboratory experience) for PHY199. Students with laboratory deficiencies in physical sciences courses taken at CCCC will not be allowed to register for PHY199, since the physical sciences courses are designed and taught such that the laboratory and lecture are non-separable. Prerequisite: Completion of the non-lab portion of a transferred physical sciences course and permission of the Academic Dean / 1 credit. Offered: Varies

Latin
Introduction to Latin
LAT100. This course introduces students to the Latin language and Roman culture. Learning Latin grammatical structures helps students gain an understanding of English grammar and syntax. Emphasis is on the etymology and morphology of words, and the practice of derivations and cognates allows students to enrich their vocabulary. This language study occurs within the context of Roman culture, which influenced the western world. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring

Literature
Introduction to Children’s Literature
ENL120. Students survey works drawn from the rich variety of children’s literature. They analyze selections from major genres, discuss historical and contemporary issues, and develop practical ways of involving children in literature. Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

The Short Story and Human Values
ENL135. This course examines the ways in which short fiction reflects and shapes the human experience. Works examined feature a variety of cultural traditions, allowing students to consider which human values are universal and which may be culturally bound. Students examine the ways in which stories are used to preserve and challenge social institutions such as marriage/family, education, justice, and religion. Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered Spring

World Mythologies
ENL150. Students study myths from the great cultures of the world. Through readings, discussions, research projects and presentations, students explore the universal values conveyed by these stories from different world cultures. Students discover the symbolism in the events and details of these stories, and they understand mythmaking as a primary human activity. Prerequisite: ENL101 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Cape Cod Literature
ENL200. A survey of four centuries of Cape Cod literature, including Native American, journals and records of discovery and settlement, fishing and whaling literature, Cape women’s literature, Thoreau’s nature writing, and contemporary fiction, poetry, and essays. The course explores the Cape’s rich literary heritage, how it reflects the region’s history, culture, and environment, and examines the underlying theme of human and natural change. Field trips and journal keeping are integral to this course. Prerequisite: ENL102 or permission of instructor with submission of writing sample / 3 credits. Offered: Varies

World Literature I
ENL201. Major literary works are studied from the ancient world through the Enlightenment that have both described and shaped western civilization. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / odd

World Literature II
ENL202. Through reading Chinese folktales, Ottoman Empire traditional stories, and European treatises from the Enlightenment, students explore the literary sources of our diverse modern world cultures. An examination of historical texts from revolution to romanticism in western Europe and the Americas, lyric poetry of the Urdu, as well as multiple voices of myriad peoples, provides a framework for studying and comparing universal values through twenty-first century texts. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring / even

British Literature through the Eighteenth Century
ENL203. Designed for students who have successfully completed both semesters of English Composition and who wish to become familiar with literature that has helped shape contemporary culture. This course surveys representative works and writers in English literature through the 18th century. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / even

British Literature from the Romantic Age to the Present
ENL204. Designed for students who have successfully completed both semesters of English Composition and who wish to become familiar with literature that has helped shape contemporary culture, this course examines representative works and writers in British literature since mid-eighteenth century. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring / odd

American Literature to 1890
ENL205. Students examine major contributions to the development of American culture and ideals from the Pilgrims to Henry James. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

American Literature since 1890
ENL206. Students examine the rise of Realism and Naturalism through fiction and poetry. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Shakespeare
ENL207. Students read and discuss representative works by Shakespeare, considering them for their literary value, their relevance to Elizabethan culture, and their expression of our common human experience. Prerequisite: ENL102 / 3 credits. Offered: Fall / odd
Exploring Modern Poetry
ENL210. Students engage in reading, discussing, and writing about poems and poets of the 20th and 21st centuries. Consideration of modern poetry as both literature and art includes individual projects and presentations. Selections are drawn from both major as well as lesser known and culturally diverse poetic voices. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring / even

The Arthurian Legend
ENL218. This course focuses on the origins, development, structure, and meaning of the Arthurian legend. Students read, discuss, and write about seminal Arthurian texts, and explore connections to mythology, Celtic culture, and European history. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring / odd

MAT120. This course is designed for students planning to teach Elementary or Early Childhood Education. Students develop an understanding of the mathematical content of numbers and operations at the deep level required for successful elementary school teaching in ways that are meaningful to pre-service elementary and early childhood educators. Topics include: critical thinking skills; sets and operations on sets; the whole number system and its operations; place value and arithmetic models; mental math; algorithms; pre-algebra; factors, divisibility, prime numbers, elementary number theory, and their applications; the integers and its operations; clock arithmetic, fractions and rational numbers; decimals and the real number system; ratios, rates, and proportions; and percents. (4 contact hours) Prerequisite: MAT035 or satisfactory basic skills assessment score and ECE100 or EDU101/3 credits. Offered: Fall, Spring, Summer

Mathematics for Elementary and Early Childhood Educators II
MAT121. This course is designed for students planning to teach Elementary and/or Early Childhood Education. Students develop an understanding of the mathematical content of geometry, measurement, statistics, and probability at the deep level required for successful early childhood and elementary school teaching in ways that are meaningful to pre-service elementary and early childhood educators. Topics include: Two- and Three-dimensional Geometry; Measurement; Data Analysis; Single Variable Statistics; Probability. (4 contact hours) Prerequisite: MAT120 / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

Survey of Mathematics
MAT140. Designed for liberal arts students. Emphasis is on mathematics as the study of patterns and on mathematical thinking as the making and proving of conjectures. Topics: logic, number sequences, functions and graphs, large numbers and logarithms, geometry, symmetry and regular figures, methods of counting, probability, introductory statistics, finance, and topology. The history, philosophy, and applications of mathematics are interwoven. (4 contact hours) Prerequisite: (MAT035 or MAT040) or satisfactory basic skills assessment scores / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

World Religions in Literature
ENL215. World Religions in Literature provides students the opportunity to read, discuss and write about the religions of the world as subthemes in short stories, poetry, novels and literary essays. Included is intensive reading, analysis of world literature and its influence on society, consideration of literary criticisms, and discussion of values/beliefs evident in literature with particular attention to religious themes. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / odd

Women Writers
ENL228. This course examines traditions and themes especially important in the development of fiction, non-fiction, poetry, and drama written by women, such as “Women Alone,” “Women and Sexuality,” “Women and War,” “Women in Love.” An initial overview describing the emergence of women as authors is provided to establish topical and historical contexts. Readings, drawn primarily from modern texts, offer a diverse range of authors, genres, styles, and cultures. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / even

ENL290. Selected Topics in Literature provides students the opportunity to read, discuss and write about a literary specialty. Subjects may include African-American literature, Nobel Prize winning literature, a literary genre, a single author, or a single major work. The course includes intensive reading, analysis of the literature and its influence on society, consideration of criticism of this literature, historical study of the author or authors involved, and discussion of the cultural context of the literature. Specific content depends on the particular subject chosen for study. Prerequisite: ENL102 / 3 credits; may be repeated once for credit. Offered: Varies

Masters of Horror
ENL219. Masters of Horror is a literature course that provides students the opportunity to read, discuss and write about the genre of horror in literature. Texts include short stories, poetry, novels, film, and nonfiction. Emphasis is given to reading and analysis of the genre of horror and its influence on society and literature. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / even

Exploring the World of Science Fiction
ENL217. Exploring the World of Science Fiction is a course that provides students the opportunity to read, discuss, and write about the genre of science fiction in literature. Texts include short stories, poetry, novels, film, and nonfiction. Emphasis is given to reading and analysis of the genre of science fiction and its influence on society and literature. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / odd

Exploring Modern Poetry
ENL210. Students engage in reading, discussing, and writing about poems and poets of the 20th and 21st centuries. Consideration of modern poetry as both literature and art includes individual projects and presentations. Selections are drawn from both major as well as lesser known and culturally diverse poetic voices. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring / even

ENL228. This course examines traditions and themes especially important in the development of fiction, non-fiction, poetry, and drama written by women, such as “Women Alone,” “Women and Sexuality,” “Women and War,” “Women in Love.” An initial overview describing the emergence of women as authors is provided to establish topical and historical contexts. Readings, drawn primarily from modern texts, offer a diverse range of authors, genres, styles, and cultures. Prerequisite: ENL102 / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall / even

Selected Topics in Literature
ENL290. Selected Topics in Literature provides students the opportunity to read, discuss and write about a literary specialty. Subjects may include African-American literature, Nobel Prize winning literature, a literary genre, a single author, or a single major work. The course includes intensive reading, analysis of the literature and its influence on society, consideration of criticism of this literature, historical study of the author or authors involved, and discussion of the cultural context of the literature. Specific content depends on the particular subject chosen for study. Prerequisite: ENL102 / 3 credits; may be repeated once for credit. Offered: Varies

MAT140. Designed for liberal arts students. Emphasis is on mathematics as the study of patterns and on mathematical thinking as the making and proving of conjectures. Topics: logic, number sequences, functions and graphs, large numbers and logarithms, geometry, symmetry and regular figures, methods of counting, probability, introductory statistics, finance, and topology. The history, philosophy, and applications of mathematics are interwoven. (4 contact hours) Prerequisite: (MAT035 or MAT040) or satisfactory basic skills assessment scores / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

MAT120. This course is designed for students planning to teach Elementary or Early Childhood Education. Students develop an understanding of the mathematical content of numbers and operations at the deep level required for successful elementary school teaching in ways that are meaningful to pre-service elementary and early childhood educators. Topics include: critical thinking skills; sets and operations on sets; the whole number system and its operations; place value and arithmetic models; mental math; algorithms; pre-algebra; factors, divisibility, prime numbers, elementary number theory, and their applications; the integers and its operations; clock arithmetic, fractions and rational numbers; decimals and the real number system; ratios, rates, and proportions; and percents. (4 contact hours) Prerequisite: MAT035 or satisfactory basic skills assessment score and ECE100 or EDU101/3 credits. Offered: Fall, Spring, Summer

MAT121. This course is designed for students planning to teach Elementary and/or Early Childhood Education. Students develop an understanding of the mathematical content of geometry, measurement, statistics, and probability at the deep level required for successful early childhood and elementary school teaching in ways that are meaningful to pre-service elementary and early childhood educators. Topics include: Two- and Three-dimensional Geometry; Measurement; Data Analysis; Single Variable Statistics; Probability. (4 contact hours) Prerequisite: MAT120 / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

MAT140. Designed for liberal arts students. Emphasis is on mathematics as the study of patterns and on mathematical thinking as the making and proving of conjectures. Topics: logic, number sequences, functions and graphs, large numbers and logarithms, geometry, symmetry and regular figures, methods of counting, probability, introductory statistics, finance, and topology. The history, philosophy, and applications of mathematics are interwoven. (4 contact hours) Prerequisite: (MAT035 or MAT040) or satisfactory basic skills assessment scores / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

Mathematics
Also see Developmental Education and Computer Science.
Course descriptions for the following courses are listed under Developmental Education.
MAT010. Fundamental Arithmetic
MAT025. Prealgebra
MAT035. Algebra for Non-STEM
MAT040. Intermediate Algebra
MAT041. Elementary Algebra for STEM
MAT045. Intermediate Algebra for STEM

Mathematics for Elementary and Early Childhood Educators I
MAT120. This course is designed for students planning to teach Elementary or Early Childhood Education. Students develop an understanding of the mathematical content of numbers and operations at the deep level required for successful elementary school teaching in ways that are meaningful to pre-service elementary and early childhood educators. Topics include: critical thinking skills; sets and operations on sets; the whole number system and its operations; place value and arithmetic models; mental math; algorithms; pre-algebra; factors, divisibility, prime numbers, elementary number theory, and their applications; the integers and its operations; clock arithmetic, fractions and rational numbers; decimals and the real number system; ratios, rates, and proportions; and percents. (4 contact hours) Prerequisite: MAT035 or satisfactory basic skills assessment score and ECE100 or EDU101/3 credits. Offered: Fall, Spring, Summer

MAT121. This course is designed for students planning to teach Elementary and/or Early Childhood Education. Students develop an understanding of the mathematical content of geometry, measurement, statistics, and probability at the deep level required for successful early childhood and elementary school teaching in ways that are meaningful to pre-service elementary and early childhood educators. Topics include: Two- and Three-dimensional Geometry; Measurement; Data Analysis; Single Variable Statistics; Probability. (4 contact hours) Prerequisite: MAT120 / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

MAT140. Designed for liberal arts students. Emphasis is on mathematics as the study of patterns and on mathematical thinking as the making and proving of conjectures. Topics: logic, number sequences, functions and graphs, large numbers and logarithms, geometry, symmetry and regular figures, methods of counting, probability, introductory statistics, finance, and topology. The history, philosophy, and applications of mathematics are interwoven. (4 contact hours) Prerequisite: (MAT035 or MAT040) or satisfactory basic skills assessment scores / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer
Elementary Statistics
MAT150. An introduction to descriptive and inferential statistics that emphasizes statistical literacy and conceptual understanding. Topics include: techniques for organizing and presenting data, measures of central tendency and dispersion, probability, discrete and continuous probability distributions, sampling distributions, estimation, one-sample hypothesis tests, and correlation and regression. (4 contact hours) Prerequisite: MAT035 or MAT040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

Finite Mathematics
MAT165. An introduction to selected applications of mathematics in business, management, social sciences, and economics. Topics include: elementary descriptive statistics, graphing of functions, simple and compound interest, functions and their applications, probability, and elements of mathematical modeling using first and second degree polynomials. (4 contact hours) Prerequisite: MAT035 or MAT040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring

College Algebra
MAT175. This is an entry-level mathematics course for students interested in a STEM (Science, Technology, Engineering, Math) track. Topics include: domain and range, piecewise functions, complex numbers, quadratic inequalities, graphs of polynomial and rational functions, fundamental theorem of algebra, transformations of graphs, inverse functions, solving exponential and logarithmic equations, Gaussian elimination, and translations of conics. Critical thinking and problem solving skills are emphasized throughout the course. This course prepares students for Precalculus with Trigonometry or Applied Calculus. (5 contact hours) Prerequisite: MAT045 or satisfactory basic skills assessment score / 4 credits. Satisfies a Mathematics/Quantitative Reasoning general education requirement. Offered: Fall, Spring, Summer

Applied Calculus
MAT180. (formerly Business Calculus I) This course is designed for students planning to apply mathematics to management and social science topics. Topics include: a review of polynomial, exponential, and logarithmic functions and their application to business, an introduction to limits, continuity and the derivative, and applications of the derivative. Prerequisite: MAT171 or MAT175 / 3 credits. Offered: Varies

Business Calculus II
MAT185. This course is designed for students seeking a background in mathematical modeling and applied calculus and/or intending to pursue transfer study in business administration or in social science disciplines requiring calculus. The topics covered include: the integral and its applications, and techniques of integration. Additional topics are selected from probability distributions, differential equations, multivariable calculus, and Taylor Series. Prerequisite: MAT180 / 3 credits. Offered: Varies

Precalculus with Trigonometry
MAT195. Targeting students in Mathematics, Engineering, and Physical Sciences, this course provides the foundation necessary for a rigorous study of calculus. It covers non-linear inequalities, functions, and graphs. The primary focus is on polynomial, rational, exponential, logarithmic, and trigonometric functions. Applications are also discussed extensively. Additional topics may include analytic geometry with an emphasis on the conic sections, Gibbs notation vector algebra, polar coordinates, sequences, series, and mathematical induction. (5 contact hours) Prerequisite: MAT175 / 4 credits. Offered: Fall, Spring, Summer

The following three courses (MAT240, MAT250, MAT260) constitute a coordinated calculus sequence. Students should complete at least the first two semesters.

Calculus I
MAT240. This first course in calculus covers basic concepts, methods, and applications suitable for engineering, natural sciences, computer science, or mathematics majors. It is recommended to students who are qualified and desire a rigorous approach to calculus. Topics include limits, continuity, derivatives, integrals, fundamental theorem, applications on curve sketching, optimization, areas, and volumes. Upon completion, students should be able to apply differentiation and integration techniques (up to substitution) to both algebraic and transcendental functions. Prerequisite: MAT190 or MAT195 / 4 credits. Offered: Fall, Spring, Summer

Calculus II
MAT250. Continuation of MA240. The calculus of the logarithmic, exponential, and trigonometric functions; techniques of integration, polar coordinates; sequences and series. Prerequisite: MAT240 or MAT185 / 4 credits. Offered: Varies

Calculus III
MAT260. The sequel to MAT250. Topics include parametric equations and polar coordinates, vector-valued functions, partial differentiation, multiple integrals, and topics from vector calculus and from differential equations. Prerequisite: MAT250 / 4 credits. Offered: Varies

Differential Equations
MAT270. This first course in differential equations is designed for students with interests in mathematics, the natural sciences, or engineering. Coverage and emphasis is given to methods of solution, precise statement of theorems and definitions, problem applications. Prerequisite: MAT250 / 3 credits. Offered: Varies

Linear Algebra
MAT245. Study of abstract mathematical systems. Topics include matrices, vector spaces, linear transformations, and characteristic values. Prerequisite: MAT240 / 3 credits. Offered: Varies

Peer Tutorial Practicum (Math/Science)
MTU200. This course provides an opportunity to participate in an increasingly popular, growing area of collaborative learning: the peer tutorial. By means of readings, discussion, and supervised practicum in the College’s Math Lab, students participate in a comprehensive training experience designed to thoroughly familiarize them with the tutoring process. Prerequisite: Faculty recommendations in the content area / 1, 2, or 3 credits; may be repeated for credit; 3 credits maximum. Offered: Fall, Spring

Medical Interpreter
Medical Interpreter I
MIN101. (formerly HEA145) This introductory course, designed for individuals who are bilingual in English and Spanish or English and Portuguese, focuses on the basic competency skills necessary to work as a trained medical interpreter. The course adheres to the Standards of Practice for medical interpreters as established by the National Council on Interpreting in Healthcare. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score or ESL201 and target language assessment conducted in the first class session / 3 credits. Offered: Varies
Medical Interpreter II
MIN102. This course is designed for students continuing the study of medical interpreter practice and for experienced medical interpreters. The focus is on necessary advanced competency skills, written translation, and vocabulary. Prerequisite: BIT103 and MIN101 with a grade of C or higher / 3 credits. Offered: Varies

Medical Interpreter Practicum
MIN200. This course, designed for individuals who are bilingual in English and Spanish or English and Portuguese, will focus on skills acquired during coursework in Medical Interpreter I and Medical Interpreter II. The course adheres to the Standards of Practice for medical interpreters as established by the National Council on Interpreting in Healthcare. Students complete 150 hours of supervised medical interpreter activity in a community healthcare organization. Prerequisite: MIN102. Co-requisite: BIO105 / 3 credits. Offered: Varies

Music
Music Appreciation
MUS100. A survey of development of music from the Renaissance to the present including jazz and the contemporary scene. Emphasis on basic musical materials and principles of design. This course is for students not planning to major in music; no previous musical training required. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Music Theory I
MUS101. This course examines the fundamental materials, including pitch, rhythm, tonal systems, ear training, and basic harmony for those wishing to learn or to improve music reading skills. Students practice in performance and composition for instruments and voice. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring, Summer

Music History I
MUS102. This course is a detailed study of styles and forms of music from ancient cultures to eighteenth century classicism. Major compositions, personalities, styles, and forms explored through structured listening, analysis, and reading assignments. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Music History II
MUS103. This course is a detailed study of styles and forms of music from the eighteenth-century to the present. Major compositions, personalities, styles, and forms are explored through structured listening, analysis, and reading assignments. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Fundamentals of Music
MUS104. This course introduces the fundamental materials of music, including pitch, rhythm, scales, ear training, and basic melodic notation. Elementary principles of vocal tone production are explored, and basic keyboard technique is introduced. Prerequisite: None / 3 credits. Offered: Fall, Spring

Select Chorus
MUS113. Select Chorus provides an opportunity for experienced vocalists to rehearse and perform challenging music from a variety of modern musical styles. All participants are expected to be able to read music at a moderate degree of proficiency and produce a controlled vocal quality. (2 hours per week plus 2 dress rehearsals and a final performance). Prerequisite: Interview/Audition / 1 credit. May be repeated for credit up to 6 hours. Offered: Fall, Spring

History of Rock Music
MUS116. This course explores the origins, characteristics and stylistic development of rock music. The emphasis is on the artists, songwriters, and producers who have created the most famous hits and long term trends. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Applied Music
MUS120. Students receive private instruction in vocal or instrumental music, appropriate to the level of the student. (15 one-half hour tutorial lessons) There is an Applied Music charge. Prerequisite: Assessment Audition / 1 credit. May be repeated for credit; 6 credit maximum. Offered: Fall, Spring

Advanced Applied Music
MUS121. This course provides private instruction in vocal or instrumental music, appropriate to the level of the student. There is an Applied Music charge. (15 one-hour tutorial lessons) Prerequisite: Interview/Assessment Audition / 2 credits. May be repeated for credit; 6 credits maximum. Offered: Fall, Spring, Summer

Beginning Guitar
MUS122G. Students study, rehearse, and perform music in a small group setting. Emphasis is placed on learning to read standard musical notation, with attention also given to chords. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own guitar. Prerequisite: None / 1 credit. Offered: Fall, Spring

Beginning Piano
MUS122P. Students study, rehearse and perform keyboard music in a class setting. Emphasis is placed on learning to read standard musical notation in bass and treble clefs. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own portable keyboard. (3 hours per week for 7 weeks) Prerequisite: None / 1 credit. Offered: Fall, Spring

Jazz Combo
MUS123. Students rehearse and perform jazz in a variety of styles which may include: blues, Dixieland, swing, bebop, Latin, and rock. Performances on campus and in the immediate community are part of Jazz Combo activities. Students are expected to be able to read standard music notation. (Three class hours per week plus one dress rehearsal and one performance near the end of the semester.) Prerequisite: MUS101 or ability to read from standard musical notation / 1 credit. May be repeated for credit; 6 credit maximum. Offered: Fall, Spring

Guitar II
MUS124G. This continuation of Beginning Guitar course involves study, rehearsal, and performance of music in a class of up to 12 guitars. Emphasis is placed on expanding the students' abilities to read and perform from standard musical notation in treble clef and chord symbols. Repertoire varies from one semester to the next. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own instrument. Prerequisite: MUS122 or permission of the instructor / 1 credit; may be repeated; 6 credits maximum. Offered: Fall, Spring

Advanced Medical Interpreter
MIN200. This course, designed for individuals who are bilingual in English and Spanish or English and Portuguese, will focus on skills acquired during coursework in Medical Interpreter I and Medical Interpreter II. The course adheres to the Standards of Practice for medical interpreters as established by the National Council on Interpreting in Healthcare. Students complete 150 hours of supervised medical interpreter activity in a community healthcare organization. Prerequisite: MIN102. Co-requisite: BIO105 / 3 credits. Offered: Varies

Music Appreciation
MUS100. A survey of development of music from the Renaissance to the present including jazz and the contemporary scene. Emphasis on basic musical materials and principles of design. This course is for students not planning to major in music; no previous musical training required. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Music Theory I
MUS101. This course examines the fundamental materials, including pitch, rhythm, tonal systems, ear training, and basic harmony for those wishing to learn or to improve music reading skills. Students practice in performance and composition for instruments and voice. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring, Summer

Music History I
MUS102. This course is a detailed study of styles and forms of music from ancient cultures to eighteenth century classicism. Major compositions, personalities, styles, and forms explored through structured listening, analysis, and reading assignments. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall

Music History II
MUS103. This course is a detailed study of styles and forms of music from the eighteenth-century to the present. Major compositions, personalities, styles, and forms are explored through structured listening, analysis, and reading assignments. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Fundamentals of Music
MUS104. This course introduces the fundamental materials of music, including pitch, rhythm, scales, ear training, and basic melodic notation. Elementary principles of vocal tone production are explored, and basic keyboard technique is introduced. Prerequisite: None / 3 credits. Offered: Spring

Select Chorus
MUS113. Select Chorus provides an opportunity for experienced vocalists to rehearse and perform challenging music from a variety of modern musical styles. All participants are expected to be able to read music at a moderate degree of proficiency and produce a controlled vocal quality. (2 hours per week plus 2 dress rehearsals and a final performance). Prerequisite: Interview/Audition / 1 credit. May be repeated for credit up to 6 hours. Offered: Fall, Spring

History of Rock Music
MUS116. This course explores the origins, characteristics and stylistic development of rock music. The emphasis is on the artists, songwriters, and producers who have created the most famous hits and long term trends. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Applied Music
MUS120. Students receive private instruction in vocal or instrumental music, appropriate to the level of the student. (15 one-half hour tutorial lessons) There is an Applied Music charge. Prerequisite: Assessment Audition / 1 credit. May be repeated for credit; 6 credit maximum. Offered: Spring

Advanced Applied Music
MUS121. This course provides private instruction in vocal or instrumental music, appropriate to the level of the student. There is an Applied Music charge. (15 one-hour tutorial lessons) Prerequisite: Interview/Assessment Audition / 2 credits. May be repeated for credit; 6 credits maximum. Offered: Fall, Spring, Summer

Beginning Guitar
MUS122G. Students study, rehearse, and perform music in a small group setting. Emphasis is placed on learning to read standard musical notation, with attention also given to chords. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own guitar. Prerequisite: None / 1 credit. Offered: Fall, Spring

Beginning Piano
MUS122P. Students study, rehearse and perform keyboard music in a class setting. Emphasis is placed on learning to read standard musical notation in bass and treble clefs. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own portable keyboard. (3 hours per week for 7 weeks) Prerequisite: None / 1 credit. Offered: Fall, Spring

Jazz Combo
MUS123. Students rehearse and perform jazz in a variety of styles which may include: blues, Dixieland, swing, bebop, Latin, and rock. Performances on campus and in the immediate community are part of Jazz Combo activities. Students are expected to be able to read standard music notation. (Three class hours per week plus one dress rehearsal and one performance near the end of the semester.) Prerequisite: MUS101 or ability to read from standard musical notation / 1 credit. May be repeated for credit; 6 credit maximum. Offered: Fall, Spring

Guitar II
MUS124G. This continuation of Beginning Guitar course involves study, rehearsal, and performance of music in a class of up to 12 guitars. Emphasis is placed on expanding the students' abilities to read and perform from standard musical notation in treble clef and chord symbols. Repertoire varies from one semester to the next. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own instrument. Prerequisite: MUS122 or permission of the instructor / 1 credit; may be repeated; 6 credits maximum. Offered: Fall, Spring
Piano II
MUS124P. This is a continuation of MUS122P Beginning Piano. Students study, rehearse and perform keyboard music in a class setting. The emphasis is placed on expanding the students’ ability to read and perform from standard musical notation in treble and bass clefs. Performances on campus and in the immediate community are part of class activities. Students are expected to provide their own portable keyboard. Prerequisite: MUS122-P / 1 credit; may be repeated for credit; 6 credits maximum. Offered: Fall, Spring

Music Theory II
MUS202. This course is a continuation of MUS101 with emphasis on harmony and form. Prerequisite: MUS101 or permission of instructor/ 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Spring

Songwriting
MUS205. Students learn how to compose songs and discover the relationships among melody, harmony, rhythm, and lyrics (when present). Through analysis, students explore why hit songs are successful. Attention is also paid to creating stylistically appropriate introductions and endings, interludes, popular "hooks," and complete arrangements. Prerequisite: MUS101 / 3 credits. Offered: Spring

Nursing
Also see Fitness, Health Sciences, and Information Technology.

Medical Terminology
BIT103. Refer to Information Technology.

Advanced Rehabilitation Nursing Assistant
CNA113. This course is designed to enhance the knowledge of Rehabilitation and Restorative Care Concepts for the Nursing Assistant working in a variety of settings with people of all ages. Prerequisite: Documentation of at least a 75-hour nursing assistant and/or home health aide course / 1 credit. Offered: Varies

Effective Strategies for Working with Alzheimer’s Patients
CNA114. This course is designed to offer caregivers of persons with Alzheimer’s disease a variety of strategies to use in meeting the person's needs and understanding and dealing with often difficult behaviors. Prerequisite: None / 1 credit. Offered: Varies

Tri-level Nursing Assistant / Home Health Aide
CNA117. This 140-hour course (75 classroom and lab, and 65 hours of supervised clinical practice) teaches basic nursing skills and beginning interpersonal relationship techniques to entry-level students in the classroom and clinical area. The curriculum is divided into three levels of care: long-term, home health, and acute. It is possible to exit with certification upon completion of any one of the levels. Applicants must attend an information session prior to admission. Prerequisite: None / 6 credits. Offered: Fall, Spring

Rehabilitation / Restorative Aide
CNA138. This course is designed to enhance the knowledge of the nursing assistant/home health aide in the field of rehabilitation/restoration through a combination of classroom and laboratory practice. Students acquire the skills to assist in the day-to-day rehabilitation plan of care established by and under the supervision of the physical therapist, occupational therapist, speech therapist and/or the registered nurse in a variety of settings. Prerequisite: High school diploma or HiSET/GED and documented completion of at least a 75-hour nursing assistant or home health aide course / 3 credits. Offered: Varies

Pharmacology Calculations
NUR100. This course examines the methods of dosage calculation required for safe administration of medications to children and adults. Interpretation of medical orders and systems of measurements are included. Introduces dimensional analysis to convert and calculate dosages of oral, parenteral, and intravenous medications. Prerequisite: MAT030 or MAT035 or satisfactory basic skills assessment score / 1 credit. Offered: Fall, Spring, Summer

Fundamentals of Nursing
NUR107. Introduction to concepts of health, the individual, and nursing. Principles of the natural, behavioral and social sciences are applied to nursing. Nursing process is used to meet the basic human needs of the young, middle, and older adult in health and illness. Health assessment, interpersonal and psychomotor nursing skills are addressed in the classroom and practiced in the campus laboratory and community health agencies with faculty guidance. (4 class hours / 12 laboratory hours) Prerequisite: Admission to the College and Nursing program. Current American Heart Association or American Red Cross certification in cardiopulmonary resuscitation (CPR/Basic Life Support - 8 hour course). ENL020 and ENL050 or satisfactory basic skills assessment score; NUR100 and (BIO107 or BIO251). BIT103 is strongly recommended. Corequisite: (BIO108 or BIO252), ENL101, and PSY101 / 8 credits. Offered: Fall

Nursing Across the Life Span
NUR108. Basic concepts of human development, human behavior and scientific principles are applied to the care of the childbearing family, children and adults with health problems. The cycle from infancy to the older adult is integrated with emphasis on developmental stressors and the role of family and community. This course builds upon and expands basic concepts of health assessment, interpersonal and psychomotor nursing skills. Nursing process is applied to the childbearing family, the child from infancy to adolescence and the young, middle and older adult. Nursing care of patients with selected health problems related to nutrition/fluid balance and activity/exercise is integrated. Nursing care of the preoperative patient is included. Correlated clinical laboratory experiences with faculty guidance are required. (4 class hours / 12 laboratory hours) Prerequisite: NUR107, (BIO108 or BIO252), ENL101, and PSY101. Co-requisite: PSY233 / 8 credits. Offered: Spring
LPN in Transition

NUR132. This course prepares the student for advanced placement in NUR201 of the Nursing program by introducing concepts of professional nursing practice and building upon basic concepts of human development/behavior and scientific principles applied to the care of the childbearing family/children/adults with common health problems. The cycle from infancy to older adulthood is integrated including emphasis on developmental stressors, the family, and community. Correlated campus lab experiences with faculty guidance are required. (10 class hours / 12 clinical hours) Prerequisite: Current licensure as a Licensed Practical Nurse; current CPR certification; satisfactory basic skills assessment scores; ENL101, PSY101, PSY233, (BIO107 or BIO251), (BIO108 or BIO252), NUR100, and COM103 or ENL102; admission to the College and to the Nursing program / 8 credits. Offered: Summer

Paralegal

Foundations of the Profession

NUR203. This course analyzes the practice of nursing in contemporary society. Historical perspectives and current issues and trends are studied. Accountability, legal responsibilities of licensure, the ethical issues arising in the present health care systems, and leadership and management in nursing are major units of study. Political, economic, social, and cultural influences in nursing practice are considered. Prerequisite: NUR201 / 3 credits. Offered: Spring

Paralegal

Introduction to Substantive Law

LGS130. (replaces BIT130) This course is an introduction to the basic concepts of law and the judicial system. Students obtain an overview of criminal law, torts, property, contracts, wills, trusts, and employment law. Particular attention is given to general skills required of paralegals. Prerequisite: None / 3 credits. Offered: Fall

Family Law

LGS131. (replaces BIT131) The law of marriage, divorce, annulment, legal separation, pre-marital agreements, cohabitation, child support, alimony, and adoption are studied, as well as their implementing procedures. Prerequisite: LGS130 / 3 credits. Offered: Fall / even

Law Office Management

LGS132. (replaces BIT132) Students learn to work in a law office environment and receive hands-on training in billing, basic bookkeeping, form preparation and library maintenance. Legal ethics, attorney/client relationships, and the paralegal’s role in maintaining files, libraries and client confidentiality are stressed. Prerequisite: LGS130 / 1 credit. Offered: Spring

Legal Research and Writing

LGS133. (replaces BIT133) This course is an introduction to the methods and materials employed in legal research and the writing of legal memoranda and briefs. Emphasis is placed on how and where to locate the law and how to present the law that is found in those sources. Many different strategies of research are explored including computer resources and online database research. Prerequisite: LGS130 and ENL101 and two of the following: (LGS131, LGS134, LGS135, LGS136, LGS137) / 3 credits. Offered: Spring

Real Estate, Mortgages and Landlord-Tenant Law

LGS134. (replaces BIT134) This course is a study of the law of real property with special emphasis on both substantive law and practical considerations including drafting of real estate contracts and documents, title examinations, and an understanding of the mortgage lending field. Particular attention is given to the skills needed by paralegals including closing documents. Prerequisite: LGS130 / 3 credits. Offered: Spring / odd

Civil Litigation

LGS135. (replaces BIT135) This course covers basic steps in lawsuits from the initial interview through the appellate process. Students learn how to prepare complaints, answers, motions, discovery, and study in-depth the different phases of a civil trial. Prerequisite: LGS130 / 3 credits. Offered: Fall

Estate Planning, Wills, Trusts and Probate Procedures

LGS136. (replaces BIT136) This course covers the procedure, techniques and the substantive law in the planning of estates from simple wills to more complicated trusts. Students also learn to administer the estate of the deceased and study the tax consequences involved. Prerequisite: LGS130 / 3 credits. Offered: Spring / even

Contracts, Business Organizations and Transactions

LGS137. (replaces BIT137) Students are introduced to the Law of Contracts with an emphasis on understanding the interrelationships among concepts and the tools required in drafting good solid contracts. Students learn how to choose and organize the different types of business organizations such as sole proprietorships, partnerships, limited liability entities, and corporations. Prerequisite: LGS130 / 3 credits. Offered: Fall / odd

Criminal Law and Procedure

LGS138. (replaces BIT138) This course is a study of criminal law and procedure with special emphasis on both substantive and procedural criminal law and constitutional issues. Students learn to draft motions and other documents necessary for criminal defense and prosecution, prepare affidavits, briefs, and discovery. Particular attention is given to the skills needed by paralegals to assist attorneys and other legal professionals. Prerequisite: LGS130 / 3 credits. Offered: Fall
Internship in Paralegal Studies  
LGS238. (replaces BIT238) Students spend the semester (160 hours, at least 12 hours per week) working in a paralegal setting, either in a private law firm or for a government or non-profit agency such as the Sheriff's department, District Attorney's office, court, or Legal Aid Office. Participation in this course is subject to availability of placements, application and acceptance into the course. 
Prerequisite: LGS130, LGS133, LGS135 and (LGS131 or LGS134 or LGS136 or LGS137). The fourth prerequisite must reflect the type of legal practice in which he/she will intern. A 3.00 grade point average is required / 3 credits. 
Offered: Fall, Spring

Philosophy  

Introduction to Philosophy  
PHI130. This course provides the student with an introduction to six major issues in philosophy. Although the course is essentially an "isms" course, there is substantial and focused emphasis on historical development. In every section of the course, original source materials are read and used. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Logic  
PHI131. This course is an introduction to the principles of logic. It is designed for students who wish to develop their habits of thinking clearly and logically in the everyday world as well as in specialized areas such as science and technology. Although there is some coverage of informal logic, the thrust of the course is on formal logic including the following topics: deduction and syllogistic logic, symbolic logic, and induction and scientific method. Prerequisite: ENL101 or PHI130 / 3 credits. Satisfies a Humanities & Fine Arts (or) Behavioral & Social Sciences general education requirement. Offered: Varies

Three Great Thinkers  
PHI160. Students in this course engage in a critical examination of a number of contemporary seminal ideas central to the human experience of both Eastern and Western thinkers. Students study the writings of three major thinkers in the history of ideas. The three are announced before pre-registration each semester and vary from semester to semester, so the course is never the same. Students explore the ideas in the course for internal consistency and for the historical context in which they arose, as well as the actual consequences those ideas have had in human affairs. Prerequisite: ENL101 and a previous philosophy course / 3 credits; may be repeated once. Satisfies a Humanities & Fine Arts (or) Behavioral & Social Sciences general education requirement. Offered: Varies

Existentialism  
PHI201. This course provides the student with a comprehensive analysis of the multifaceted view toward life which has come to be known as existentialism. Social, moral, legal, religious, literary, as well as epistemological and metaphysical aspects of the existentialistic point of view, are considered. Prerequisite: ENL101 or PHI130 / 3 credits. Satisfies a Humanities & Fine Arts (or) Behavioral & Social Sciences general education requirement. Offered: Spring

Ethics  
PHI210. This course provides a rigorous and thorough examination of the major ethical theories in the history of Western philosophy, covering the work of such philosophers as Plato, Aristotle, Epicurus, Augustine, Aquinas, Kant, Hobbes, Rousseau, Nietzsche, Mill, Marx, Kierkegaard, Sartre, and Ayer, and contemporary writers such as Callahan, Raz, Rawls, Nozick, and Frankl. The early part of the course is a study of metaethics and of the terminology used in doing ethical analysis. The body of the course involves the study of five major theories of normative ethics: natural law theories, social contract theories, duty-based (deontological) theories, utilitarian (teleological) theories, and existentialist theories. Skeptical alternatives to these theories are also considered. In the last month of the semester, each student is expected to focus on a project dealing with a specific ethical theory or problem area. Prerequisite: ENL101 or PHI130 / 3 credits. Satisfies a Humanities & Fine Arts (or) Behavioral & Social Sciences general education requirement. Offered: Fall

Selected Topics in Philosophy  
PHI241. This course serves as a vehicle to either deepen students' knowledge of subjects addressed in Philosophy introductory courses or explore issues outside the traditional curriculum. Prerequisite: Any introductory level Philosophy course / 3 credits; may be repeated once; 6 credit maximum. Offered: Varies

Physics  
The following two courses (PHY151, PHY152) constitute a physics sequence that covers physics without the use of calculus.

Survey of Physics  
PHY106. Classical and modern physics presented conceptually and experimentally for students desiring a one-semester introduction to physics. The class emphasizes verbal and conceptual understanding of the way the world works using as little mathematics as possible. This course is appropriate for non-science majors and as a preparation for PHY211. (3 class hours / 2 laboratory hours) Prerequisite: (MAT030 or MAT035), ENL020, ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Varies

Physics I (formerly PHY101)  
PHY151. First semester of a two-semester introduction to college physics without calculus. This course covers mechanics (kinematics, dynamics and statics), relativity and some heat. The course is appropriate for any student interested in science and particularly appropriate for health sciences and pre-professional students. (3 class hours/ 2 laboratory hours) Prerequisite: (MAT040 or MAT110 or MAT035), and ENL020 and ENL050 or satisfactory basic skills assessment scores / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Fall, Summer

Physics II (formerly PHY102)  
PHY152. Second semester of a two-semester introduction to college physics without calculus. This course covers vibrations and waves; electricity and magnetism; light and optics; and some modern physics. The course is appropriate for non-science majors who are interested in science. (3 class hours / 2 laboratory hours) Prerequisite: A grade of C or higher in (PHY101 or PHY151) / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Spring
The following two courses (PHY211, PHY212) constitute a traditional university parallel calculus-based physics sequence. These courses are appropriate for math, science, and engineering students.

University Physics I

PHY211. First semester of a two-semester introduction to university physics. This course covers mechanics (kinematics, dynamics and statics), relativity and some heat. The course is appropriate for math, science, and engineering students. Calculus is used. Previous experience in physics (such as PHY106) is strongly recommended. Students must have taken or be currently enrolled in MAT240. Calculus I. (3 lecture hours / 2 laboratory hours / 1 recitation hour) Prerequisite: MAT195; corequisite: MAT240 / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Varies

University Physics II

PHY212. Second semester of a two-semester introduction to university physics using calculus. This course covers vibrations and waves; electricity and magnetism; optics; and a brief introduction to modern physics. The course is appropriate for math, science, and engineering students. Calculus will be used throughout the course. Students must have taken or be currently enrolled in MAT250. Calculus II. (3 lecture hours / 2 laboratory hours / 1 recitation hour) Prerequisite: A grade of C or higher in PHY211 / 4 credits. Satisfies a Natural or Physical Science general education requirement. Offered: Varies

Cooperative Work Experience in the Natural Sciences

SCI261. Refer to Biology.

Political Science

Comparative Politics

GOV101. This course is designed as an introduction to the basic concepts and themes in comparative politics. Using a case studies approach, the course compares and contrasts states according to political ideology, process, socialization, historical evolution, public policy, state institutions, and governmental systems. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall

International Relations

GOV102. This course features an historical examination of the fundamentals of international relations in theory and practice. Topics pertaining to developed and developing nations, security, power, science and technology, and international organizations are discussed with emphasis on the 20th and 21st centuries. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

The American Presidency

GOV110. This course explores the responsibilities, staff, functions, and limitations of the modern American presidency. While the course covers the origins of the presidency, the reading and lecture material focuses on the modern American presidency in the post-1932 period. This course explores the cultural, social, and economic changes that have wrought political changes in the meaning and role of the presidency. Prerequisite: None / 3 credits. Offered: Fall

American Government

GOV111. This course provides an introductory examination of the federal government. Emphasis is placed upon the political system in both principle and practice, the structure of our government, and public safety. Prerequisite: None / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Selected Topics in Government

GOV241. This course serves as a vehicle to either deepen students' knowledge of subjects addressed in Government introductory courses or explore issues outside the traditional curriculum. Prerequisite: Any introductory-level Government course / 3 credits; may be repeated once; 6 credit maximum. Offered: Varies

Portuguese

Conversational Brazilian Portuguese

PRT100. This basic conversational Brazilian Portuguese course is designed to introduce the non-native speaker of Brazilian Portuguese to the four basic skills necessary to develop a working knowledge of Portuguese: understanding, speaking, reading, and writing. Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring

Conversational Brazilian Portuguese II

PRT125. This basic conversational Brazilian Portuguese II course is designed to provide continued practice and mastery for the non-native speaker of Portuguese in the four basic skills necessary to develop a working knowledge of Portuguese: understanding, speaking, reading, and writing. Prerequisite: PRT100 / 3 credits. Offered: Fall, Spring

Psychology

Psychology of Career Development

PSY100. This course introduces students to the lifelong career development process. Students gain self-knowledge through assessment of interests, abilities, values and personality. Influences on career aspirations are explored. Students identify and investigate potential career options. Decision making skills are employed to develop career goals and action plans. Students are introduced to the benefits of networks, mentors, and role models. Students develop job search materials including a résumé and cover letter. Students gain familiarity with the process and skills for employment interviewing. Prerequisite: None / 1 credit. Offered: Fall, Spring

General Psychology

PSY101. Introduction to the major concepts and principles underlying human behavior and mental processes. Topics include personality theory, development, learning and thought, brain and nervous system, sensation and perception, motivation and emotion, stress and physical health, abnormal psychology, psychotherapy, and social psychology. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment scores / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Child Psychology

PSY201. This course focuses on important aspects of physical, cognitive, social and emotional development, occurring from the prenatal period through middle school. The major theories of development, research methods and the important roles of genetics and neuroscience are discussed. Emphasis is placed on the role of early experiences and biological factors in the later formation of personality, intellectual and emotional behaviors. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer
Adolescent Psychology
PSY202. Physical, emotional, intellectual, and social development of the human being during adolescence. Suggested for students planning to major in psychology, education, social work, or related areas. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Abnormal Psychology
PSY207. This course includes the study of the major psychiatric disorders such as depression, anxiety, and schizophrenia. Analysis is made of the probable causes of these disorders with emphasis on the strengths and limitations of the commonly used therapies. Consideration is given to positive, constructive, alternative responses to the basic problems of living. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Principles of Counseling and Crisis Intervention
PSY208. Analysis of a variety of life crises, methods of effecting intervention, and procedures for establishing a counseling relationship when appropriate. Designed to introduce those now in, or preparing for, the helping professions or related paraprofessional positions to the principles of effective crisis intervention and counseling. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring

Group Dynamics in Human Services
PSY209. This course explores the various stages of therapeutic groups, including group development. Emphasis is on basic group theory, process, and effective practice skills. Students are acquainted with task-oriented and treatment-oriented groups in a broad range of settings. This course may incorporate experiential learning where students learn about group processes via group exercises in class. Service Learning may be required. Prerequisite: PSY101 or SOC106 / 3 credits. Offered: Fall, Spring

Human Sexuality
PSY212. This course explores the physiological, psychological, and sociological aspects of human sexuality. Sexuality is considered as a natural, healthy function and a vital part of the total human organism. Issues of psychosexual development, sexual physiology, sexual attitudes, gender identity, love and sex, sex and the law, different sexual lifestyles, and sexual dysfunction, among others, are discussed in an open, frank manner. Audio/visual material, Internet web sites, and discussion forums augment the textbook and lecture content. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Social Science Research Methods
PSY216. This course introduces the basic research techniques and skills of the social sciences through an interdisciplinary, topical approach. Qualitative and quantitative research methods including ethnography, observation, survey and experimentation are discussed, demonstrated and practiced. Topics include formulating social science hypotheses, identifying variables, constructing and interpreting questionnaires, interviewing, and observing participants. Other topics include social scientists' use of statistics; research ethics; interpretation and communication of research findings, and the relevance of research to public policies in our society. Students may not earn credit for SOC225. Prerequisite: PSY101 and (MAT020 or MAT025) / 3 credits. Offered: Varies

Psychology of Women
PSY219. This course is designed for both females and males wishing a broader understanding of the physiological, psychological, and sociological determinants of female growth and development. It concentrates on developmental issues and contemporary role expectations, conflicts, and the status of women within a culturally defined role throughout the life cycle. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Varies

Social Psychology
PSY225. In an ever-changing global society, the individual is both influenced by the groups they encounter and conversely they influence those same groups. Social Psychology addresses human interaction and its consequences. Topics include conformity, aggression, motivation, group organization, social influences on perception, cognitive processes, and culture's impact on social behavior, addressing issues of tolerance within an increasingly diverse society. Emphasis is on the application of concepts. Prerequisite: PSY101 or SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Psychology of Aging
PSY231. This course presents a developmental perspective on the older adult. Biological, social, and psychological changes in personality and behaviors are studied with special attention to old age. Prerequisite: PSY101 / 3 credits. Offered: Varies

Developmental Psychology: The Life Span
PSY233. This course provides a survey of the physical, cognitive, sexual, social, and moral issues relevant to human development across the life span. Prerequisite: PSY101 and ENL101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

Brain and Behavior
PSY234. Brain and Behavior is all about the central nervous system (CNS)—its evolution, structures, development, and basic operating principles. Over the course of the semester students study the neural underpinnings (brain bases) of ordinary behaviors such as talking, moving, thinking, and dreaming. They also explore instances when the CNS "goes awry"; that is, examine the causes and behavioral effects of CNS disorders such as Alzheimer’s disease, schizophrenia, and autism. Prerequisite: PSY101 / 3 credits. Offered: Spring

Cognitive Psychology
PSY235. This course defines and explains the major concepts and principles underlying Cognitive Psychology. Topics include: Human Information Processing System, Perception and Attention, Short-Term Memory, different aspects of Long-Term Memory, Judgments, and Reasoning and Problem Solving. Prerequisite: PSY101 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring
**Selected Topics in Psychology**

PSY241. This course serves as a vehicle to either deepen students' knowledge of subjects addressed in Psychology introductory courses or explore issues outside the traditional curriculum. Prerequisite: PSY101 / 3 credits; may be repeated once for credit. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring

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**Recreation**

Refer to Fitness.

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**Religion**

**Concepts of Western Religion**

REL122. A study of the major concepts and beliefs, including Judaism, Christianity, and Islam from historical, philosophical, and cultural perspectives with consideration of the influence on personal and contemporary life. Prerequisite: None / 3 credits. Offered: Spring

**Concepts of Eastern Religion**

REL123. A study of the major concepts and beliefs including Hinduism, Buddhism, Confucianism, and Taoism from historical, philosophical and cultural perspectives with consideration of the influence on personal and contemporary life. Prerequisite: None / 3 credits. Offered: Fall, Summer

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**Service Learning**

**Service Learning Option**

SLR101. This course is a fourth-credit option which may be added as an additional "lab" to an existing course. Students conduct a minimum of 50 hours of community service. Students interested in this course must first enroll in and have the permission of the instructor of an anchor three or four credit course. This additional course requires a contract between the student and faculty member. All contracts are submitted to the College Service Learning coordinator for approval. Co-requisite: Enrollment in a college-level credit course and permission of both instructor and Service Learning coordinator / 1 credit; may be repeated for a maximum of 3 credits. Offered: Fall, Spring, Summer

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**Sociology**

**Principles of Sociology**

SOC106. Introduction to basic social concepts, theoretical perspectives and research methods. Topics include societies, cultures, social organization, social inequalities, social institutions, group behavior and the impact of globalization, population growth, and new technologies upon individuals and societies. Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

**Juvenile Delinquency**

SOC205. This course analyzes delinquent behavior of young people in our society, using various studies of the topic. It emphasizes the relationship between delinquent behavior and today's social and political conditions. Prerequisite: SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

**Race, Gender, and Class in the United States**

SOC208. This course examines the intertwining constructs of race, class, and gender, and their effects on the social and economic experiences of groups or persons. Through a focus on racial formation in U.S. history, students examine dominant ethnic identity and the histories of diverse ethnic groups. Students analyze how race, class and gender shape individuals' personal identities and access to institutional settings. Ideologies and achievements of diverse ethnic groups are compared. Prerequisite: SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Spring, Summer

**Marriage and Family: Sociology of Family Interaction and Organization**

SOC210. Study of the social aspects of family life and the impact of society upon families. Topics include historical forms of family life, varieties of contemporary families, the effects of changing cultural values and economic forces upon the daily life and stability of families, gender, the social psychology of love and romance, sex, parenting, and divorce. The course also covers family policy issues. Prerequisite: SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall

**Domestic Violence and Victimology**

SOC211. The major focus of this sociology course introduces students to research on domestic violence and victimology. Theories of domestic violence (the resource theory, symbolic interaction theory, functionalism, conflict theory, and criminological theories) are introduced, defined, and applied throughout the class. The macro-sociological view looks at violence as a societal-level. The micro-sociological view looks at the social interaction between perpetrators and victims. Data, research, and case studies are explored. Prerequisite: SOC106 / 3 credits. Offered: Fall

**Social Problems**

SOC215. A survey of the nature and range of social problems, the global and societal conditions which give rise to them, and the methods by which societies attempt to cope with them. Prerequisite: SOC106 / 3 credits. Satisfies a Behavioral & Social Sciences general education requirement. Offered: Fall, Spring, Summer

**Sociology of Education**

SOC216. This course provides a sociological analysis of the structure and function of contemporary education. Although some comparative cultural/historical data will be used, the focus is on education in America today. Students explore theoretical approaches to the sociology of education, stratification of schools both externally (public/private, suburban/urban) and internally (tracking, socialization, and more), the culture of schools, the relationship between education and issues of class, ethnicity and gender, and the sociology of educational alternatives and reform. Prerequisite: SOC106 / 3 credits. Offered: Varies

**Sociology of Health and Health Care**

SOC220. This course examines the socio-cultural aspects of health, illness and health care. Topics include development of scientific medicine, social epidemiology; definition of health and illness; social and cultural dimensions of disease and the illness experience; ethical issues in health care and health care reform. Effects of social stratification on access to health care, health professionals; the politics and economics of health care for selected diseases, such as breast cancer and HIV, are explored. Prerequisite: SOC106 or PSY101 or (BIO101 or BIO151) or BIO105 / 3 credits. Offered: Varies
Social Science Research Methods  
SOC225. This course introduces the basic research techniques and skills of the social sciences through an interdisciplinary, topical approach. Qualitative and quantitative research methods including ethnography, observation, survey and experimentation are discussed, demonstrated and practiced. Topics include formulating social science hypotheses, identifying variables, constructing and interpreting questionnaires, interviewing, and observing participants. Other topics include social scientists’ use of statistics; research ethics; interpretation and communication of research findings, and the relevance of research to public policies in our society. Students may not earn credit for PSY216. **Prerequisite: SOC106 and (MAT020 or MAT025) / 3 credits. Offered: Fall**

Peoples and Cultures of Africa  
SOC230. The course examines Africa’s social, economic, political, religious and cultural institutions, as well as the origins, cultural practices, population dynamics, family structures, marriage, inheritances, values, ethnicity, gender relations and patriarchy, and inter-tribal and ethnic conflicts in modern Africa. Contemporary issues such as HIV/AIDS epidemic, poverty, and Africa’s place in the global world are examined. **Prerequisite: SOC106 or ANT107 or HIS119 or HIS120 / 3 credits. Satisfies a Behavioral or Social Science general education requirement. Offered: Fall**

Sociology of Aging  
SOC232. The study of the sociological aspects of aging, the sociological adaptations to an aging population, and study of the aging individual in the social setting. **Prerequisite: SOC106 or GRN100 / 3 credits. Offered: Varies**

The Sociology of Gender: Roles of Men and Women in Global Perspective  
SOC235. Study of the changing social roles and experiences of men and women throughout the world. Family, educational, economic, political, community and cultural aspects of men and women’s lives are explored. **Prerequisite: SOC106 or PSY101 / 3 credits. Offered: Fall**

Selected Topics in Sociology  
SOC241. This course serves as a vehicle to either deepen students’ knowledge of subjects addressed in Sociology introductory courses or explore issues outside the traditional curriculum. **Prerequisite: Any introductory level Sociology or Anthropology course / 3 credits; may be repeated once for credit. Offered: Fall, Spring**

Spanish  

**Conversational Spanish**  
SPN100. This basic conversational Spanish course is designed to introduce the non-native speaker of Spanish to the four basic skills necessary to develop a working knowledge of Spanish: understanding, speaking, reading, and writing. The emphasis is on speaking and understanding spoken Spanish. **Prerequisite: ENL050 or satisfactory basic skills assessment score / 3 credits. Offered: Fall, Spring, Summer**

**Elementary Spanish I**  
SPN101. The first semester of a two-semester college elementary Spanish sequence for beginning non-native students of Spanish. The text and ancillary materials provide a thorough four skills approach: speaking, reading, writing, and understanding spoken Spanish. This course is not intended for students whose native language is Spanish. **Prerequisite: ENL020 and ENL050 or satisfactory basic skills assessment score / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall**

**Elementary Spanish II**  
SPN102. This is the second semester of a two-semester college Elementary Spanish sequence. It is for beginning students of Spanish. The text and ancillary materials provide a thorough four skills approach: speaking, reading, writing, and understanding spoken Spanish. **Prerequisite: SPN101 / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall**

**Intermediate Spanish I**  
SPN201. This course is for students who have completed one year of elementary college Spanish or three to four years of high school Spanish. Students read, discuss, and write about Hispanic culture and language in Spanish. **Prerequisite: SPN102 or 3-4 years of high school Spanish / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall**

**Intermediate Spanish II**  
SPN202. This is the second semester of the sequential intermediate college-level Spanish course emphasizing further mastery of speaking, understanding, reading and writing Spanish. Readings include historical and literary aspects of the Hispanic world and Spain. This course completes Stage III of the Language Learning Continuum of the ACTFL (American Council on Teaching Foreign Languages). **(5 class hours) Prerequisite: SPN201 or 3-4 years of high school Spanish / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall**

**Advanced Spanish I**  
SPN301. This course is a survey of selected Spanish literary works. These selections serve as a basis for classroom discussion and writing assignments. Conversation and composition polish and develop students' abilities in all four language skills. **Prerequisite: SPN202 / 3 credits. Offered: Fall**

Immersion Study in Spanish Language/Civilization  
SPN23. Students study Spanish language and civilization in a Spanish speaking country. Traditional class work is supplemented by cultural activities and fieldtrips. **Prerequisite: None / 3 credits. Offered: Varies**

Travel and Study in a Spanish Speaking Country  
SPN126. This is an educational field trip for Spanish language students enrolled at Cape Cod Community College. Visits could include Spain, Puerto Rico, Costa Rica, Ecuador, or any other Spanish speaking country. **Co-requisite: any credit Spanish class at CCCC / one week to 10 days. 1 credit; may be repeated; 4 credit maximum. Offered: Spring**

Onsite Spanish Culture  
SPN128. A ten-day study tour in a Spanish speaking country. Visits could include Spain, Puerto Rico, Costa Rica, Ecuador, Cuba, etc. **Prerequisite: One semester of college Spanish with a grade of C or better / 3 credits. Offered: Varies**

**Travel and Study in a Spanish Speaking Country**  
SPN126. This is an educational field trip for Spanish language students enrolled at Cape Cod Community College. Visits could include Spain, Puerto Rico, Costa Rica, Ecuador, or any other Spanish speaking country. **Co-requisite: any credit Spanish class at CCCC / one week to 10 days. 1 credit; may be repeated; 4 credit maximum. Offered: Spring**

Onsite Spanish Culture  
SPN128. A ten-day study tour in a Spanish speaking country. Visits could include Spain, Puerto Rico, Costa Rica, Ecuador, Cuba, etc. **Prerequisite: One semester of college Spanish with a grade of C or better / 3 credits. Offered: Varies**

Intermediate Spanish I  
SPN201. This course is for students who have completed one year of elementary college Spanish or three to four years of high school Spanish. Students read, discuss, and write about Hispanic culture and language in Spanish. **Prerequisite: SPN102 or 3-4 years of high school Spanish / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall**

Intermediate Spanish II  
SPN202. This is the second semester of the sequential intermediate college-level Spanish course emphasizing further mastery of speaking, understanding, reading and writing Spanish. Readings include historical and literary aspects of the Hispanic world and Spain. This course completes Stage III of the Language Learning Continuum of the ACTFL (American Council on Teaching Foreign Languages). **(5 class hours) Prerequisite: SPN201 or 3-4 years of high school Spanish / 4 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall**

Advanced Spanish I  
SPN301. This course is a survey of selected Spanish literary works. These selections serve as a basis for classroom discussion and writing assignments. Conversation and composition polish and develop students' abilities in all four language skills. **Prerequisite: SPN202 / 3 credits. Offered: Fall**
Advanced Spanish II
SPN302. This course is a survey of selected Spanish literary works. These selections serve as a basis for classroom discussion and writing assignments. Conversation and composition polish and develop students' abilities in all four language skills. Prerequisite: SPN301 / 3 credits. Offered: Spring

Theater and Dance

Oral Interpretation/Readers Theater
COM205. Refer to Communication.

Musical Theater Dance
DAN102. This course is designed to develop students' classic musical theatre dance skills. The class covers the basic steps, vocabulary, and variations of jazz, tap and contemporary choreography as they relate to musical theatre. The course explores the influence of award-winning choreographers such as Bob Fosse, Jerome Robbins, Gower Champion and/or Susan Stroman. Students will cultivate acting skills and character development as channeled through dance, and although singing is not taught, the instructor will emphasize the importance of vocal training to complement musical theatre dance training. Prerequisite: None; THR103 recommended / 3 credits. Offered: Fall, Spring

Modern Dance I
DAN120. This course provides students with a fundamental knowledge of modern dance techniques and composition. Participation in dance exercises, observation, and discussion of various modern dance styles enables students to develop a physical awareness and understanding of modern dance. Emphasis is placed on participation. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment scores / 3 credits; may be repeated once for credit. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Modern Dance II
DAN221. This course provides students with the opportunity to continue the study of Modern Dance technique and composition. Students participate in intermediate dance exercises and execute more advanced technique. Students observe and discuss dance styles which include interdisciplinary collaboration with music, art, and theater, and develop a further understanding and appreciation of modern dance performance. Prerequisite: DAN120 / 3 credits. Offered: Spring

African Dance and Drums
DAN126. This course serves as an introduction to the study of African dance and drumming including techniques, history and composition of dance as well as drumming techniques and rhythmic styles. In class, all students participate in both dance and drumming. Students learn about Africa including Mali, Senegal, Guinea, and West Africa and how these cultures have influenced art forms throughout the world. (Students may earn credit for either DAN126 or MUS125.) Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits; may be repeated once for credit. Offered: Spring

Middle Eastern Dance and Culture
DAN127. This course serves as an introduction to the study of North African (Egypt and the Maghreb) and Middle Eastern dance and culture, including history, composition, rhythms, finger cymbals, and styles of folkloric dance, drumming and costume. Students learn about the cultural and world influence of the arts of the Middle East and North Africa. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits; may be repeated once for credit. Offered: Fall

Introduction to Theater
THR101. This course explores the many facets that make up the experience of theater. Students probe questions like: what is the essence of theater, who are the artists that create what one sees on stage, what are the types of drama, the trends and movements since the Ancient Greeks, and how are plays reflective of playwrights' cultures? Students broaden their knowledge and experience of what constitutes the art of theater through reading, class discussion, lecture, staged readings, and viewing live and video performances. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring

Page to Stage: Planning Play Productions
THR102. Students consider the life cycle of a play from the page to the stage. Students read several plays, each to be explored from the viewpoint of the director, the various designers, and other collaborating artists. Prerequisite: None / 3 credits. Offered: Spring

Acting I
THR103. Students explore basic acting concepts, characterization, script analysis, and improvisation to develop confidence and skill when performing before an audience. Through observation, practice and analysis a variety of tools and techniques for effective performance will be applied to acting exercises, scenes and monologues. Prerequisite: ENL010 and ENL040 or satisfactory basic skills assessment score / 3 credits. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring, Summer

Introduction to Stage Management
THR104. This course provides an introduction to the role of the stage manager throughout the lifecycle of a theatrical production including preproduction, rehearsal period, technical preparation, technical rehearsals, opening, running of the show, production wrap up and post-production. Through written exercises and the construction of a complete prompt-book using word processing and spreadsheet software, students gain an appreciation of the role of the stage manager as the facilitator, mediator and organizer of the production process. Prerequisite: THR101 or equivalent / 1 credit. Offered: Spring

Introduction to Theatrical Makeup
THR105. Students in this course will explore the practice of stage makeup with emphasis on the requirements of dramatic character. Students learn how to research and practice the application of stage make-up and basic special effects. The course provides hands-on experience in makeup design and application for the performing arts. Students may be given the option to design make up plots for department productions as appropriate. Prerequisite: None / 1 credit. Offered: Varies

Rehearsal and Performance
THR113. Rehearsal and Performance is a practicum course that invites students to participate in the multifaceted experience of interpreting a play into a live theater production. Students learn by doing, with the option of assuming responsibilities as performers and/or production crewmembers in the Department’s scheduled production. Prerequisite: None / 1 credit; may be repeated up to 6 times for credit. Satisfies a Humanities & Fine Arts general education requirement. Offered: Fall, Spring
Introduction to Theater Design
THR117. Students use a practical, hands-on approach to designing and constructing various scenic elements for the stage including sets, costumes, props, and lighting. (2 class hours / 3 studio hours) Prerequisite: None; THR119 recommended / 3 credits. Offered: Spring (bi-annually)

Stagecraft and Theater Technologies
THR120. Students explore various aspects of technical theater production through research, observation and practice. Students develop skills in the design, planning, engineering, construction, and manipulation of a variety of theatrical technologies, including scenery, color mixing and paint application techniques, hanging, installation and focusing of theatrical lighting instruments, and operation of industry standard lighting, sound and video projection mapping systems for production purposes. Students gain practical experience by supporting the department’s theatrical productions. Prerequisite: ENL010, ENL040 & MAT025 or satisfactory basic skills assessment scores / 3 credits. Offered: Fall, Spring

Stage Movement
THR125. This course is designed to introduce the non-dancer to the fundamentals of movement and expression through observation, analysis, interpretation, and demonstration. Students learn postural alignment, centering, breathing techniques and kinesthetic (body) awareness. Individual and group exercises are used to explore various practices such as mime, mask, stage combat, and more. Prerequisite: None / 3 credits. Offered: Fall

Acting II
THR203. This course builds on skills developed in a beginning acting class to include more advanced work in character development. Students are introduced to advanced level work on text analysis, character motivation and physical acting. Prerequisite: THR103 / 3 credits. Offered: Spring

Directing for Theater
THR205. This studio course combines the introduction of basic directing theory and the application of technique to assigned scenes. Students are expected to have some previous theater experience on stage or behind the scenes. Students learn to interpret scripts for performance, prepare for auditions, manage rehearsals, and refine actors work for public presentation. Prerequisite: THR103 / 3 credits. Offered: Varies

Acting on Camera I
THR207. This course is for the intermediate actor to learn the specific acting and career management skills required to pursue professional work in film and television. Students develop refined audition techniques for soap operas and all forms of television commercials. Students learn about the business concepts and self-marketing tools used by performers in film and television, focusing on how actors fit into this marketplace and how to enhance their own unique talents as saleable qualities. Prerequisite: THR103 / 3 credits. Offered: Fall

Acting on Camera II
THR208. This course is a continuation of Acting On Camera I with students working in greater depth on scripts and developing more skill and confidence in front of the camera. Topics include script analysis, preparing for emotional scenes, non-verbal reactions, characterization as well as further discussion in regard to the job seeking process. While some scripted material is provided by the instructor, students are required to go to Internet script sites and select material from existing television shows or films. Prerequisite: THR207 / 3 credits.

Audition and Portfolio Preparation
THR209. This is a course linking the work of the performance classroom with the professional performing arts scene. Students develop audition pieces and learn auditioning techniques. Cold reading technique, monologue preparation as well as the actor's interview also are covered. Students develop resumes and choose a headshot. They attend regional auditions and engage in the process of finding work in the performing arts beyond the college setting. Prerequisite: THR203 or demonstrated equivalent knowledge / 3 credits. Offered: Fall, Spring

Theater Cooperative Work Experience
THR261. This course is designed to expand student knowledge through actual work involvement in the field of theatre arts. Working with a faculty mentor and collaborating with an employer, the student will demonstrate mastery of the student learning outcomes of pre-requisite courses. A minimum of 150 hours of onsite work is required. The student will meet with the instructor an average of one hour a week. Prerequisite: THR101 and THR113 or THR119 and approval of faculty mentor / 3 credits. Offered: Varies
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Campus Directory

BARNSTABLE CAMPUS
2240 Iyannough Rd., West Barnstable

Tilden Arts Center (1)
Arts & Communication Department & Faculty Offices
Art Studios
Box Office
Dean of Arts & Humanities
Grants
Higgins Art Gallery
Honors Program
Institutional Research and Planning
International Studies
Main Theater
Music Room
Phi Theta Kappa
Practice Rooms
Studio Theater

Nickerson Administration Building (2)
Admissions
Business Office
College Communications
Conference Room
Financial Aid
Human Resources
Payroll
President
Public Safety/Lost and Found
Reception
Registrar/Registration
Student Immunization Records
Switchboard/Information
Vice President of Academic and Student Affairs
Vice President of Finance and Operations

Wilkens Library (3)
Dean of Teaching and Learning Resources & Technologies
Board Room
CCCC Educational Foundation
Cape Cod Historical Collection/Nickerson Room
Group Study Rooms
Information Skills Classroom
MainSheet - Student Newspaper
Media Room
Military and Veterans Services
Online & Blended Learning

Maureen M. Wilkens Hall (4)
Adult Learner Services
Advanced Studies
ADVANTAGE/TRIO/SSS Program
Career Vocational Technical Education Linkage
Coaches & Mentors
Dean of Learning Resources and Student Success
Dental Hygiene Clinic
Inclusive Concurrent Enrollment
O’Neill Center for Disability Services
PACT
Project Forward
Reading & Writing Resource Center
Social Science, Behavioral Sciences and Human Services Department and Faculty Offices
Student Code of Conduct Officer
Student Employment
Student Grievance Officer
Tutoring Center

Connector (5)

North Building (6)
Civic Engagement and Service Learning
Dean of Health Sciences, Social Sciences, & Human Services
Health Sciences Department & Faculty Offices
Language & Literature Department & Faculty Offices
Nursing & Allied Health Learning Resource Center

Science Building (7, 8)
Dean of Science, Technology, Mathematics, Business, and Workforce Education
Lecture Halls
Mathematics, Natural Sciences and Applied Technology Departments and Faculty Offices
Math Learning Center
Science Labs

Grossman Commons (9)
Academy for Lifelong Learning
Accelerated Career Training
Advising & Counseling Center
Alumni Association
Bookstore
Cafeteria
Dean of Enrollment Management & Advising Services
First Year Student Success
High School Equivalency Test Center
Student Life & Co-Curricular Programs
Student Lounge
Student Senate
Testing Center
Zammer Dining Room

Lyndon P. Lorusso Applied Technology Building (10)
Business Department & Faculty Offices
Computer Labs
Information Technology
Instructional Technology Center
Teaching & Learning Center
Zammer Hospitality Institute Office

Makkay Broadcasting Center (11)
WKKL - Radio Station

Life Fitness Complex (12-15)
All-Purpose Fields
Cape Cod Regional STEM Network
Career Services & Experiential Learning
Child Care Center
Counseling Services
Family Pantry of Cape Cod
Gymnasium
Life Fitness Center
Racquetball Court
Soccer Fields
Tennis Courts

Facilities Management Building (16,17)
Facilities Use
Maintenance Shops
Shipping and Receiving - Warehouse

HYANNIS CENTER
540 Main St., Hyannis
ACCCESS
Workforce Education Resource Center
Cape Cod Community College
West Barnstable - Main Campus

Directions
Route 6 to exit 6. Travel north on Route 132 for 1/4 mile. The campus entrance is on the right.

Directions to the Hyannis Center
Route 6 to exit 6 turn on Route 132 South (Iyannough Road) and travel approximately 1.7 miles. Turn right on to Bearse’s Way and proceed 1.7 miles (crossing Route 28). Enter the rotary and continue on Bearse’s Way (almost straight ahead.) At the first traffic light turn left onto North Street. The Hyannis Center is on the right.
Glossary of Academic Terms

A.A. - Associate in Arts - An undergraduate degree of at least 60 credits or more awarded upon successful completion of a program of study in liberal arts and sciences that prepares students to transfer to a baccalaureate institution.

A.S. - Associate in Science - An undergraduate degree of at least 60 credits awarded upon successful completion of a program of study in an applied subject area, such as computers, electronics, or health, that prepares students to enter the work force.

Academic Advisor - College staff member responsible for providing guidance in course and/or program-related issues.

Academic Term (semester) - Fall, spring, and summer weeks when classes are in session. The fall and spring semesters are approximately fifteen weeks long. The summer semester is seven weeks long.

Academic Year - Fall, spring, and summer semesters are generally from early September to mid August.

Adjunct Faculty - Members of the College staff who teach on a part-time basis.

Administration - College staff members responsible for management and supervision.

Alumni - Graduates, in the plural.

Articulation Agreement - A formal agreement between Cape Cod Community College and a four-year college or university which eases the transfer to that institution.

Audit - To take a course under an agreement which does not result in a final grade of A, B, C, etc. Generally involves regular attendance and participation, but limits graded activities, such as exams. Requires full payment of tuition.

Certificate Program - An academic program of study in a specific field intended for occupational training, upgrading or retraining, generally 29 credits or less in duration. A certificate is awarded upon successful completion of the program.

Commencement - Graduation.

Concentration - Refer to the Associate in Arts section of this Catalog.

Credit Course - An academic course numbered 100 or above in the College catalog which may be applied toward completion of a degree or certificate (see Developmental Course).

Credit Hour - A standard measure of the amount of instructional time required to successfully complete a course. For example, ENL101, English Composition 1, is a 3-credit hour course, which means that it will meet for 3-hours each week for one semester.

Curriculum - Set of courses focused in a particular field, i.e., accounting, criminal justice, and early childhood education.

Dean - Member of administrative staff responsible for supervision and management of a particular division of the College.

Degree Program - At Cape Cod Community College, an Associate in Arts or Associate in Science program of study requiring 60 credits or more for completion.

Developmental Course - A basic skill development course, generally numbered below 100 in the College catalog, that carries college credit but does not count toward the requirements for graduation.

Elective - A course requirement in a program of study that may be fulfilled with a variety of courses in the designated discipline area numbered above 100.

Faculty - Members of the College staff who teach.

Fees - Charges to students by the College for specific services.

Financial Aid - Funding provided to students from various sources to assist in defraying expenses to attend the College.

Free Application for Federal Student Aid (FAFSA) - A standardized application including detailed financial data that is required to determine eligibility for all financial aid programs.

Full-Time (Student) - Students registered for 12 or more credits in the fall or spring semester.

General Education Requirements - A common core of courses that all students are required to take which provide for the acquisition of the core skills and knowledge of a literate citizenry.

GPA (Cumulative GPA) - Grade point average used to compute student academic standing.

Matriculation - A process designed to promote student success and help students achieve their educational goals. Matriculation enhances student access to academic advising and financial aid opportunities. A student becomes ‘matriculated’ when accepted and admitted to the College under a specific degree or certificate program and has registered for one or more credit courses.

A non-matriculated student is one who has registered for one or more credit courses but is not enrolled in a degree or certificate program.

Mid-Term - The point midway through an academic term.

Part-Time (Student) - Student enrolled for 11 credits or fewer in the fall or spring semester.

Prerequisite - Prerequisite courses are established to assure students have the necessary knowledge and skills to succeed in a course. Students are required to complete (or be currently enrolled in prerequisites) prior to registering for the next level course.

Program - Refer to the A.S. Associate in Science section of this Catalog.

Schedule Adjustment Period - A period of time when students may drop a class and add another.

Transcript - Permanent record of student academic grades.

Tuition - Charges to a student by the College for registration in credit courses.

Withdrawal from the College - The formal process of notifying the College of the decision to discontinue attending all classes. Available through the Advising & Counseling Office.

Withdrawal from a Course - The formal process of notifying the College of the decision to discontinue attendance in a course. Available through the Registrar’s Office.