# **Programs of Study**

### **Associate Degree**

Accounting Option, A.S.

Biological Sciences: Biotechnology Option, A.S.

Biological Sciences: Medical Professions Option, A.S.

Biology Transfer Option, A.S.

Chemistry Concentration, A.A.

Communication Concentration, A.A.

Computer Information Systems Concentration, A.A.

Computer Science Concentration, A.A.

Computer Science Transfer Option, A.S.

Criminal Justice Career Option, A.S.

Criminal Justice Transfer Option, A.S.

Culinary Arts Option, A.S.

Cybersecurity Option, A.S.

Data Analytics Option, A.S.

Early Childhood Development, A.S.

Education Concentration, A.A.

Electric Power Utility Program - A Partnership with EVERSOURCE, A.S.

Electrical Engineering Transfer Option, A.S.

Engineering Transfer Option, A.S.

English Concentration, A.A.

English: Creative Writing Option, A.A.

Entrepreneurship Option, A.S.

Environmental Science, A.S.

Finance Option, A.S.

Fire Protection and Safety Program, A.S.

Gaming/Computer Artist Track Simulation Option, A.S.

Gaming/Computer Programming Track Simulation Option, A.S.

General Sonography Option Full-time, A.S.

Global Languages Concentration, A.A.

Health Science, A.A.

History Concentration, A.A.

Hospitality Management, A.S.

Human Services, A.S.

Information Technology Transfer Option, A.S.

Integrated Media Design Option, A.S.

Liberal Arts, A.A.

Management Option, A.S.

Mathematics Concentration, A.A.

Medical Imaging, A.S.

Medical Information Management Option, A.S.

Medical Laboratory Technician, A.S.

Medical Radiography Option Full-time, A.S.

Medical Radiography Option Part-time, A.S.

Music Concentration, A.A.

Paralegal Studies, A.S.

Paramedic Studies, A.S.

Physics Concentration, A.A.

Political Science Concentration, A.A.

Psychology Concentration, A.A.

Registered Nursing Program: Day/Alternative Options, A.S.

Sociology Concentration, A.A.

Sport Management Option, A.S.

Studio Arts Option, A.S.

Surgical Technology Option, A.S.

Theatre Concentration, A.A.

Visual Design Option, A.S.

Web Development Option, A.S.

#### Certificate

Accounting Information Certificate

Android Mobile App Certificate

Apple Mobile App Starter Certificate

Central Processing Certificate

Data Analytics Certificate

Data Management (Fast-Track) Certificate

Early Childhood Development Certificate

Early Childhood Development with Child Development Associate Credential Certificate

Entrepreneurship Certificate

**Excel Applications Support Specialist Certificate** 

Health IT Systems Support Certificate

Hotel and Restaurant Management Certificate

IT Support Certificate

Magnetic Resonance (MR) Certificate

Medical Assistant Certificate

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Medical Information Management Assistant Certificate

Medical Laboratory Assistant Certificate

Microsoft Applications Support Specialist Certificate

Networking and Security Certificate

Object Oriented Computer Programming and Design Certificate

Paralegal Studies Certificate

Paramedic Certificate

Patient Care Technician Certificate

Pharmacy Technician Certificate

Professional Human Services Work Certificate

Sport Management Certificate

Web Development Certificate

# **Associate Degree**

# **Accounting Option, A.S.**

This option trains students in the use of the accounting software used in industry by introducing computerized applications early in the sequence of courses. Students interface with the public through the Volunteer Income Tax Assistance (VITA) component of this option as they help interested members of the community prepare their tax returns.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- BUS-101 Introduction to Business Credits: 3 \*
- ENG-111 College Writing I Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4 \*
   This course meets the General Education requirement for Quantitative Problem Solving Choose one course from Quantitative Problem Solving Menu
- ACC-101 Principles of Accounting I Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3

Total Credits: 15-16

## **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Explore BHCC Student Activities offered i.e., BHCC's Entrepreneurship Club.
- Create and follow education plan.

### Semester 2

- ENG-112 College Writing II Credits: 3
- ACC-102 Principles of Accounting II Credits: 3 \*
- BUS-201 Business Law I Credits: 3
- MAN-112 Organizational Behavior/Design Credits: 3
- ACC-105 Accounting Information Systems Credits: 3

**Total Credits: 15** 

## **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- Complete a volunteer activity in an area of interest.
- Learn about Alpha Beta Gamma (Business Honor Society) and Alpha Kappa Mu (General Honor Society).
- Inquire about the Commonwealth Honors Program.

#### Semester 3

- ACC-201 Intermediate Accounting I Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning

Choose one course from Scientific Reasoning Menu

- ACC-203 Personal Income Tax Credits: 3
- ACC-207 Cost Accounting Credits: 3
- ECO-201 Macroeconomics Credits: 3

or

ECO-202 Microeconomics Credits: 3

Total Credits: 16

# **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Develop a financial plan for continued education and life after graduation.
- Complete a pre-graduation check with an advisor in LifeMap.

#### Semester 4

- ACC-202 Intermediate Accounting II Credits: 3
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

- ACC-205 Volunteer Income Tax Assistance Credits: 3
- ACC-216 Managerial Accounting Credits: 3
- MAN-299 Business Internship Credits: 3
- INT-299B Learn and Earn Business Internship Credits: 3
- MAN-105 Principles of Marketing Credits: 3
- MAN-111 Principles of Management Credits: 3

**Total Credits: 15** 

## **Semester 4 Advising Note**

- Gather recommendation letters from faculty and staff.
- Apply for Graduation.
- Finalize your resume and upload it to your ePortfolio and LinkedIn website.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Understand all variables that are relevant to preparing individual tax returns at both the state and federal levels.
- Prepare a set of financial statements for a service, merchandising, or manufacturing business that is structured as either a proprietorship, partnership, or corporation.
- Analyze a set of financial statements to determine the strengths or weaknesses of the business.
- Understand the importance of cash flow within a business and account for its use and source in evaluating the
  effectiveness of managerial decisions.

#### Career Outlook

This option qualifies graduates to enter the accounting profession in entry-level positions.

## **Transfer Options**

#### **Transfer Advising Guides**

- Boston College Woods College of Advancing Studies
- Northeastern University
- Suffolk University

## Biological Sciences: Biotechnology Option, A.S.

This option covers the concepts, methodology and techniques of biochemistry, cell biology, genetics, cell culture, molecular biology, immunology, bioinformatics and microbiology. The option provides students with a rigorous academic background as well as industry-specific laboratory skills including sophisticated laboratory procedures, experimental design, data interpretation, and equipment maintenance. The program also reinforces general industry-specific skills such as communication, organization

and teamwork. Graduates of this program may transfer to four-year colleges and universities to continue their studies in biotechnology or other life sciences.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- ENG-111 College Writing I Credits: 3 \*
- MAT-197 Precalculus Credits: 4 \*
- BIO-195 General Biology I & Lab Credits: 4 \*
- BIO-120 Introduction to Biotechnology Credits: 4 \*
   Students in the Biotechnology option should take BIO-120 in their first semester. Students must also complete BIO-120 before taking BIO-261 in their third semester.

Total Credits: 15

# **Semester 1 Advising Note**

- If student is taking developmental math their first semester, they can supplement their schedule with General Education courses and College Writing I (ENG-111). Taking developmental math the first semester will require a student to attend for an extra semester and/or attend a summer session to complete the program.
- A student should consider taking one of their General Education courses during the summer session to lighten their academic load in semester two.
- General Education Quantitative Problem Solving and General Education Scientific Reasoning satisfied by Program.
- This is a day program only. The only biotechnology course offered in the evening is BIO-120.
- Students who do not place into MAT-197 may need to take prerequisite coursework. This could require additionaltime to complete the degree. Math should be taken as early in the program as possible to ensure timely completion.

#### Semester 2

- ENG-112 College Writing II Credits: 3 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3

This course meets the General Education requirement for Community & Cultural Contexts Choose one course from Community and Cultural Contexts Menu

• GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

- BIO-196 General Biology II & Lab Credits: 4
- BIO-207 Cell Biology & Lab Credits: 4 \*

**Total Credits: 17** 

## **Semester 2 Advising Note**

Three General Education menu courses must be completed during semesters 2 and 3, in no particular sequence.

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.

#### Semester 3

- BIO-208 Genetics and Lab Credits: 4 \*
- BIO-261 Advanced Laboratory Techniques in Biotechnology Credits: 3 \*
- CHM-201 General Chemistry I & Lab Credits: 4 \*
   Students must complete MAT-197 or higher level math with a C+ or better before taking CHM-201
- BIO-262 Principles of Molecular Biotechnology Credits: 3 \*

**Total Credits: 14** 

## **Semester 3 Advising Note**

- Students in the Biotechnology option must complete BIO-120 before taking BIO-261
- BIO-262 is only offered in the fall semester, please see department chair for questions.
- To lighten the course load for semester 3, a student should consider taking either BIO-208 or CHM-201 during the preceding summer session.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

- CHM-202 General Chemistry II & Lab Credits: 4
- Elective- Option Elective Credits: 4

Elective Options:

BIO-205 Microbiology & Lab, ENV-211 Environmental Microbiology/Lab, CHM-121 Principles of Organic & Chemistry W/Lab, CHM-251 Organic Chemistry I and Lab, CHM-252 Organic Chemistry II and Lab, CIT 110 - Applications/Concepts, MAT-181 Statistics I, MAT-281 Calculus I, MAT-282 Calculus II, SCI-221 Interpretation and Presentation of Scientific Research, SCI-150 Forensic Science and Lab, HON-200 Honors Seminar

Elective- Option Elective Credits: 4

**Elective Options:** 

BIO 205 - Microbiology & Lab, ENV 211 - Environmental Microbiology/Lab, CHM 121 - Principles of Organic & Chemistry W/Lab, CHM 251 - Organic Chemistry I and Lab, CHM 252 - Organic Chemistry II and Lab, CIT 110 - Applications/Concepts, MAT 181 - Statistics I, MAT 281 - Calculus I, MAT 282 - Calculus II, SCI 221 - Interpretation and Presentation of Scientific Research, SCI 150 - Forensic Science and Lab, HON 200 - Honors Seminar

Total Credits: 14-15

### **Semester 4 Advising Note**

- For the two option elective courses, students must complete a minimum of 7 credits. (One of the two electives courses must be a 4-credit course.)
- Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Use currently accepted biological, chemical, and physical concepts to investigate problems and ideas presented in advanced biological study.
- Use biological concepts to evaluate their own science related concerns such as personal health or careers.
- Use laboratory technology, equipment and techniques to investigate scientific problems critically and safely using proper scientific methods.
- Use molecular and cellular laboratory techniques that are commonly used in Biotechnology.
- Explain the major concepts of cell structure, function and cellular processes that are key to life.
- Explain current models, concepts and principles of genetics and inheritance.
- Explain and apply the underlying concepts of current topics and experimental models in molecular biology and Biotechnology.
- Use industry skills and work practices of the biotechnology industry for direct employment.

#### Career Outlook

Students completing this option qualify for entry level positions in a wide range of biotechnology disciplines in industry, police, government and academic labs. These positions require a biotechnology certificate, AS degree or BS degree with 0-2 years of experience. Such positions offer the possibility of merit bonus and promotion and are available locally as well as nationwide.

### **Transfer Options**

### MassTransfer A2B Link

- Fitchburg State University
- UMASS Boston University
- UMASS Lowell University

## **Transfer Guides**

Northeastern University College of Professional Studies

### **Biological Sciences: Medical Professions Option, A.S.**

This option provides students with the technical coursework and laboratory experiences that enable them to successfully transfer and pursue a career in the medical professions including medical, veterinary, and pharmacy, physical therapy and physician's assistant programs. Students should tailor this option by choosing electives based on the requirements of the programs to which they plan to apply. BHCC has articulation agreements with UMass Boston, UMass Amherst and UMass Lowell, enabling Medical Professions graduates to enroll in any one of these universities as juniors, without losing credits.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- ENG-111 College Writing I Credits: 3 \*
- CHM-201 General Chemistry I & Lab Credits: 4 \*
- MAT-281 Calculus I Credits: 4 \*
- BIO-195 General Biology I & Lab Credits: 4 \*

Total Credits: 15

## **Semester 1 Advising Note**

- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program.
- This option has three tracks: 1. Pre-pharmacy school; 2. Pre-physician's assistant or physical therapy school; 3. Pre-medical or Pre-veterinary school. Course selection will vary based on a student's intended career. Students should learn about the course requirements of specific programs as they choose their electives. Please see each semester's advising notes for correct course registration.
- Students need to complete three General Education courses during semesters 1 and 2. Students do not need to complete General Education courses in any particular order.
- MAT-197 requires a C+ or higher to enroll in CHM-201.
- If a student is not eligible to take (MAT-281) Calculus I, they should take (MAT-197) Precalculus in order to take (CHM-201) General Chemistry I/Lab in their second semester.

#### Semester 2

- ENG-112 College Writing II Credits: 3 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts Choose one course from Community and Cultural Contexts Menu
- BIO-196 General Biology II & Lab Credits: 4 \*
- CHM-202 General Chemistry II & Lab Credits: 4 \*
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

**Total Credits: 17** 

## **Semester 2 Advising Note**

- Cell Biology/Lab (BIO-207), Genetics/Lab (BIO-208), Organic Chemistry I/ Lab (CHM-251), Organic Chemistry II/Lab (CHM-252) and Interpretation and Presentation of Scientific Research (SCI-221) are not always offered during the summer semester. All other required science and math courses are offered during the summer.
- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

- BIO-207 Cell Biology & Lab Credits: 4 \*
- CHM-251 Organic Chemistry I and Lab Credits: 4 \*
- PHY-251 Physics I/Lab Credits: 4 \* or
- PHY-201 General Physics I/Lab Credits: 4 \*
- Elective- Elective Credits: 3

Option elective courses:

BIO-203 Anatomy/Physiology I & Lab, BIO-204 Anatomy/Physiology II & Lab, BIO-205 Microbiology & Lab, BIO-208 Genetics and Lab, CHM-252 Organic Chemistry II and Lab, MAT-181 Statistics I, MAT-282 Calculus II, NHP-180 Medical Terminology, COM-171 Public Speaking and Professional Comm, SCI-221 Interpretation and Presentation of Scientific Research, HON-200 Honors Seminar, BIO-120 Introduction to Biotechnology See semester advising note.

**Total Credits: 15** 

## **Semester 3 Advising Note**

- Veterinary and pharmacy schools: Most require calculus and calculus-based Physics I &II (PHY-251 and PHY-252).
- Medical, physician's assistant, physical therapy schools: Most do not require calculus or calculus-based physics and students can instead take General Physics (PHY-201 and PHY-202). However, Physics I &II (PHY-251 and PHY-252) courses will strengthen your application.
- Electives should be decided based on the medical profession chosen by the student. Students should research specific programs and their course requirements.
- Veterinary and medical schools elective options: Organic Chemistry II (CHM-252), Genetics (BIO-208), Statistics (MAT-181), \*Students may choose to take Microbiology (BIO-205).
- Pharmacy programs elective options: Organic Chemistry II (CHM-252), Microbiology (BIO-205), Anatomy & Physiology I (BIO-203), \*Students may also choose: Public Speaking and Professional Communication (COM-171), Statistics (MAT-181), and/or Anatomy & Physiology II (BIO-204).
- Physician's Assistant or Physical Therapy programs elective options: Anatomy & Physiology I and II (BIO-203 and BIO-204), Statistics (MAT-181),\* Students may choose to take Medical Terminology (NHP-180) and/or Microbiology (BIO-205).
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

- PHY-252 Physics II/Lab Credits: 4 \*
- PHY-202 General Physics II/Lab Credits: 4 \*
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

• Elective-Elective Credits: 3-4

Option elective courses:

BIO-203 Anatomy/Physiology I & Lab, BIO-204 Anatomy/Physiology II & Lab, BIO-205 Microbiology & Lab, BIO-208 Genetics and Lab, CHM-252 Organic Chemistry II and Lab, MAT-181 Statistics I, MAT-282 Calculus II, NHP-180 Medical Terminology, COM-171 Public Speaking and Professional Comm, SCI-221 Interpretation and

Presentation of Scientific Research, HON-200 Honors Seminar, BIO-120 Introduction to Biotechnology See semester advising note.

Elective- Elective Credits: 3-4

Option elective courses:

BIO-203 Anatomy/Physiology I & Lab , BIO-204 Anatomy/Physiology II & Lab , BIO-205 Microbiology & Lab , BIO-208 Genetics and Lab , CHM-252 Organic Chemistry II and Lab , MAT-181 Statistics I, MAT-282 Calculus II, NHP-180 Medical Terminology, COM-171 Public Speaking and Professional Comm, SCI-221 Interpretation and Presentation of Scientific Research, HON-200 Honors Seminar, BIO-120 Introduction to Biotechnology See semester advising note.

Total Credits: 13-15

## **Semester 4 Advising Note**

- Veterinary and medical schools elective options: Organic Chemistry II (CHM-252), Genetics (BIO-208), Statistics (MAT-181), \*Students may choose to take Microbiology (BIO-205).
- Pharmacy programs elective options: Organic Chemistry II (CHM-252), Microbiology (BIO-205), Anatomy & Physiology I (BIO-203), \*Students may also choose: Public Speaking and Professional Communication (COM-171), Statistics (MAT-181), and/or Anatomy & Physiology II (BIO-204).
- Physician's Assistant or Physical Therapy programs elective options: Anatomy & Physiology I and II (BIO-203 and BIO-204), Statistics (MAT-181),\* Students may choose to take Medical Terminology (NHP-180) and/or Microbiology (BIO-205).
- Apply for graduation.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Use currently accepted biological, chemical and physical concepts to investigate problems and ideas presented in advanced study related to health and medicine.
- Use biological concepts to evaluate their own science related concerns such as personal health or health careers.
- Use laboratory technology, equipment and techniques to investigate scientific problems critically and safely using proper scientific methods.
- Use molecular and cellular laboratory techniques that are commonly used in Biotechnology and Medicine.
- Explain the major concepts of cell structure, function and cellular processes that are key to life.

### Career Outlook

This option will allow students to transfer to four-year colleges and universities to seek a bachelor's degree to pursue a career in the health professions. Students should enroll in this option if they plan to transfer to a four-year college or university to pursue admission to programs in medical, veterinary, pharmacy, physician's assistant or physical therapy professions.

## **Transfer Options**

## **Transfer Advising Guides**

- Massachusetts College of Pharmacy and Health Sciences Boston Campus
- Massachusetts College of Pharmacy and Health Sciences Manchester and Worcester Campuses

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Northeastern University College of Professional Studies

#### MassTransfer A2B Link

University of Massachusetts Amherst

### **Biology Transfer Option, A.S.**

This option provides students with the technical coursework and laboratory experience that enables them to succeed in undergraduate biology programs. Upon graduation from BHCC, students are able to pursue further study at four-year colleges and universities in any number of areas including physiology, ecology, cell biology, biotechnology, genetics, botany, zoology, microbiology, biochemistry, wildlife conservation, or any of the health sciences. BHCC has articulation agreements with UMass Boston, UMass Amherst and UMass Lowell, enabling Biology Transfer graduates to enroll in any one of these universities as juniors, without losing credits.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing | Credits: 3 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose a course from the Community & Cultural Contexts Menu
- MAT-281 Calculus | Credits: 4 \*
- BIO-195 General Biology I & Lab Credits: 4 \*

Total Credits: 14

## **Semester 1 Advising Note**

- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program.
- Students need to complete three General Education courses during semesters 1 & 2. These do not need to be completed in any particular sequence.
- If a student is not eligible to take MAT-281, they should take Precalculus (MAT-197) in order to take General Chemistry I (CHM-201) in their second semester.
- Students who do not place into MAT-197 may need to take prerequisite coursework. This could require additional time to complete the degree. Math should be taken as early in the program as possible to ensure timely completion.

- ENG-112 College Writing II Credits: 3 \*
- GenEd-E General Education Elective Credits: 3
   This course meets the General Education requirement for General Education Elective.
   Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

- GenEd-CW Creative Work Credits: 3 \*
   This course meets the General Education requirement for Creative Work Choose a course from the Creative Work Menu
- BIO-196 General Biology II & Lab Credits: 4 \*
- CHM-201 General Chemistry I & Lab Credits: 4 \*

Total Credits: 17

## **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

### Semester 3

- BIO-207 Cell Biology & Lab Credits: 4
- CHM-202 General Chemistry II & Lab Credits: 4
- PHY-251 Physics I/Lab Credits: 4 \* or
- PHY-201 General Physics I/Lab Credits: 4 \*
- Elective-Option Elective Credits: 3-4

**Elective Options:** 

BIO-120 Introduction to Biotechnology, BIO-210 Population Ecology & Lab, ENV-211 Environmental Microbiology/Lab, BIO-261 Advanced Laboratory Techniques in Biotechnology, BIO-262 Principles of Molecular Biotechnology, CHM-251 Organic Chemistry I and Lab, CHM-252 Organic Chemistry II and Lab, MAT-181 Statistics I, MAT-282 Calculus II, SCI-221 Interpretation and Presentation of Scientific Research, HON-200 Honors Seminar

Total Credits: 15-16

### **Semester 3 Advising Note**

- It is highly recommended that a student take Organic Chemistry I & II for two of their option electives. However, this will require an extra semester at BHCC to complete unless the student has completed the math prerequisite (MAT-197; or equivalent) to take General Chemistry I (CHM-201) in their first semester.
- If a student elects to take Advanced Lab Techniques in Biotechnology (BIO-261) they should also take Principles of Molecular Biotechnology (BIO-262) to ensure transferability. BIO-261 is offered in the fall and spring semesters.
- BIO-262 is only offered in the fall semester, please see department chair for questions.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Students should check with their transferring institution to see if they require algebra or calculus based physics for their biology programs.
- Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

• BIO-208 Genetics and Lab Credits: 4

- PHY-252 Physics II/Lab Credits: 4
- PHY-202 General Physics II/Lab Credits: 4
- Elective-Option Elective Credits: 3-4

Elective Options:

BIO-120 Introduction to Biotechnology, BIO-210 Population Ecology & Lab, ENV-211 Environmental Microbiology/Lab, BIO-261 Advanced Laboratory Techniques in Biotechnology, BIO-262 Principles of Molecular Biotechnology, CHM-251 Organic Chemistry I and Lab, CHM-252 Organic Chemistry II and Lab, MAT-181 Statistics I, MAT-282 Calculus II, SCI-221 Interpretation and Presentation of Scientific Research, HON-200 Honors Seminar

Elective- Option Elective Credits: 3-4

**Elective Options:** 

BIO-120 Introduction to Biotechnology, BIO-210 Population Ecology & Lab, ENV-211 Environmental Microbiology/Lab, BIO-261 Advanced Laboratory Techniques in Biotechnology, BIO-262 Principles of Molecular Biotechnology, CHM-251 Organic Chemistry I and Lab, CHM-252 Organic Chemistry II and Lab, MAT-181 Statistics I, MAT-282 Calculus II, SCI-221 Interpretation and Presentation of Scientific Research, HON-200 Honors Seminar

Total Credits: 14-16

## **Semester 4 Advising Note**

- Elective Notes: It is highly recommended that a student take Organic Chemistry I/Lab and Organic Chemistry II/Lab for two of their option electives. However, this will require an extra semester at BHCC to complete.
- If a student elects to take Advanced Lab Techniques in Biotechnology (BIO-261) they should also take Principles of Molecular Biotechnology (BIO-262) to ensure transferability. BIO-261 is offered in the fall and spring semesters.
- BIO-262 is offered only in the fall semester, please see department chair for questions.
- Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Describe the structure and function of living cells and explain how their cellular components and biochemistry interact in the metabolic pathways that define life.
- Relate cellular reproduction to the theories and concepts of genetics to explain inheritance.
- Relate the concepts of evolutionary theory to explain adaptations, speciation, the diversity of life, and the interactions of living organisms in the biosphere.
- Apply currently accepted biological, chemical, physical and mathematical concepts to investigate problems and ideas
  presented in advanced biological study.
- Apply the concepts of scientific inquiry to investigate biological observations by formulating hypotheses, designing
  and conducting experiments, analyzing, evaluating, and interpreting experimental data, and developing evidence-based
  conclusion.
- Search and retrieve peer-reviewed information from scientific journals and other sources and provide proper credit when the information is used in their own scientific reporting.
- Evaluate the credibility of sources of scientific information presented by the general media and the Internet.
- Clearly express the procedures used, data collected, and conclusions obtained in his or her written or oral presentation of a scientific investigation.
- Apply laboratory safety protocols in using the equipment, technology, and techniques that are commonly used in laboratory or field investigations.
- Apply evidence-based science in addressing personal and global issues.

#### Career Outlook

This option will allow students to transfer to four-year colleges and universities to seek a bachelor's degree in biology or biochemistry. Students can then continue their studies in the fields of physiology, ecology, cell biology, biotechnology, genetics, botany, zoology, microbiology, biochemistry, or wildlife conservation.

### **Transfer Options**

#### MassTransfer A2B Link

- Bridgewater State University
- Fitchburg State University
- Massachusetts College of Liberal Arts
- Westfield State University
- Worcester State University
- University of Massachusetts Amherst
- University of Massachusetts Lowell

## **Transfer Advising Guides**

Northeastern University College of Professional Studies

### **Biomedical Engineering Option, A.S.**

The Associate of Science in Engineering Program is offered as part of a response to the long-term shortage of skilled workers in the engineering workforce, and is consistent with the mission of the College. It is designed to meet the needs of BHCC students and to address the workforce demands of Greater Boston. The curriculum is structured to mirror the freshman and sophomore years of a university engineering degree. Accordingly, the Engineering and Physical Sciences Department is developing articulation agreements with area universities to enable BHCC engineering graduates to transfer as juniors upon completing the Associate of Science degree. The curriculum offers three options: a Biomedical Engineering Option, an Electrical Engineering option, and an Engineering Transfer option.

This option brings engineering design and technology into the field of biology and medicine. The option prepares students to transfer to four-year institutions as Biomedical Engineering majors, or for direct employment in entry-level positions.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

- ENR-101 Introduction to Engineering/Lab Credits: 4
- ENG-111 College Writing I Credits: 3
- MAT-281 Calculus I Credits: 4 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from Community and Cultural Contexts Menu

• GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

Total Credits: 17

# **Semester 1 Advising Note**

- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program
- This map assumes a student enters the program ready to enroll in MAT-281.

#### Semester 2

- CHM-201 General Chemistry I & Lab Credits: 4 \*
   Students must complete MAT-197 with a C+ or better before taking CHM-201
- MAT-282 Calculus II Credits: 4
- PHY-251 Physics I/Lab Credits: 4
- ENG-112 College Writing II Credits: 3
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

Total Credits: 18

## **Semester 2 Advising Note**

- A student should plan to complete CHM-201 during the Spring semester or the Summer Bridge Session.
- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.

#### Semester 3

- BME-100 Biomedical Engineering I Credits: 4 \*
- MAT-283 Calculus III Credits: 4
- BIO-195 General Biology I & Lab Credits: 4
- PHY-252 Physics II/Lab Credits: 4

**Total Credits: 16** 

# **Semester 3 Advising Note**

Biomedical Engineering I/Lab is currently only offered during the Fall Semester.

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

- BME-200 Biomedical Engineering II Credits: 3
- MAT-285 Ordinary Differential Equations Credits: 4
- BIO-196 General Biology II & Lab Credits: 4
- CHM-202 General Chemistry II & Lab Credits: 4
- See Engineering Department Chair for Option Credits: 3

**Total Credits: 18** 

# **Semester 4 Advising Note**

- Biomedical Engineering II is currently offered during only the Spring semester
- Apply for graduation.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Design and conduct experiments.
- Analyze and interpret data.
- Apply computational tools and scientific concepts to biomedical engineering problems.
- Design systems, components, or processes for solving biomedical engineering problems.
- Function as part of a biomedical engineering team.
- Articulate the professional and ethical responsibilities required of engineers.

#### Career Outlook

Graduates with an associate of science degree will be qualified for direct employment in entry-level research/lab assistant, design and manufacturing positions available in private industries, academic research institutions, and hospitals locally and nationwide.

### **Transfer Options**

#### MassTransfer A2B Link

- University of Massachusetts Amherst
- University of Massachusetts Lowell

### **Business Transfer Option, A.A.**

The Business Administration Department at Bunker Hill Community College is a collegial, student-centered learning community dedicated to providing an innovative, creative, and relevant education in business disciplines to a diverse student population. We strive to maximize student success by placing graduates in a competitive position when seeking employment in a business

environment or upon transfer to a four-year academic institution, ultimately empowering them to compete responsibly and successfully in a global business environment.

This concentration prepares students to transfer to four-year colleges or universities and major in business administration. A bachelor's degree enhances the competitive status of students for entry into business-related fields, and prepares students for advanced degrees. The college has transfer articulation agreements with many four-year academic institutions in the area. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, visit www.mass.edu/masstransfer. The department also encourages students to consult with their advisors concerning transfer requirements.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- BUS-101 Introduction to Business Credits: 3 \*
- ENG-111 College Writing I Credits: 3 \*
- Elective- Career Elective Credits: 3
   Choose any ACC, BUS, FIN or MAN prefixed course
- CIT-110 Applications/Concepts Credits: 3
- PSY-101 Principles of Psychology Credits: 3

**Total Credits: 15** 

## **Semester 1 Advising Note**

- BUS-101: New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Explore BHCC Student Activities offered i.e., BHCC's Entrepreneurship Club.
- Create and follow an Education Plan with an Academic Advisor.

#### Semester 2

- ENG-112 College Writing II Credits: 3
- MAT-181 Statistics | Credits: 3
- ACC-101 Principles of Accounting I Credits: 3 \*
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

Total Credits: 16

## **Semester 2 Advising Note**

Meet with an advisor to begin career planning activities

- Begin exploring transfer options: attend a transfer workshop and the College transfer fair
- Complete a volunteer activity in an area of interest.
- Learn about Alpha Beta Gamma (Business Honor Society) and Alpha Kappa Mu (General Honor Society).
- Inquire about the Commonwealth Honors Program.

#### Semester 3

- ACC-102 Principles of Accounting II Credits: 3
- ECO-202 Microeconomics Credits: 3
- MAT-231 Calculus for Management Science Credits: 4 or
- MAT-281 Calculus I Credits: 4
- Elective- Literature Elective Credits: 3

Choose one course designated with the prefix LIT

• GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

\*Note: Students must take MAN-112 Organizational Behavior/Design to satisfy this requirement

**Total Credits: 16** 

## **Semester 3 Advising Note**

- MAT-231 and MAT-281 may require the student to take an additional math course(s) depending on placement and/or
  math courses taken and completed at another college or university.
- Develop a financial plan for continued education and life after graduation.
- Continue preparations for transfer: write essays for transfer institution collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap.

#### Semester 4

- MAN-111 Principles of Management Credits: 3
- MAN-105 Principles of Marketing Credits: 3
- Elective- Literature Elective Credits: 3

Choose one course designated with the prefix LIT

- Elective- Lab Science Elective Credits: 4
  - Choose one science course with a lab component
- Elective- Social Science Elective Credits: 3

Note: ECO-201 Macroeconomics is required to fulfill this requirement

Total Credits: 16

# **Semester 4 Advising Note**

Apply for Graduation.

• Finalize your resume and upload it to your ePortfolio and LinkedIn website.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Describe the interaction of history, culture, literature, economics, and science as studied within a broad liberal arts curriculum.
- Demonstrate competence in reading and writing/literacy skills and in the organization of critical thinking and problem solving behaviors.
- Examine management theory and practice and explain basic business methodology and application.

#### Career Outlook

Students' potential careers vary depending upon the chosen major and include accounting, mid-level management, banking, finance, and insurance. Students must complete a bachelor's degree as a minimum requirement for entry into these fields. Students may need to pursue graduate work, as well.

### **Transfer Options**

#### **Transfer Advising Guides**

- Boston College Woods College of Advancing Studies
- Lesley University
- Northeastern CPS
- Suffolk University

#### MassTransfer A2B Map

- Fitchburg State University
- Framingham State University
- Salem State University
- Worcester State University
- University of Massachusetts Amherst
- University of Massachusetts Boston
- University of Massachusetts Dartmouth
- University of Massachusetts Lowell

#### MassTransfer A2B Link

- Bridgewater State University
- Massachusetts College of Liberal Arts
- Westfield University
- University of Massachusetts Boston

### Cardiac Sonography Option Full-time, A.S.

This option prepares students in the imaging of the human heart with sound waves. Students are prepared to use the ultrasound equipment that produces sound waves, obtains an image, and provides the physician with diagnostic information for treatment.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Admission Requirements

- Diploma High School diploma or GED
- Session Attend a mandatory information session
- ENG-111 College Writing I Credits: 3
- BIO-203 Anatomy/Physiology I & Lab Credits: 4
- MATH College Algebra or Statistics Credits: 3
   Completion of any 3 credit College Algebra or Statistics course
- TEAS Complete the Test of Essential Academic Skills (TEAS) Allied Health

**Total Credits: 10** 

# **Admission Requirements Advising Note**

- TEAS scores must be at least 47.6 percent in Reading, 46.7 percent in Math and 47.6 percent in English/language
- All Admissions course requirements must be completed with a grade of C or better
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal
  Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more
  information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/
- Anatomy and Physiology must be completed within ten (10) years of application unless currently working in a related healthcare position
- Approximate application dates for the Fall program are mid-October through mid-February for admission to the program for the next academic year. Check with the Admissions office for exact timelines

### Summer Before Starting the Program

- MIG-111 Imaging Technology I Credits: 3 \* or
- PHY-201 General Physics I/Lab Credits: 4 \*

Total Credits: 3-4

Accepted and standby students must complete either the online MIG-111 or PHY-201 with a grade of C or better in the summer prior to the start of the program. Students will need access to a personal computer with Internet access for MIG-111.

#### Semester 1 Fall

- MIG-101 Introduction to Ultrasound Credits: 2 \*
- MIG-109 Patient Care for Medical Imaging Credits: 4 \*
- MIG-105 Ultrasound Physics and Instrumentation Credits: 3 \*
- BIO-204 Anatomy/Physiology II & Lab Credits: 4 \*
- MIG-106 Introduction to Cardiac Scanning Credits: 2

**Total Credits: 15** 

# **Semester 1 Fall Advising Note**

- General Education Requirements Quantitative Problem Solving, Scientific Reasoning, Creative Work and Elective satisfied by program.
- Core courses (i.e. MIG prefix) are only offered once per year and must be taken as scheduled, as must BIO-204.

### Semester 2 Spring

- MIG-112 Echo I Credits: 3 \*
- MIG-115 Interpretation I Credits: 4 \*
- ENG-112 College Writing II Credits: 3
- CIT-110 Applications/Concepts Credits: 3

**Total Credits: 13** 

# **Semester 2 Spring Advising Note**

• Students may consider taking ENG-112, SOC-101 or CIT-110 this semester. It is strongly recommended that you do not take these general education courses in Summer Session I.

#### Semester 3 Summer

- MIG-205 Vascular Ultrasound Credits: 3 \*
- MIG-119 Echo II Credits: 3 \*
- SOC-101 Principles of Sociology Credits: 3
- MIG-203 Interpretation II Credits: 3 \*

Total Credits: 12

# **Semester 3 Summer Advising Note**

ENG-112 or SOC-101 or CIT-110 may be taken any time prior to the last semester of the program.

#### Semester 4 Fall

- MIG-201 Echo III Credits: 4 \*
- MIG-207 Ultrasound Physics and Instrumentation for the Cardiac Sonographer Credits: 2 \*
- MIG-211 Cardiac Sonography Clinical I Credits: 3 \*

**Total Credits: 9** 

### Semester 5 Spring

- MIG-213 Cardiac Sonography Clinical II Credits: 4 \*
- MIG-215 Echo IV/Interpretation Credits: 4 \*
- MIG-216 Advanced Interpretation Seminar Credits: 2 \*

Total Credits: 10

## **Semester 5 Spring Advising Note**

All required general education courses must be completed by the end of the second spring semester.

#### Semester 6 Summer

MIG-217 Cardiac Sonography Clinical III Credits: 4 \*

**Total Credits: 4** 

### Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate general knowledge and technical skills required to perform cardiac echo examinations as an entry-level cardiac sonographer.
- Demonstrate sufficient knowledge of cardiac sonography to pursue registry status through The American Registry of Diagnostic Medical Sonographers.
- Understand the importance of lifelong continuing education in the field of Cardiac Sonography.

### Career Outlook

Graduates of this option qualify for employment in hospitals, HMOs, clinics, doctors' offices, mobile units, community health agencies, equipment/film companies, and/or as application specialist sales representatives.

### **Chemistry Concentration, A.A.**

This program prepares students to transfer to four-year colleges or universities to seek bachelor's degrees in chemistry. After transferring, students develop a course of study to become proficient in one or more of the chemistry divisions, e.g., polymer, physical, organic, biochemistry, analytical, chemical, chemical, or hazardous waste management. A further goal of the program is to provide students with the technical coursework and laboratory experience that would enable them to enter the workforce as entry-level laboratory technicians in positions that require some background in the physical and/or biological sciences. Graduates of this program may qualify to transfer using the benefits of MassTransfer to a four-year state university or University of Massachusetts campus. For current information on eligible programs, see Transfer Options below.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

- ENG-111 College Writing | Credits: 3 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from Community and Cultural Contexts Menu
- MAT-281 Calculus | Credits: 4 \*
- CHM-201 General Chemistry I & Lab Credits: 4 \*
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

**Total Credits: 17** 

## **Semester 1 Advising Note**

- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program
- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously
- Students need to complete three General Education courses and a humanities course. They do not need to be completed
  in any particular sequence.
- Students must have completed ENG-111 with a C or better or take ENG-111 concurrently with CHM-201. Must have completed MAT-197 with a C+ or better before taking CHM-201 or take MAT-281 concurrently with CHM-201.
   Students who are not able to take CHM-201 in their first semester will need to take CHM-202 during the summer or take an additional semester for completion of CHM-252 at the end of the program.

#### Semester 2

- ENG-112 College Writing II Credits: 3
- MAT-282 Calculus II Credits: 4 \*
- CHM-202 General Chemistry II & Lab Credits: 4 \*
- PHY-251 Physics I/Lab Credits: 4 \*

**Total Credits: 15** 

## **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- It is recommended that students take the General Education elective or Humanities courses during the summer to lighten their load in the second semester, and/or to take one of their recommended third-semester electives during the summer to lighten their load in the third semester
- CHM-251 and CHM-252 are not offered during the summer session. All other required science and math courses are
  offered during the summer. Students wishing to complete the program in four semesters will need to begin their CHM251/CHM-252 sequence in their third semester, and will need to take CHM-202 in the summer if they take CHM201 in their second semester

- CHM-251 Organic Chemistry I and Lab Credits: 4 \*
- PHY-252 Physics II/Lab Credits: 4 \*
- Elective- Concentration Elective Credits: 3-4
  See Semester Advising Notes for list of options.
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective. Choose a course from the Community/Cultural Contexts

Total Credits: 14-15

## **Semester 3 Advising Note**

One of the Concentration electives must be a 4-credit course to satisfy the minimum 60-credit degree requirement.

#### Concentration Electives:

- BIO-120 Introduction to Biotechnology Credits: 4
- BIO-195 General Biology I & Lab Credits: 4
- BIO-196 General Biology II & Lab Credits: 4
- CSC-120 Intro to Comp Sci & Object Oriented Prog Credits: 4
- ENR-101 Introduction to Engineering/Lab Credits: 4
- HON-200 Honors Seminar Credits: 3
- MAT-181 Statistics | Credits: 3
- MAT-283 Calculus III Credits: 4
- MAT-285 Ordinary Differential Equations Credits: 4
- SCI-221 Interpretation and Presentation of Scientific Research Credits: 3

### Semester 4

- CHM-252 Organic Chemistry II and Lab Credits: 4 \*
- Elective- Concentration Elective Credits: 3-4
  See Semester Advising Notes for list of options.
- Elective- Humanities Elective Credits: 3
  Choose one course from the Humanities Electives menu.
- Elective- Concentration Elective Credits: 3-4
  See Semester Advising Notes for list of options.

Total Credits: 13-15

# **Semester 4 Advising Note**

One of the Concentration electives must be a 4-credit course to satisfy the minimum 60-credit degree requirement.

#### Concentration Electives:

- BIO-120 Introduction to Biotechnology Credits: 4
- BIO-195 General Biology I & Lab Credits: 4

- BIO-196 General Biology II & Lab Credits: 4
- CSC-120 Intro to Comp Sci & Object Oriented Prog Credits: 4
- ENR-101 Introduction to Engineering/Lab Credits: 4
- HON-200 Honors Seminar Credits: 3
- MAT-181 Statistics | Credits: 3
- MAT-283 Calculus III Credits: 4
- MAT-285 Ordinary Differential Equations Credits: 4
- SCI-221 Interpretation and Presentation of Scientific Research Credits: 3

### Upon Completion of This Concentration Graduates Will Be Able To:

- Use currently accepted chemical concepts to investigate problems and ideas presented in advanced chemical study.
- Use chemical concepts to evaluate their own science-related concerns such as personal health or careers in science.
- Use laboratory technology, equipment, and techniques critically and safely to investigate scientific problems using proper scientific methods.

### Career Outlook

Graduates of this concentration should transfer to a four year college or university because entry-level employment opportunities in chemistry such as lab or field technicians usually require a minimum of a bachelor's degree in chemistry. Professional positions such as engineers, researchers, or college instructors usually require a minimum of a master's degree.

### **Transfer Options**

#### MassTransfer A2B Map

- Bridgewater State University
- Fitchburg State University
- Framingham State University
- Massachusetts College of Liberal Arts
- Salem State University
- Westfield State University
- Worcester State University
- University of Massachusetts Boston
- University of Massachusetts Lowell

#### MassTransfer A2B Link

- University of Massachusetts Amherst
- University of Massachusetts Dartmouth

### **Communication Concentration, A.A.**

Communication is the process by which human beings create meaning, and students in the Communication major at Bunker Hill Community College learn to speak, write, and express themselves with humanity and professionalism. The program focuses on human rights and career success. At the core of communication is human rights: the acts of love, justice and empathy for the "recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family." Our goal is to

help students learn and become both ethical and competitive leaders in the job market. The Associate in Arts Degree in Communication offers foundational training in communication and prepares students to transfer to four-year colleges and pursue careers in the creative industries and beyond, including journalism, media, film studies, and video production.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing I Credits: 3 \*
- COM-110 Introduction to Communication Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4
   This course meets the General Education requirement for Quantitative Problem Solving
   Choose one course from Quantitative Problem Solving Menu. Recommended: MAT-181 Statistics I or MAT-174
   Quantitative Reasoning.
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from Community and Cultural Contexts Menu. PHL-103 or SOC-227 recommended.
- COM-101 Film As Art Credits: 3

Total Credits: 15-16

## **Semester 1 Advising Note**

- Semester 1 is typically the Fall Semester
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Students, please consult with a Communication faculty member before registering.
- Students intending to use Mass Transfer are recommended to take quantitative math (MAT-174 Quantitative Reasoning)

### Semester 2

- ENG-112 College Writing II Credits: 3
- COM-171 Public Speaking and Professional Comm Credits: 3 \*
- COM-210 Interpersonal Communication Credits: 3 \*
- COM-250 Analyzing Media Credits: 3 \*
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective. Choose a course from Behavioral or Social Sciences. PSY-107 or SOC-101 is recommended.

**Total Credits: 15** 

### **Semester 2 Advising Note**

- Semester 2 is typically the Spring Semester.
- Students, please consult with a Communication faculty member before registering.

#### Semester 3

- COM-254 Digital Media & Performance Credits: 3 \*
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu. COM-102 American Cinema is recommended

- COM-299 Internship Credits: 3 \*
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu. ENV-105 Environmental Science/Lab is recommended

• Elective- Behavioral Science Elective Credits: 3

Choose one PSY or SOC course

PSY-219, SOC-227 or SOC-229 recommended

Total Credits: 16

### Semester 4

• Elective- Literature Elective Credits: 3

LIT-203 recommended.

• Elective- Concentration Elective Credits: 3

Choose one Concentration Elective:

COM-102 American Cinema, COM-241 Introduction to Today's Journalism, COM-242 Multimedia Journalism, ENG-234 Literary Publishing, VMA-262 Video Techniques Lab, VMA-263 Video Concepts Lab

• Elective- Concentration Elective Credits: 3

Choose one Concentration Elective:

COM-102 American Cinema, COM-241 Introduction to Today's Journalism, COM-242 Multimedia Journalism, ENG-234 Literary Publishing, VMA-262 Video Techniques Lab, VMA-263 Video Concepts Lab

• Elective- Lab Science Elective Credits: 4 \*

ENV-110 Recommended

• Elective- Concentration Elective Credits: 3

Choose one Concentration Elective:

COM-102 American Cinema, COM-241 Introduction to Today's Journalism, COM-242 Multimedia Journalism, ENG-234 Literary Publishing, VMA-262 Video Techniques Lab, VMA-263 Video Concepts Lab

Total Credits: 16

## **Semester 4 Advising Note**

- Students who are interested in journalism and media are encouraged to take COM-241, COM-242 and ENG-234.
- Students who are interested film studies and video production are encouraged to take COM-102 and VMA-262 OR VMA-263.
- Semester 4 is typically the Spring Semester.
- Apply for graduation.

### Upon Completion of This Concentration Graduates Will Be Able To:

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- Have an effective transfer path to a four-year college/university.
- Express foundational communication skills, such as public speaking, professional communication, clear argumentation, and critical reasoning.
- Write for a variety of purposes, adapting to varying audiences.
- Develop cultural and ethical competency, by engaging in human rights advocacy and effective intercultural communication.
- Conduct research in the field of communication.
- Earn hands-on skills in the field of communication through coursework and an internship.
- Understand the dynamics of communication in a global context.
- Enter the workforce upon graduation in journalism, media, film studies, video production, or other creative industry.
- Produce and edit video.

### Career Outlook

Students in this program will earn hands-on skills in the field of communication through coursework and an internship. Students are prepared to enter the workforce upon graduation in journalism, media, film studies, video production, or other creative industry. The program is suited for students who wish to pursue careers in the field of: Advertising, Broadcasting, Business, Communication, Education, Film, Journalism, Marketing, Politics, Public Relations, Social Media, and/or Video Production.

### **Transfer Options**

#### MassTransfer A2B Map

Worcester State University

#### MassTransfer A2B Link

- Bridgewater State University
- Fitchburg State University
- Massachusetts College of Liberal Arts
- Westfield State University
- University of Massachusetts Amherst
- University of Massachusetts Boston
- University of Massachusetts Dartmouth
- University of Massachusetts Lowell

## **Computer Information Systems Concentration, A.A.**

The Computer Information Technology (CIT) Department mission is two-fold. CIT prepares its students for good paying, entry level careers as database professionals through the Associate in Science (A.S.) and Certificate Database Programming and Administration Programs. CIT also prepares students to transfer to four-year college Information Technology (IT) Programs through two Associate in Arts (A.A.) Programs: A.A. Computer Information Systems Transfer and A.A. Computer Science Transfer. The Department's goals are in concert with the College's goals. Using input from its Industry Advisory Committee and internship course, the department is continually updating and fine tuning its programs of study. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, see Transfer Options below.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- CIT-110 Applications/Concepts Credits: 3 \* or
- CIT-113 Information Technology Problem Solving Credits: 3 \*
- ENG-111 College Writing I Credits: 3
- ACC-101 Principles of Accounting I Credits: 3 \*
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

• GenEd-QPS Quantitative Problem Solving Credits: 3-4

This course meets the General Education requirement for Quantitative Problem Solving Choose one course from Quantitative Problem Solving Menu

Total Credits: 15-16

## **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Students taking 9 or more credits should take CIT-113

#### Semester 2

- CSC-125 Python Programming Credits: 3
- ACC-102 Principles of Accounting II Credits: 3
- ENG-112 College Writing II Credits: 3
- ECO-202 Microeconomics Credits: 3
- Elective- Mathematics Elective Credits: 3-4 Choose one college-level MAT course

Total Credits: 15-16

## **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

- CSC-225 Advanced Python Programming Credits: 3
- ECO-201 Macroeconomics Credits: 3

• Elective- Literature Elective Credits: 3

Choose one LIT course

• Elective- Computer Elective Credits: 3-4

Computer Elective Options:

CIT-118 Principles of Internet & Info Security, CSC-120 Intro to Comp Sci & Object Oriented Prog, CIT-128 Database Design with MS Access, CIT-162 CISCO Networking I, CSC-242 Data Structures, CIT-268 Operating Systems, CSC-284 Advanced C++/OOP

GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu

Total Credits: 16-17

## **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

• Elective- Computer Elective Credits: 3-4

Computer Elective Options:

CIT-118 Principles of Internet & Info Security, CSC-120 Intro to Comp Sci & Object Oriented Prog, CIT-128 Database Design with MS Access, CIT-162 CISCO Networking I, CSC-242 Data Structures, CIT-268 Operating Systems, CSC-284 Advanced C++/OOP

GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

• Elective- Behavioral Science Elective Credits: 3

Choose one PSY or SOC course

• Elective- Lab Science Elective Credits: 4

Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course

• Elective- Literature Elective Credits: 3

Choose one LIT course

• Elective- Mathematics Elective Credits: 3-4

Choose one college-level MAT course

Total Credits: 19-21

### **Semester 4 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

Analyze the system needs of an organization.

• Make feasible recommendations for computer solutions that meet those needs.

#### Career Outlook

Graduates of this concentration can transfer to bachelor's programs at four-year colleges.

### **Transfer Options**

#### MassTransfer A2B Link

- Bridgewater State University
- Fitchburg State University
- Framingham State University
- Massachusetts College of Liberal Arts
- Westfield State University
- University of Massachusetts Amherst
- University of Massachusetts Boston

## **Computer Science Concentration, A.A.**

The Computer Science Concentration (CS) degree mission is two-fold. CS prepares its students for well-paying, entry-level careers as computer scientists and programmers through the Associate in Arts (A.A.), and prepares students to transfer to four-year college Computer Science (CS) Programs. The Department's goals are in concert with the College's goals. The department is continually updating and fine-tuning its programs of study. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a University of Massachusetts campus. For current information on eligible programs, see Transfer Options below.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- CSC-120 Intro to Comp Sci & Object Oriented Prog Credits: 4 \*
- ENG-111 College Writing | Credits: 3
- MAT-281 Calculus I Credits: 4 \*

MAT-197 is waived for students placing higher on Accuplacer test; student should take MAT-281. If MAT-197 is waived students can replace with one of the math electives CIT-237, CIT-243, CIT-287 or MAT-281 or MAT-291

GenEd-CCC Community & Cultural Contexts Credits: 3
 This course meets the General Education requirement for Community & Cultural Contexts
 Choose one course from Community and Cultural Contexts Menu

**Total Credits: 14** 

## **Semester 1 Advising Note**

- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by Program.
- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.

• New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.

#### Semester 2

- CSC-239 JAVA Programming Credits: 4 \*
- ENG-112 College Writing II Credits: 3
- MAT-282 Calculus II Credits: 4
- CSC-237 C++ Programming Credits: 4 \*

**Total Credits: 15** 

## **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.

### Semester 3

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from the Creative Work Menu

- CSC-285 Advanced Java Programming Credits: 3 \*
- PHY-251 Physics I/Lab Credits: 4 \*
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose one course from the Community & Cultural Contexts Menu.

• Elective-Concentration Elective Credits: 3-4

Concentration Elective Options:

CSC-244 Android Development With Kotlin, CSC-236 SQL Programming, CSC-284 Advanced C++/OOP, CSC-287 Survey New Popular OOPL for Programmers, CSC-299 Computer Science Internship, HON-200 Honors Seminar, INT-299CSC Learn & Earn Computer Science Intern, MAT-283 Calculus III, MAT-285 Ordinary Differential Equations, MAT-291 Linear Algebra

Total Credits: 16-17

# **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap
- Students planning to transfer to UMASS Boston's Computer Science program, should plan to take CSC-240 (Programming in C) at UMB, and transfer it back to BHCC as an elective.

- PHY-252 Physics II/Lab Credits: 4 \*
- CSC-242 Data Structures Credits: 3 \*
- Elective- Concentration Elective Credits: 3-4

Concentration Elective Options:

CSC-244 Android Development With Kotlin, CSC-236 SQL Programming, CSC-284 Advanced C++/OOP, CSC-287 Survey New Popular OOPL for Programmers, CSC-299 Computer Science Internship, HON-200 Honors Seminar, INT-299CSC Learn & Earn Computer Science Intern, MAT-283 Calculus III, MAT-285 Ordinary Differential Equations, MAT-291 Linear Algebra

Elective- Concentration Elective Credits: 3-4

Concentration Elective Options:

CSC-244 Android Development With Kotlin, CSC-236 SQL Programming, CSC-284 Advanced C++/OOP, CSC-287 Survey New Popular OOPL for Programmers, CSC-299 Computer Science Internship, HON-200 Honors Seminar, INT-299CSC Learn & Earn Computer Science Intern, MAT-283 Calculus III, MAT-285 Ordinary Differential Equations, MAT-291 Linear Algebra

• Elective- Humanities Elective Credits: 3
Choose one course from Humanities Elective.

Total Credits: 16-18

## **Semester 4 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

Computer Science Concepts -

 Demonstrate a clear understanding of the concepts, terminology, and term definitions associated with Computer Science, including basic computer architecture and organization.

Computer Science Software -

• Demonstrate a clear understanding of the discipline's specific Integrated Development Environments, software utilities, and computer platforms which can be used in the development of software.

Computer Software Development -

- Design, plan, develop, and produce complete computer software from start to finish with all stages of the development process clearly identified.
- Create software in Object Oriented Languages

Computer Science Teams -

• Participate in multi-cultural teams and team projects as a contributing member with the requirement to be an active and supportive team member.

Computer Software Quality and Assurance -

- Analyze Worst and Best case for algorithm performance
- Design and implement software test plans, including Unit and Integration testing
- Reporting and Presenting Software

Solutions -

• Write formal report of software solutions

- Present software solutions using diverse modalities (PowerPoint, Video, etc.)
- Provide and receive constructive and critical feedback
- Create software Requirements and Design Documents
- Create software program documentation

### Career Outlook

Graduates of this concentration are prepared for well-paying, entry level careers as computer scientists and programmers, and can transfer to bachelor's programs at four-year college Computer Science programs.

### **Transfer Options**

#### MassTransfer A2B Link

- Bridgewater State University
- Framingham State University
- Massachusetts College of Liberal Arts
- Westfield State University
- Worcester State University
- University of Massachusetts Amherst

### **Computer Science Transfer Option, A.S.**

The Computer Science (CS) Transfer Option Associate in Science (A.S.) degree mission is two-fold. It prepares students to transfer to four-year college Computer Science (CS) Programs across the United States, and also prepares them for well-paid entry-level careers and internships as computer scientists and programmers.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CSC-120 Intro to Comp Sci & Object Oriented Prog Credits: 4 \*
- MAT-281 Calculus I Credits: 4
- ENG-111 College Writing I Credits: 3
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from Community and Cultural Contexts Menu
- GenEd-E General Education Elective Credits: 3-4
   This course meets the General Education requirement for General Education Elective.
   Choose one course from General Education Community and Cultural Contexts Menu

Total Credits: 17-18

# **Semester 1 Advising Note**

General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program.

 New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community cluster within their first year

#### Semester 2

- CSC-237 C++ Programming Credits: 4 \*
- MAT-282 Calculus II Credits: 4
- ENG-112 College Writing II Credits: 3
- CSC-239 JAVA Programming Credits: 4 \*

**Total Credits: 15** 

# **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

### Semester 3

• Elective-Option Elective Credits: 3-4

Elective Options:

CSC-244 Android Development With Kotlin , CSC-236 SQL Programming, CSC-284 Advanced C++/OOP, CSC-287 Survey New Popular OOPL for Programmers, CSC-299 Computer Science Internship, HON-200 Honors Seminar, INT-299CSC Learn & Earn Computer Science Intern, MAT-283 Calculus III, MAT-285 Ordinary Differential Equations, MAT-291 Linear Algebra

- CSC-285 Advanced Java Programming Credits: 3 \*
- CSC-242 Data Structures Credits: 3
- PHY-251 Physics I/Lab Credits: 4
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

Total Credits: 16-17

## **Semester 3 Advising Note**

- Recommended electives: CIT-287 or CIT-243 or MAT-291.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap
- Students planning to transfer to UMASS Boston's Computer Science program, should plan to take CSC-240 (Programming in C) at UMB, and transfer it back to BHCC as an elective.

- PHY-252 Physics II/Lab Credits: 4
- Elective-Option Elective Credits: 3-4

Elective Options:

CSC-244 Android Development With Kotlin, CSC-236 SQL Programming, CSC-284 Advanced C++/OOP, CSC-287 Survey New Popular OOPL for Programmers, CSC-299 Computer Science Internship, HON-200 Honors Seminar, INT-299CSC Learn & Earn Computer Science Intern, MAT-283 Calculus III, MAT-285 Ordinary Differential Equations, MAT-291 Linear Algebra

Elective- Option Elective Credits: 3-4

Elective Options:

CSC-244 Android Development With Kotlin, CSC-236 SQL Programming, CSC-284 Advanced C++/OOP, CSC-287 Survey New Popular OOPL for Programmers, CSC-299 Computer Science Internship, HON-200 Honors Seminar, INT-299CSC Learn & Earn Computer Science Intern, MAT-283 Calculus III, MAT-285 Ordinary Differential Equations, MAT-291 Linear Algebra

• Elective-Option Elective Credits: 3-4

**Elective Options:** 

CSC-244 Android Development With Kotlin, CSC-236 SQL Programming, CSC-284 Advanced C++/OOP, CSC-287 Survey New Popular OOPL for Programmers, CSC-299 Computer Science Internship, HON-200 Honors Seminar, INT-299CSC Learn & Earn Computer Science Intern, MAT-283 Calculus III, MAT-285 Ordinary Differential Equations, MAT-291 Linear Algebra

Total Credits: 13-16

# **Semester 4 Advising Note**

- Recommended electives: CIT-287 or CIT-243 or MAT-291
- Students planning to transfer to UMASS Lowell and UMASS Amherst should take MAT-291 as an elective
- Students planning to transfer to Tufts University should take MAT-283 as an elective
- Apply for graduation
- Students planning to transfer to UMASS Boston's Computer Science program, should plan to take CSC-240 (Programming in C) at UMB, and transfer it back to BHCC as an elective.

### Upon Completion of This Concentration Graduates Will Be Able To:

Computer Science Concepts -

 Demonstrate a clear understanding of the concepts, terminology, and term definitions associated with Computer Science, including basic computer architecture and organization.

Computer Science Software -

- Demonstrate a clear understanding of the discipline's specific Integrated
- Development Environments, software utilities, and computer platforms which can be used in the development of software.

Computer Software Development -

- Design, plan, develop, and produce complete computer software from start to finish with all stages of the development process clearly identified.
- Create software in Object Oriented Languages
- Computer Science Teams -

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• Participate in multi-cultural teams and team projects as a contributing member with the requirement to be an active and supportive team member.

Computer Software Quality and Assurance -

- Analyze Worst and Best case for algorithm performance
- Design and implement software test plans, including Unit and Integration testing
- Reporting and Presenting Software

#### Solutions -

- Write formal report of software solutions
- Present software solutions using diverse modalities (PowerPoint, Video, etc.)
- Provide and receive constructive and critical feedback
- Create software Requirements and Design Documents
- Create software program documentation

#### Career Outlook

The CS Transfer Option degree prepares students to transfer to four-year college Computer Science (CS) Programs across the United States and also prepares them for well-paid entry level careers and internships as computer scientists and programmers.

### **Transfer Options**

#### MassTransfer A2B Link

- University of Massachusetts Amherst
- University of Massachusetts Boston

### **Criminal Justice Career Option, A.S.**

The mission of the Criminal Justice Program is to prepare students for employment in various criminal justice related areas and/or for pursuit of Baccalaureate Degrees in criminal justice or other related fields of study by educating them in the fundamental concepts, knowledge and practices of the field.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- ENG-111 College Writing | Credits: 3 \*
- PSY-101 Principles of Psychology Credits: 3
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

- CRJ-101 Introduction to Criminal Justice Credits: 3 \*
- CRJ-103 Criminal Law Credits: 3 \*

**Total Credits: 15** 

# **Semester 1 Advising Note**

• New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.

### Semester 2

- ENG-112 College Writing II Credits: 3
- SOC-101 Principles of Sociology Credits: 3
- GenEd-QPS Quantitative Problem Solving Credits: 3-4
   This course meets the General Education requirement for Quantitative Problem Solving
   Choose one MAT course from Quantitative Problem Solving Menu. MAT-181 Statistics I is strongly recommended.
- CRJ-107 Introduction to Corrections Credits: 3
- CRJ-225 Policing Credits: 3

Total Credits: 15-16

### **Semester 2 Advising Note**

- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- Meet with an advisor to begin career planning activities.

### Semester 3

- SOC-207 Criminology Credits: 3
- CRJ-211 Criminal Procedure Credits: 3 \*
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning menu. SCI-150 Forensic Science and Lab is recommended.

• Elective- Career Elective Credits: 3

See semester advising note

• Elective- Career Elective Credits: 3

See semester advising note

Total Credits: 16

# **Semester 3 Advising Note**

- For students interested in a career in Law Enforcement recommended electives: CRJ-202 Evidence and Ct Procedures and CRJ-208 Criminal Investigation
- For students interested in a career in Corrections recommended electives: CRJ-102 Juvenile Justice and CRJ-203 Rehabilitation of the Offender
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

### Semester 4

- CRJ-275 Criminal Justice Capstone Credits: 3
- Elective- Career Elective Credits: 3
  Choose from any non-required CRJ course
- Elective- Career Elective Credits: 3
  Choose from any non-required CRJ course
- Elective- Career Elective Credits: 3
   Choose from any non-required CRJ course
- Elective- Open Elective Credits: 3

  Recommended electives include Communication or Political Science or Computer or Foreign Language courses.

Total Credits: 15

# **Semester 4 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate knowledge, defend and critique the structure of the criminal justice system.
- Identify, demonstrate and evaluate knowledge of corrections, including its purpose and function.
- Explain the history and critique major theories of why crime is committed with a focus on criminal behavior.
- Identify and demonstrate knowledge of Courts including its purpose and function, be able to accurately discuss and relate criminal law and procedure and its constitutional basis.
- Identify and demonstrate knowledge of policing including its purpose and function, describe and assess the general
  responsibilities of the criminal justice professional including the professional's responsibilities and governing ethics.
- Articulate and critique the role of data and research in the development of criminal justice and policy.

### Career Outlook

Graduates that complete the Transfer Option can transfer to four-year colleges and universities to seek a bachelor's degree in criminal justice or a related field. Graduates who complete the Law Enforcement or Corrections Tracks qualify for entry level positions in law enforcement, corrections or security at local, state, regional and federal agencies.

### **Transfer Options**

#### **Transfer Advising Guides**

• Boston College Woods College of Advancing Studies

### **Criminal Justice Transfer Option, A.S.**

The mission of the Criminal Justice Program is to prepare students for employment in various criminal justice related areas and/or for pursuit of Baccalaureate Degrees in criminal justice or other related fields of study by educating them in the fundamental concepts, knowledge and practices of the field.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing | Credits: 3 \*
- PSY-101 Principles of Psychology Credits: 3
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

- CRJ-101 Introduction to Criminal Justice Credits: 3 \*
- CRJ-103 Criminal Law Credits: 3 \*

Total Credits: 15

# **Semester 1 Advising Note**

• New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.

### Semester 2

- ENG-112 College Writing II Credits: 3
- SOC-101 Principles of Sociology Credits: 3
- GenEd-QPS Quantitative Problem Solving Credits: 3-4
   This course meets the General Education requirement for Quantitative Problem Solving
   Choose one MAT course from Quantitative Problem Solving Menu. MAT-181 Statistics I is strongly recommended.
- CRJ-107 Introduction to Corrections Credits: 3 \*
- CRJ-225 Policing Credits: 3 \*

Total Credits: 15-16

### **Semester 2 Advising Note**

- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- Meet with an advisor to begin career planning activities.

### Semester 3

- SOC-207 Criminology Credits: 3 \*
- CRJ-211 Criminal Procedure Credits: 3 \*
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning

Choose one course from Scientific Reasoning menu. SCI-150 Forensic Science and Lab is recommended.

• Elective- Career Elective Credits: 3
Choose from any non-required CRJ course

Elective- Behavioral Science Elective Credits: 3
 Choose one PSY or SOC course

**Total Credits: 16** 

# **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

- CRJ-275 Criminal Justice Capstone Credits: 3
- Elective- Lab Science Elective Credits: 4
   Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course
- Elective- Humanities Elective Credits: 3
  Choose one course from the Humanities Electives menu.
- Elective- Humanities Elective Credits: 3
  Choose one course from the Humanities Electives menu.
- Elective- Career Elective Credits: 3
  Choose from any non-required CRJ course

Total Credits: 16

# **Semester 4 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate knowledge, defend and critique the structure of the criminal justice system.
- Identify, demonstrate and evaluate knowledge of corrections, including its purpose and function.
- Explain the history and critique major theories of why crime is committed with a focus on criminal behavior.
- Identify and demonstrate knowledge of Courts including its purpose and function, be able to accurately discuss and relate criminal law and procedure and its constitutional basis.
- Identify and demonstrate knowledge of policing including its purpose and function, describe and assess the general
  responsibilities of the criminal justice professional including the professional's responsibilities and governing ethics.
- Articulate and critique the role of data and research in the development of criminal justice and policy.

### Career Outlook

Graduates that complete the Transfer Option can transfer to four-year colleges and universities to seek a bachelor's degree in criminal justice or a related field. Graduates who complete the Law Enforcement or Corrections Tracks qualify for entry level positions in law enforcement, corrections or security at local, state, regional and federal agencies.

### **Transfer Options**

#### **Transfer Advising Guides**

- Boston College Woods College of Advancing Studies
- Suffolk University

#### MassTransfer A2B Map

- Bridgewater State University
- Fitchburg State University
- Salem State University
- Westfield State University
- Worcester State University
- University of Massachusetts Boston
- University of Massachusetts Dartmouth
- University of Massachusetts Lowell

### **Culinary Arts Option, A.S.**

The mission of the Culinary Arts Program is to train students to master the skills, knowledge, sanitation, and behavior commonly accepted in the industry as foundations for a sustainable career in the highly diverse and growing hospitality and service sectors. In our A.S. degree program, students will take a core set of Culinary Arts classes to gain a strong foundation in this growing field. Our Culinary Arts courses are hands-on experience and will show students what it's like to work in a professional kitchen setting.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CUL-101 Culinary Fundamentals Credits: 3
- CUL-111 Food Service Sanitation and Skills Credits: 3
- CUL-115 Culinary Foundations 1 Credits: 4 \*
   Uniforms and tools required for this course.
- CUL-125 Baking Foundations 1 Credits: 4 \* Uniforms and tools required for this course.

Total Credits: 14

# **Semester 1 Advising Note**

• New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.

#### Semester 2

- ENG-111 College Writing | Credits: 3 \*
- CUL-117 The Science of Food & Cooking Credits: 3
- CUL-135 Culinary Foundations 2 Credits: 4 \*
   Uniforms and tools required for this course.
- MAT-100 Topics in Career Math Credits: 3 \*

**Total Credits: 13** 

### **Semester 2 Advising Note**

- General Education requirement Quantitative Problem Solving satisfied by Program.
- This map assumes that a student enters the College ready to enroll in ENG-111 and MAT-100. Maps may be altered if developmental courses need to be taken.

### Summer Semester

- INT-299CU Learn and Earn Culinary Internship Credits: 3 \* or
- CUL-299 Culinary Arts Internship Credits: 3 \*

**Total Credits: 3** 

# **Summer Semester Advising Note**

Internship requirement recommended to take in summer semester.

#### Semester 3

- ENG-112 College Writing II Credits: 3
- CUL-211 Menu Design and Purchasing Credits: 3
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose one course from General Education Elective Menu. Recommended: PSY-101 or SOC-101 or MAN-112

- CUL-215 Culinary Foundations 3 Credits: 4 \* Uniforms and tools required for this course.
- CUL-225 Essentials of Dining Service Credits: 4 \* Uniforms and tools required for this course.

Total Credits: 17

# **Semester 3 Advising Note**

• It is strongly recommended that a student meet with their Advisor when planning for semesters 3 and 4 to ensure the focus of study aligns with course selection, especially the General Education Elective courses.

### Semester 4

- BIO-115 Nutrition Science & Lab Credits: 4
- Elective- Career Elective Credits: 3-4
  Choose one CUL or HRT course not included in the program.
- CUL-235 International Cuisines Credits: 4
  Uniforms and tools required for this course.
- CUL-245 Culinary Capstone: Food and Beverage Operations Credits: 4
   Uniforms and tools required for this course.

Total Credits: 15-16

# **Semester 4 Advising Note**

 General Education requirements Scientific Reasoning, Community and Cultural Contexts, and Creative Work satisfied by Program.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Employ appropriate safety and sanitation practices and safe equipment operation used in the foodservice industry.
- Describe the fundamentals of purchasing, receiving, inventory, cost control, front of the house operations, and menu design.
- Utilize interpersonal and critical thinking skills to complete tasks and solve problems.
- Understand the importance of diversity and professional ethics in the foodservice industry.
- Appraise program capstone experiences to enhance personal, academic, and career development.

### Career Outlook

Graduates of this program qualify for a variety of positions in restaurants, hotels, resorts, catering facilities, health care food operations, and other foodservice establishments. Typically, these positions are in food production, shift supervision, and kitchen management. Culinary jobs outlook is projected to grow sixteen percent in the next ten years. Students also qualify to transfer to four-year colleges or universities to pursue bachelor's degrees.

### Cybersecurity Option, A.S.

The goal of the Cybersecurity program is to offer a student-centered, contemporary and future focused, comprehensive security program. The objective of this program is to provide students with the necessary technical knowledge, skills, and abilities alongside cultivating a student's ability to think analytically and critically, to collaborate, to problem solve, to communicate verbally and in writing, and to behave ethically. The Cybersecurity degree has been designed to provide courses and content that are informed by national standards such as the NICE Framework from National Institute of Standards and Technology (NIST) and the knowledge units required for National Centers of Academic Excellence (CAE) program jointly sponsored by the National Security Agency (NSA) and the Department of Homeland Security (DHS), along with aligning it to local area career market needs. Further, curriculum in this program readies students for several industry certifications including CISCO's CCNA, RedHat's Certified Engineer, CompTIA's Security+ and EC Council's Certified Ethical Hacker. The Cybersecurity degree program prepares students either for transfer to a related bachelor's degree program in cybersecurity or for employment in various entry-level information security analyst positions.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CIT-113 Information Technology Problem Solving Credits: 3 \*
- CIT-162 CISCO Networking | Credits: 3 \*
- CIT-182 PC Hardware & Software Credits: 3 \*
- ENG-111 College Writing | Credits: 3
- MAT-194 College Algebra for STEM Credits: 4

**Total Credits: 16** 

# **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Quantitative Problem Solving General Education requirement satisfied by Program.

### Semester 2

- CIT-270 Linux Administration/Lab Credits: 4
- CIT-268 Operating Systems Credits: 3 \*
- CIT-121 Introduction to Computer Forensics Credits: 3 \*
- CIT-167 CISCO Networking II Credits: 3 \*
- ENG-112 College Writing II Credits: 3

Total Credits: 16

# **Semester 2 Advising Note**

• Meet with an advisor to begin career planning activities

### Summer Semester

• PHL-103 Ethics Credits: 3

Total Credits: 3

# **Summer Semester Advising Note**

Community and Cultural Contexts General Education requirement satisfied by Program.

### Semester 3

- CIT-219 Information Security & Assurance Credits: 3 \*
- CIT-264 IT Security Credits: 3 \*
- CSC-125 Python Programming Credits: 3 \*
- Elective- CIT Elective Credits: 3

Elective Options:

CIT-262 Wireless Technology, CIT-267 CISCO Networking III, CIT-299C Computer Technology Internship, CIT-299N Networking Internship, INT-299IT Learn and Earn Info Tech Internship

• GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose one course from the Scientific Reasoning Menu

Total Credits: 16

# **Semester 3 Advising Note**

Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

- CIT-275 Information Security Seminar Credits: 3 \*
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

- CIT-278 Penetration Testing Credits: 3
- CSC-225 Advanced Python Programming Credits: 3

Total Credits: 15

### **Semester 4 Advising Note**

• Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate an ability to think analytically and critically, troubleshoot, collaborate, multitask, prioritize, problem solve, communicate verbally and in writing, and behave ethically.
- Identify, understand, and apply industry standards
- Describe and deploy network, firewalls, Intrusion Detection System (IDS), and honeypots
- Understand and apply technologies and principles involved in creating a secure computer network and enterprise
  environment
- Differentiate between threats, risks, and vulnerabilities and be prepared to handle and respond to incidents using countermeasures

- Apply threat intelligence, network assessments and defenses, security appliances and technologies, incident preparation, response, and investigation, and risk management and data privacy
- Analyze network traffic, differentiate between legitimate and malicious activity, and recognize anomalies in data
- Identify and manage threats and vulnerabilities including social engineering and physical security
- Understand and apply industry standards
- Manage documentation of processes and procedures
- Understand and manage modern operating systems using the command line interface
- Use a programming language to read, write, and execute programs
- Explain what a penetration tester can and cannot do legally, perform attacks, employ the tools and techniques of a penetration tester, and generate a penetration test report
- Understand concepts and applications of cryptography including PKI and other cryptographic protocols, authentication, and cybersecurity resiliency

### Career Outlook

The option is designed to align with the National Institute of Technology and Standards' National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework to ensure consistent, current, and flexible training in the growing technology field of Information Security. Further, the Cybersecurity degree student learning outcomes and program outcomes have been informed by a panel of cybersecurity professionals who developed a profile for a Security Operations Analyst Level 1 including skills, knowledge, behaviors, tools, and future trends necessary for the local Boston area job market. According to the BLS, "jobs for information security analysts will grow by 33% from 2020 to 2030," which is an estimated four times faster rate than the average employment growth rate of all occupations nationwide.

### **Data Analytics Option, A.S.**

Data Analytics and Artificial Intelligence are changing the face of the world where we live. Analytics is used in society to analyze and provide solutions for a wide scope of problems including customer churn, programming self-driving cars, facial recognition, natural language processing, and predicting crime. The Data Analytics AS degree is designed for students looking to pursue an entry-level job or internship in the field of Analytics. Students will learn the fundamentals of data science through the lens of the R and Python programming languages. Students will learn data gathering, combining, preparation, and presentation with a variety of open source and commercial tools. Students will learn the basic building blocks of analytical modeling and gain an understanding of the analytics life cycle.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- CIT-113 Information Technology Problem Solving Credits: 3 \*
- MAT-181 Statistics | Credits: 3 \*
- MAT-197 Precalculus Credits: 4 \*
- ENG-111 College Writing | Credits: 3 \*
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning. Choose one course from the Scientific Reasoning Menu

**Total Credits: 17** 

### **Semester 1 Advising Note**

- Equivalent courses for CIT-113 are CIT-110 Applications/Concepts or CSC-120 Intro to Comp Sci & Object Oriented Prog.
- There is a hidden prerequisite for MAT-197 (MAT-194 College Algebra for STEM), but students can place into the course. Students who place into MAT-281 (Calculus I) must replace MAT-197 with an elective.
- General Education requirement Quantitative Problem Solving satisfied by program.

#### Semester 2

- CSC-236 SQL Programming Credits: 3 \*
- CIT-137 Intro to Big Data with R & R-Studio Credits: 4 \*
- CIT-234 Decision Support Using MS Excel Credits: 3
- MAT-281 Calculus I Credits: 4 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3

This course meets the General Education requirement for Community & Cultural Contexts.

Choose one course from the Community and Cultural Contexts Menu

**Total Credits: 17** 

### Semester 3

- CSC-125 Python Programming Credits: 3 \*
- MAT-291 Linear Algebra Credits: 4
- CIT-187 Data Analytics and Predictive Analysis Credits: 3
- ENG-112 College Writing II Credits: 3
- Elective- Concentration Elective Credits: 3

Concentration Electives:

CSC-240 Database Programming, CIT-268 Operating Systems, CIT-299C Computer Technology Internship

**Total Credits: 16** 

#### Semester 4

• Elective- Concentration Elective Credits: 3

Concentration Electives:

CSC-240 Database Programming, CIT-268 Operating Systems, CIT-299C Computer Technology Internship

- CIT-130 Data Visualization Credits: 3
- CSC-225 Advanced Python Programming Credits: 3
- GenEd-E General Education Elective Credits: 4

This course meets the General Education requirement for General Education Elective.

Choose one four credit Science/Lab course (see semester four advising note)

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu.

**Total Credits: 16** 

### **Semester 4 Advising Note**

 GenEd-E To satisfy MassTransfer STEM program requirements, students are required to earn seven credits in the Natural/Physical Sciences.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Collect, clean and prepare data from various sources for analysis.
- Utilize R and Python computer languages to generate insight from data.
- Handle data with an ethically conscious approach and understanding.
- Select the correct data visualization to communicate findings and recommendations.
- Select appropriate data visualizations to clearly communicate insights to various stakeholders.

#### Career Outlook

Graduates of this option will be qualified to pursue internships or junior data practitioner jobs in the field of data analytics.

### **Transfer Options**

**Transfer Advising Guides** 

• Northeastern University CPS

### Early Childhood Development, A.S.

The Early Childhood and Education Department's mission statement and goals state two primary purposes:

1) To provide knowledge, training, and skill development for persons interested in working in the area of social services with specific educational opportunities for those interested in early childhood development, human services, and education, and 2) To serve the community as an information and knowledge-base in the area of social service, with specific expertise in early childhood education and development, human services, and education.

The Early Childhood Development Program prepares students in the fields of growth of the child, influences of the family upon the child, and environmental pressures upon the family.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- ECE-103 Child Growth and Development Credits: 3 \*
- ECE-106 Program Environments Credits: 3 \*
- ECE-116 Introduction to Early Childhood Education Credits: 3
- ENG-111 College Writing | Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3
   This course meets the General Education requirement for Quantitative Problem Solving
   Choose one MAT course from Quantitative Problem Solving Menu. Recommended class MAT-181 or MAT-172.

**Total Credits: 15** 

# **Semester 1 Advising Note**

- Employment in Early Childcare and Education requires criminal background checks to ensure the safety of young
  children. Students in the Early Childhood Development program will undergo CORI background checks before starting
  ECE-220 Practicum in Early Childhood Education. Students with concerns about this requirement should contact the
  Department Chair before beginning this program.
- ECE-103 and ECE-106 are courses required to be certified by the Massachusetts Department of Early Education and Care (DEEC).
- No other developmental Psychology courses MAY BE substituted for ECE-103. Only ECE-103 is allowed for this degree plan and others will not be counted toward qualifications for certification by Massachusetts DEEC.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. ECE-116 meets the Learning Community Seminar requirement for the A.S. in Early Childhood Development.

#### Semester 2

- ECE-101 Guidance and Discipline Credits: 3 \*
- ECE-104 Curriculum in Early Childhood Education Credits: 3 \*
- ENG-112 College Writing II Credits: 3
- PSY-101 Principles of Psychology Credits: 3 \*
- ECE-217 Observation/ Recording Behavior Credits: 3 \*

**Total Credits: 15** 

# **Semester 2 Advising Note**

- ECE-101, ECE-104, and ECE-217 may not be taken unless student has received a C or better in ECE-103 in previous semester. Students without C or better in any ECE course will be barred from practicum until this measure is completed.
- ECE-101 and ECE-104 are courses required to be certified by the Massachusetts Department of Early Education and Care.
- Meet with an advisor to begin career planning activities.

### Semester 3

- LIT-217 Children's Literature I Credits: 3
- ECE-212 Families/Community in Early Childhood Ed Credits: 3
- ECE-220 Practicum in Early Childhood Education I Credits: 3 \*
- Elective Career Elective Credits: 3

Electives:

ECE-108 Infant/Toddler Curriculum Development, ECE-207 Literacy Development and Learning for Children, ECE-209 Math Concepts & Learning for Children, ECE-210 Science Concepts & Learning for Children, ECE-118 Pedagogy of Play, SOC-211 The Family, SOC-203 Social Problems, PSY-201 Learning and Memory

• Elective Career Elective Credits: 3

Electives:

ECE-108 Infant/Toddler Curriculum Development, ECE-207 Literacy Development and Learning for Children, ECE-209 Math Concepts & Learning for Children, ECE-210 Science Concepts & Learning for Children, ECE-118 Pedagogy of Play, SOC-211 The Family, SOC-203 Social Problems, PSY-201 Learning and Memory

**Total Credits: 15** 

# **Semester 3 Advising Note**

- ECE-108 Infant/Toddler Curriculum Development is course required by Mass DEEC for those wishing to pursue teaching in infant and toddler classrooms.
- Complete a pre-graduation check with an advisor in LifeMap

### Semester 4

• GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu

- ECE-221 Practicum/Early Childhood Education II Credits: 3 \*
- Elective Career Elective Credits: 3

Electives:

ECE-108 Infant/Toddler Curriculum Development, ECE-207 Literacy Development and Learning for Children, ECE-209 Math Concepts & Learning for Children, ECE-210 Science Concepts & Learning for Children, ECE-118 Pedagogy of Play, SOC-211 The Family, SOC-203 Social Problems, PSY-201 Learning and Memory

GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus

ECE-208 Exceptional Lrnrs:Intro to Special Educ Credits: 3

**Total Credits: 16** 

### **Semester 4 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Use knowledge of child development and relationships with children and families to understand children as individuals
  and plan for their unique development by organizing environments which facilitate development in all developmental
  areas.
- Design and implement developmentally appropriate learning experiences using methods and materials which promote growth and development.
- Work with parents, families, and community leaders to support growth and development of children by engaging each child in meaningful experiences.

- Observe children in their care and be able to analyze and synthesize information about children so as to improve their own work with children, families, and communities.
- Analyze, evaluate and strengthen their work with children by reflecting upon effective practices and collaborating with other professionals in the field.

### Career Outlook

Graduates of this program qualify for employment in a variety of settings, including day care centers, preschools, head start programs, family home care and social service organizations. Students also may transfer to four-year colleges or universities in elementary education, human services work, or special needs childcare. Graduates of this program qualify as teachers and/or lead teachers in the state of Massachusetts.

### **Transfer Options**

**Transfer Advising Guide** 

Lesley University

### **Education Concentration, A.A.**

The Education concentration prepares students seeking bachelor's degrees in education or liberal arts to transfer to four-year colleges or universities. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, see Transfer Options below.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- EDU-102 Becoming a Teacher: A Learning Community Seminar Credits: 3 \*
- ENG-111 College Writing | Credits: 3 \*
- PSY-101 Principles of Psychology Credits: 3
- ECE-103 Child Growth and Development Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4
   This course meets the General Education requirement for Quantitative Problem Solving Choose one MAT course from Quantitative Problem Solving Menu.

Total Credits: 15-16

# **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Employment in the field of Education may require a criminal background check. Students concerned about this requirement should contact the department chair.

### Semester 2

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- ENG-112 College Writing II Credits: 3 \*
- EDU-201 Introduction & Foundations of Education Credits: 3 \*
- LIT-217 Children's Literature I Credits: 3
- HIS-151 US History: Colonization through the Civil War Credits: 3
  or
- HIS-152 US History: Reconstruction to Present Credits: 3
- MAT-172 Contemporary Math I Credits: 3

**Total Credits: 15** 

### Semester 3

- EDU-220 Practicum in Instruction Credits: 3 \*
- BIO-105 Introduction to Biology Credits: 4
- BIO-108 Human Biology/Lab Credits: 4
- ECE-212 Families/Community in Early Childhood Ed Credits: 3 \*
- Elective- Career Elective Credits: 3 \* See semester advising note
- LIT-218 Children's Literature II Credits: 3

Total Credits: 16

# **Semester 3 Advising Note**

- Two science courses are required for this degree plan. One must be in biological/life science area; the other, in physical science area. No exceptions will be approved.
- Career elective options: ECE-104, ECE-106, ECE-108, ECE-151 through ECE-168, ECE-209, ECE-210, ECE-223, ECE-224, ECE-213, ECE-215, ECE-516, EDU-504

### Semester 4

- ENV-105 Environmental Science/Lab Credits: 4 \*
- ECE-208 Exceptional Lrnrs:Intro to Special Educ Credits: 3 \*
- GenEd-E General Education Elective Credits: 3
  - This course meets the General Education requirement for General Education Elective. Choose a course from the Creative Work Menu
- ECE-207 Literacy Development and Learning for Children Credits: 3 \*
- HIS-111 History of Pre-Modern World Credits: 3

Total Credits: 16

Upon Completion of This Concentration Graduates Will Be Able To:

- Describe the interaction of history, culture, literature, economics, and science as studied within a broad liberal arts curriculum.
- Demonstrate a mastery in reading and writing/ literacy skills and the organization of critical thinking and problem solving behaviors.

#### Career Outlook

Graduates of this concentration may qualify to transfer to four-year colleges or universities as juniors. Potential teaching careers include teacher aid; early elementary, later elementary, middle school and high school teaching; preschool and kindergarten teaching; and special education teaching. Students must obtain a bachelor's degree as the minimum requirement for entry into these fields. Graduate work may be necessary, as well.

### **Transfer Options**

#### MassTransfer A2B Link

- Bridgewater State University
- Massachusetts College of Liberal Arts
- University of Massachusetts Amherst
- University of Massachusetts Boston
- University of Massachusetts Dartmouth

# Electric Power Utility Program - A Partnership with EVERSOURCE, A.S.

In partnership with EVERSOURCE and Local 369 UWUA, BHCC offers a two-year accredited Associate in Science Degree with a focus on Electric Power Utility Technology. Most classroom course work takes place at BHCC. Students receive continuous hands-on training at EVERSOURCE labs and during required internships.

# **Electric Power Utility Technology (EPUT) Program Requirements**

Students must apply to the Electric Power Utility program through Enrollment Management and Admissions and complete an Eversource application which may be found at tbcdn.talentbrew.com/company/7774/FULL\_v1\_0/docs/ EPUT-Application-2018-2019.pdf.

This two-year program of study includes approximately 12 weeks paid internship with Eversource for students who maintain a C or higher in all courses.

Students in this program must successfully pass any random drug or alcohol screening tests mandated by EVERSOURCE during the program; successfully complete all appropriate Skills Aptitude Tests administered by EVERSOURCE; and maintain safety skills to EVERSOURCE criteria as per OSHA 1910 and OSHA 1926 directives. Qualified applicants must pass additional physical and mechanical testing.

Graduates of the program in good standing at Eversource will have the opportunity to interview with Eversource for a potential iob.

### **Careers and Salaries**

During break, students in the Electric Power Utility program participate in a paid ten to twelve week work experience at Eversource while they complete a for-credit internship course. Students are paid \$14 an hour.

After completing this degree option, students receive an associate in science degree and a certificate in Natural Gas Technology. They will have the experience and qualifications needed to launch a career in electric and gas.

The current starting salary range for laborers in Massachusetts is approximately \$30 an hour, with additional compensation for overtime.

### **Tuition Assistance**

Eversource offers tuition assistance to enrolled students up to \$600 per semester.

For more information visit bhcc.edu/eput.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Admission Requirements

- Diploma Possess a High School Diploma or GED
- Other See Admissions Requirements below
- Test Take College Placement Test
- MAT-097 Foundations of Algebra Credits: 3
- ENG-095 Writing Skills II Credits: 3

#### **Total Credits: 6**

Admission Requirements Advising Note

- If you meet the academic requirements for BHCC you will receive an email from Eversource with next steps to
  continue with the application process. For more info https://jobs.eversource.com/ student-programs#electric- powerutility
- As a prerequisite for internship this program requires that all students must undergo a Criminal Offender Record
  Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more information regarding the
  College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617-228-2193 or visit
  https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

### Semester 1

- ENG-111 College Writing | Credits: 3 \*
- MAT-193 Topics in Algebra/Trigonometry Credits: 3 \*
- EPU-101 DC Circuit Theory & Lab Credits: 4 \*
- EPU-151 Fundamentals of Single Phase and Polyphase Metering Credits: 4 \*
- CIT-110 Applications/Concepts Credits: 3

Total Credits: 17

# **Semester 1 Advising Note**

- Courses with EPU, MAT and PHY prefixes must be taken and completed as indicated in the program map.
- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program.

### Semester 2

- ENG-112 College Writing II Credits: 3
- PSY-107 Group Dynamics Credits: 3
- EPU-104 AC Circuit Theory/Lab Credits: 4 \*
- EPU-205 Introduction to Substation Operations Credits: 4 \*

**Total Credits: 14** 

# **Semester 2 Advising Note**

• Courses with EPU, MAT and PHY prefixes must be taken and completed as indicated in the program grid.

#### Summer Semester

EPU-251 Electric Power/Utility Tech Internship Credits: 3 \*

**Total Credits: 3** 

### Semester 3

- VMA-111 Introduction to Mass Media Credits: 3
- MAN-111 Principles of Management Credits: 3
- EPU-207 Introduction to Overhead Linework Credits: 4
- EPU-257 Power and Distribution Systems Credits: 3

Total Credits: 13

### Semester 4

- PHY-191 Introduction to Physics/ Lab Credits: 4
- ENR-101 Introduction to Engineering/Lab Credits: 4
- EPU-203 Intro to Underground Operations Credits: 4
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work.

Choose a course from the Creative Work Menu

**Total Credits: 15** 

### **Electrical Engineering Transfer Option, A.S.**

This option provides students with the technical coursework and modern laboratory experience that enable them to succeed in an undergraduate electrical engineering program. Upon graduation from BHCC, students are able to pursue further study at four-year colleges and universities.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- ENG-111 College Writing | Credits: 3
- ENR-101 Introduction to Engineering/Lab Credits: 4 \*
- MAT-281 Calculus I Credits: 4 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3

This course meets the General Education requirement for Community & Cultural Contexts

Choose one course from Community and Cultural Contexts Menu

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

**Total Credits: 17** 

# **Semester 1 Advising Note**

- General Education requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program.
- This map assumes that a student enters the College ready to enroll in Calculus I (MAT-281).
- Students may want to consider completing some courses during the Summer to decrease the number of required credits during the Fall or Spring semester.

### Semester 2

- ENG-112 College Writing II Credits: 3
- PHY-251 Physics I/Lab Credits: 4 \*
- MAT-282 Calculus II Credits: 4 \*
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

• Elective- Career Elective Credits: 4 \*

Choose one course from Career Elective Options:

CHM-201 General Chemistry I & Lab, MAT-291 Linear Algebra , CSC-120 Intro to Comp Sci & Object Oriented Prog, CSC-237 C++ Programming

**Total Credits: 18** 

# **Semester 2 Advising Note**

- Students may want to consider completing some courses during the Summer to decrease the number of required credits during the Fall or Spring semester.
- Students should choose their Career Electives in consultation with an Engineering Advisor, as some transfer schools
  prefer certain courses.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.

#### Semester 3

- ENR-271 Circuit Analysis and Design I/Lab Credits: 4 \*
   Offered in Fall only
- PHY-252 Physics II/Lab Credits: 4 \*
- MAT-283 Calculus III Credits: 4 \*
- Elective- Career Elective Credits: 4

Choose one course from Career Elective Options:

CHM-201 General Chemistry I & Lab, MAT-291 Linear Algebra, CSC-120 Intro to Comp Sci & Object Oriented Prog, CSC-237 C++ Programming

**Total Credits: 16** 

# **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

### Semester 4

- ENR-272 Circuit Analysis and Design II/Lab Credits: 4 \*
- Elective- Career Elective Credits: 4 \*

Choose one course from Career Elective Options:

 $CHM-201\ General\ Chemistry\ I\ \&\ Lab,\ MAT-291\ Linear\ Algebra\ ,\ CSC-120\ Intro\ to\ Comp\ Sci\ \&\ Object\ Oriented\ Prog,\ CSC-237\ C++\ Programming$ 

- ENR-275 Digital Logic Systems/Lab Credits: 4 \*
- MAT-285 Ordinary Differential Equations Credits: 4 \*

Total Credits: 16

### **Semester 4 Advising Note**

- ENR-272 and ENR-275 are currently offered during only the Spring semester.
- Apply for graduation.

### Upon Completion of This Concentration Graduates Will Be Able To:

Design and conduct experiments.

- Analyze and interpret data.
- Apply modern computational tools and lab techniques, along with scientific concepts, to solve engineering problems.
- Design systems, components, and processes for solving problems in electrical engineering.
- Function as part of an engineering team.
- Articulate the professional and ethical responsibilities required of engineers.

### Career Outlook

Graduates completing a four-year degree will have a strong electrical engineering foundation and be able to select from a variety of high-demand fields for the balance of their training. Such high-demand fields include nanotechnology, high-tech manufacturing, electronic devices, and robotics.

### **Transfer Options**

#### **Transfer Advising Guides**

- Benjamin Franklin Institute of Technology
- Bridgewater State University
- UMASS Dartmouth Computer Engineering
- UMASS Dartmouth Electrical Engineering

#### MassTransfer A2B Link

- University of Massachusetts Amherst
- University of Massachusetts Lowell

### **Engineering Transfer Option, A.S.**

This option provides students with the technical coursework and laboratory experience that enables them to succeed in undergraduate engineering programs. Students planning to transfer into Civil, Mechanical, Structural, Materials, or other related engineering degree programs should enroll in this option. Upon graduation from BHCC, students are able to pursue further study at four-year colleges and universities.

The Associate of Science in Engineering Program is offered as part of a response to the long-term shortage of skilled workers in the engineering workforce, and is consistent with the mission of the College. It is designed to meet the needs of BHCC students and to address the workforce demands of Greater Boston. The curriculum is structured to mirror the freshman and sophomore years of a university engineering degree. Accordingly, the Engineering and Physical Sciences Department is developing articulation agreements with area universities to enable BHCC engineering graduates to transfer as juniors upon completing the Associate of Science degree. The curriculum offers three options: a Biomedical Engineering Option, an Electrical Engineering Transfer Option, and this Engineering Transfer Option.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENR-101 Introduction to Engineering/Lab Credits: 4
- ENG-111 College Writing I Credits: 3

- MAT-281 Calculus | Credits: 4 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3

This course meets the General Education requirement for Community & Cultural Contexts Choose one course from Community and Cultural Contexts Menu

• GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

**Total Credits: 17** 

# **Semester 1 Advising Note**

- The A.S. Engineering Transfer Option is appropriate for students interested in pursuing a Bachelor's degree in Civil or Mechanical Engineering.
- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program.
- This map assumes a student enters the College ready to enroll in MAT-281.

### Semester 2

- MAT-282 Calculus II Credits: 4
- ENG-112 College Writing II Credits: 3
- PHY-251 Physics I/Lab Credits: 4 \*
- CHM-201 General Chemistry I & Lab Credits: 4
   Students must complete ENG-111 and MAT-197 with a C+ or better before taking CHM-201

**Total Credits: 15** 

# **Semester 2 Advising Note**

- PHY-251 should be completed in the Spring semester or Summer Bridge Session as it is a pre-requisite for ENR-260, which is currently offered during only the Fall semester.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- Meet with an advisor to begin career planning activities.

### Semester 3

- ENR-260 Engineering Statics Credits: 3 \*
   Offered in Fall only
- PHY-252 Physics II/Lab Credits: 4
- MAT-283 Calculus III Credits: 4
- Elective- Career Elective Credits: 3-4

Career elective selection must be recommended and approved by the Engineering Advisor and/or the Engineering and Physical Sciences Department.

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Program Menu

Total Credits: 17-18

### Semester 4

- ENR-265 Engineering Dynamics Credits: 3
- ENR-270 Strength of Materials Credits: 3
- MAT-285 Ordinary Differential Equations Credits: 4
- CHM-202 General Chemistry II & Lab Credits: 4
- Elective- Career Elective Credits: 3-4

Career elective selection must be recommended and approved by the Engineering Advisor and/or the Engineering and Physical Sciences Department.

Total Credits: 17-18

# **Semester 4 Advising Note**

- ENR-265 and ENR-270 are currently offered during only the Spring semester.
- Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Design and conduct experiments.
- Analyze and interpret data.
- Apply computational tools and scientific concepts to engineering problems.
- Design systems, components, or processes for solving engineering problems.
- Function as part of an engineering team.
- Articulate the professional and ethical responsibilities required of engineers.

### Career Outlook

Graduates completing a four-year degree will have a strong engineering foundation and able to select from a variety of high demand fields for the balance of their training. Such high demand fields include Nanotechnology, Materials, and Robotics.

### **Transfer Options**

#### **Transfer Advising Guides**

- Bridgewater State University
- UMASS Dartmouth B.S. Civil Engineering
- UMASS Dartmouth B.S. Mechanical Engineering

#### MassTransfer A2B Link

- University of Massachusetts Amherst
- University of Massachusetts Lowell

### **English Concentration, A.A.**

The English Department offers programs which qualify graduates to transfer to four-year institutions that prepare them for careers in teaching, journalism, public relations, and media communications. Students must complete a bachelor's degree and teaching certificate to pursue a teaching career. A bachelor's degree in English is a minimum requirement for entry-level work in careers such as publishing, advertising, public relations, and journalism.

The English concentration prepares students to transfer to four-year colleges or universities. Students who select this concentration may be particularly interested in pursuing a career in teaching or journalism. This concentration, however, would be of value in any career in which good communication skills are fundamental to success. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, see Transfer Options below.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- HUM-120 Self, Culture and Society Credits: 3 \* or
- Elective- Elective Credits: 3 \*
   HUM-120 satisfies the Learning Community Requirement or choose one college-level course as an elective.
- ENG-111 College Writing | Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4 \*
   This course meets the General Education requirement for Quantitative Problem Solving Choose one course from Quantitative Problem Solving Menu
- GenEd-CCC Community & Cultural Contexts Credits: 3 \*
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from the Community and Cultural Contexts Menu
- Elective- Foreign Language Elective Credits: 3 \* Choose one foreign language course

Total Credits: 15-16

# **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- General Education Requirement Creative Work satisfied by program.

#### Semester 2

- ENG-112 College Writing II Credits: 3 \*
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

• Elective- Literature Elective Credits: 3

Choose one LIT course

• Elective- Math Elective Credits: 3

Choose one college-level MAT course

• Elective-Foreign Language Elective Credits: 3

Choose one foreign language course

**Total Credits: 15** 

# **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

### Semester 3

- ENG-115 Writing Tutor Seminar Credits: 3 \*
- Elective- Behavioral Science Elective Credits: 3

Choose one PSY or SOC course

• Elective- English Elective Credits: 3

Choose one ENG course

• Elective- Literature Elective Credits: 3

Choose one LIT course

• GenEd-SR Scientific Reasoning Credits: 4 \*

This course meets the General Education requirement for Scientific Reasoning

Choose one course from Scientific Reasoning Menu

**Total Credits: 16** 

# **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

### Semester 4

• Elective- Literature Elective Credits: 3

Choose one LIT course

• Elective- Literature Elective Credits: 3

Choose one LIT course

• Elective Credits: 3

Choose any course

• Elective- Social Science Elective Credits: 3

Choose one course from Social Science Elective menu

Elective- Laboratory Science Elective Credits: 4
 Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course

**Total Credits: 16** 

# **Semester 4 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate competence as a writer. Write for a variety of purposes, adapting to various audiences.
- Demonstrate proficiency in critical thinking.
- Demonstrate a basic understanding of a language other than English.
- Demonstrate strong interpersonal communication skills.

### Career Outlook

Graduates of this concentration qualify to transfer to four-year institutions that prepare students for careers in teaching, journalism, public relations, and media communications. Students must complete a bachelor's degree and teaching certificate to pursue a teaching career. A bachelor's degree in English is a minimum requirement for entry level work in careers such as publishing, advertising, public relations, and journalism. In order to advance in some fields, graduate work may be required.

### **Transfer Options**

#### **Transfer Advising Guides**

• Lesley University

#### MassTransfer A2B Map

- Fitchburg State University
- Westfield State University
- Worcester State University
- University of Massachusetts Amherst
- University of Massachusetts Lowell

#### MassTransfer A2B Link

- Bridgewater State University
- Fitchburg State University
- Massachusetts College of Liberal Arts

- Salem State University
- Worcester State University
- University of Massachusetts Boston

### **English: Creative Writing Option, A.A.**

The Creative Writing Option within the English Concentration introduces students to multiple genres of writing (e.g. poetry, fiction, nonfiction, and playwriting) and allows for students to build a writing portfolio that can then serve to appeal to transfer programs and employers. The capstone course of the English degree with the Creative Writing Option is ENG-234 Literary Publishing, an experiential learning course in which students gain professional experience as writers, editors, and publishers of BHCC's literary journal. Creative writing backgrounds appeal to a range of employers who seek candidates who can write, creatively and flexibly, in a variety of genres for diverse audiences.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- ENG-203 Creative Writing Workshop Credits: 3
- ENG-111 College Writing | Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4 \*
   This course meets the General Education requirement for Quantitative Problem Solving.
   Choose one course from the Quantitative Problem Solving Menu.
- GenEd-CCC Community & Cultural Contexts Credits: 3 \*
  This course meets the General Education requirement for Community & Cultural Contexts.
  Choose one course from the Community & Cultural Contexts Menu.
- Elective- Global Language Elective Credits: 3 \* Choose one course from Global Languages.

Total Credits: 15-16

### **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community within their first year.
- General Education Requirement Creative Work satisfied by program.

### Semester 2

- ENG-112 College Writing II Credits: 3 \*
- Elective- Global Language Elective Credits: 3 Choose one course from Global Languages.
- Elective- Literature Elective Credits: 3
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective. Students must take ENG-231, ENG-232, ENG-233, or THR-115 to satisfy this requirement.

Elective- Behavioral or Social Science Elective Credits: 3
 Choose one PSY, SOC, HIS, PHL, GEO, PSC, or REL course.

**Total Credits: 15** 

# **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop at the college transfer fair.

#### Semester 3

- Elective- Literature Elective Credits: 3
- Elective- Career Elective Credits: 3 \*

Career Elective Options:

Choose one career elective course from ENG, LIT, COM, VMA, THR, or MUS Recommended: ENG-115, COM-171, COM-101, COM-102, MUS-208, or THR-109

ENG-231 Introduction to Fiction Writing Credits: 3

or

• ENG-232 Introduction to Poetry Writing Credits: 3

or

 ENG-233 Intro to Creative Nonfiction Writing Credits: 3 or

- THR-115 Playwriting Credits: 3
- Elective- Behavioral or Social Science Elective Credits: 3
   Choose one PSY, SOC, HIS, PHL, GEO, PSC, or REL course.
- GenEd-SR Scientific Reasoning Credits: 4 \*
   This course meets the General Education requirement for Scientific Reasoning.
   Choose one course from the Scientific Reasoning Menu.

Total Credits: 16

### **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institutions, collect letters of recommendation, apply for transfer
- Complete a pre-graduation check with an advisor in LifeMap.

#### Semester 4

- ENG-234 Literary Publishing Credits: 3
- Elective- Literature Elective Credits: 3
- ENG-231 Introduction to Fiction Writing Credits: 3
   or
- ENG-232 Introduction to Poetry Writing Credits: 3
- ENG-233 Intro to Creative Nonfiction Writing Credits: 3

- THR-115 Playwriting Credits: 3
- Elective- Career Elective Credits: 3 \*

Career Elective Options:

Choose one career elective course from ENG, LIT, COM, VMA, THR, or MUS Recommended: ENG-115, COM-171, COM-101, COM-102, MUS-208, or THR-109

Elective- Lab Science Elective Credits: 4
 Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course.

**Total Credits: 16** 

### **Semester 4 Advising Note**

Apply for graduation.

### Upon Completion of This Concentration Graduates Will Be Able To:

Students graduating with an AA in English with the Creative Writing Option will be able to:

- Develop a creative writing portfolio in preparation for transfer to a four-year college or university.
- Collaboratively compose, edit, and publish a creative project.
- Demonstrate competence as a writer, composing for a variety of purposes, and in a variety of genres, adapting to various audiences.
- Demonstrate proficiency in critical thinking.
- Demonstrate a basic understanding of a language other than English.
- Demonstrate strong interpersonal communication skills.

### Career Outlook

Graduates of English with the Creative Writing Option qualify to transfer to four-year institutions that prepare students for careers in writing, editing, teaching English or creative writing, content development, and publishing. These students would be well-equipped to apply for BFA programs in Creative Writing or BA programs in English. (Students must complete a bachelor's degree and teaching certificate to pursue a teaching career.) A bachelor's degree in English is a minimum requirement for entry level work in careers such as publishing, content development, and other creative fields. In order to advance in some fields, graduate work may be required. Students interested in eventually pursuing a MFA in Creative Writing would benefit from this Option.

### **Entrepreneurship Option, A.S.**

This option allows individuals to learn entrepreneurial skills and build on their own capabilities while earning a college degree. Students will be able to transfer credit for courses to four-year colleges with entrepreneurial programs. Students learn business skills that could be combined with their specialized skills to create opportunities for self-employment or for career advancement and career mobility.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

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- BUS-101 Introduction to Business Credits: 3 \*
- ENG-111 College Writing I Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3 \*
- ACC-101 Principles of Accounting I Credits: 3 \*
- MAT-181 Statistics | Credits: 3 \*

**Total Credits: 15** 

### **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year. Students who have already taken an LCS course should consult Department Chair or Division Dean.
- Explore BHCC Student Activities offered i.e., BHCC's Entrepreneurship Club.
- Create and follow education plan.

#### Semester 2

- ENG-112 College Writing II Credits: 3
- MAN-112 Organizational Behavior/Design Credits: 3
- MAN-105 Principles of Marketing Credits: 3
- MAN-111 Principles of Management Credits: 3
- ACC-102 Principles of Accounting II Credits: 3
   or
- ACC-105 Accounting Information Systems Credits: 3

Total Credits: 15

# **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair
- Complete a volunteer activity in an area of interest.
- Learn about Alpha Beta Gamma (Business Honor Society) and Alpha Kappa Mu (General Honor Society).
- Inquire about the Commonwealth Honors Program.

#### Semester 3

- ECO-201 Macroeconomics Credits: 3 or
- ECO-202 Microeconomics Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4
   This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu
- MAN-107 Introduction to Entrepreneurship Credits: 3 \*

- BUS-201 Business Law I Credits: 3
- CIT-234 Decision Support Using MS Excel Credits: 3

**Total Credits: 16** 

### **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Develop a financial plan for continued education and life after graduation.
- Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

- GenEd-CW Creative Work Credits: 3
  - This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

- MAN-204 Entrepreneurship and Innovation Credits: 3
- Elective- Career Elective Credits: 3

Choose any ACC, BUS, FIN or MAN course

- BUS-207 Professional Communication Credits: 3
- MAN-201 Management Seminar Credits: 3
   or
- MAN-299 Business Internship Credits: 3

or

• INT-299B Learn and Earn Business Internship Credits: 3

Total Credits: 15

# **Semester 4 Advising Note**

- The Management Seminar in this program is a Capstone course and should be taken in the student's final semester.
- Gather recommendation letters from faculty and staff.
- Apply for Graduation.
- Finalize your resume and upload it to your ePortfolio and LinkedIn website.

# Upon Completion of This Concentration Graduates Will Be Able To:

- Analyze viability of opportunities from various points of view.
- Understand the leadership skills and personal characteristics needed for success in starting and managing a small business.
- Develop and implement a business plan.
- Prepare a set of financial statements for a service, merchandising or manufacturing business that is structured as a sole proprietorship, partnership or a corporation.
- Analyze a set of financial statements to determine strengths or weaknesses of the business.

- Understand the basic principles of business law, contracts and agency, intellectual property and product liability.
- Demonstrate proficiency in computer applications as required to operate and manage a small business.
- Examine management theory and practice, and explain basic business methodology and management issues.
- Be able to identify and analyze the marketing strategies of an organization that can be used to advance its mission.
- Understand the techniques useful in achieving the full potential from limited resources and improving productivity and
  effectiveness.

### Career Outlook

This option prepares graduates to start and manage a small business, and to move into management and supervisory positions.

### **Transfer Options**

### **Transfer Guides**

• Boston College Woods College of Advancing Studies

### **Environmental Science, A.S.**

Environmental Science is an interdisciplinary science major for students interested in the exploration of human interactions with the natural world. The major provides a broad foundation to the biological, physical, and chemical processes of the natural world. Additional coursework in mathematics, geographic information systems, earth science, environmental economics, and environmental policy highlights the interdisciplinary nature of environmental science. The major focuses on environmental processes, problems, and solutions.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- ENV-105 Environmental Science/Lab Credits: 4 \*
- ENG-111 College Writing I Credits: 3
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from Community and Cultural Contexts Menu
- MAT-197 Precalculus Credits: 4
- MAT-281 Calculus I Credits: 4

Total Credits: 14

# **Semester 1 Advising Note**

- The A.S. Environmental Science Program is appropriate for students who are interested in pursuing a B.S degree in Environmental Science or a B.A. degree in Environmental Studies
- General Education Requirements Quantitative Problem Solving and Scientific Reasoning are satisfied by this program.
- This map assumes a student enters the College ready to enroll in MAT-197 Precalculus.

- Students need to complete seven General Education courses during semesters 1 & 2. These do not need to be completed in any sequence.
- For students planning to apply to a B.S. Program in Environmental Science: Take MAT-281 Calculus I and complete PHY-251 Physics I/Lab
- For students planning to apply to a B.A. Program in Environmental Studies: Take MAT-197 Precalculus and complete PHY-201 General Physics I/Lab

### Semester 2

- ENG-112 College Writing II Credits: 3 \*
- MAT-181 Statistics | Credits: 3
- BIO-195 General Biology I & Lab Credits: 4
- GenEd-E General Education Elective Credits: 4

This course meets the General Education requirement for General Education Elective.

Choose one of the following:

ENV-111 Survey of Renewable Energy or, ENV-113 Introduction to Oceanography/Lab or, ENV-115 Earth Science or, ENV-120 Tropical Field Studies

GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work.

Choose one course from Creative Work Menu

**Total Credits: 17** 

# **Semester 2 Advising Note**

- ENV-120 is a study abroad course in a tropical country.
- To lighten semester load, it is recommended to complete the General Education courses in the Summer

#### Semester 3

- BIO-196 General Biology II & Lab Credits: 4 \*
- ECO-220 Environmental Economics Credits: 3

• ENV-222 Environmental Policy, Law, and Management Credits: 3

- CHM-201 General Chemistry I & Lab Credits: 4
- PHY-201 General Physics I/Lab Credits: 4 or
- PHY-251 Physics I/Lab Credits: 4

Total Credits: 15

### **Semester 3 Advising Note**

 For students planning to apply to a B.S. Program in Environmental Science: Take MAT-281 Calculus I and complete PHY-251 Physics I/Lab • For students planning to apply to a B.A. Program in Environmental Studies: Take MAT-197 Precalculus and complete PHY-201 General Physics I/Lab

#### Semester 4

Elective Option Elective Credits: 4

Option Elective

BIO-210 Population Ecology & Lab, ENV-211 Environmental Microbiology/Lab, ENV-250 Global Environmental Change, MAT-281 Calculus I, (see semester advising note), PHY-202 General Physics II/Lab, PHY-252 Physics II/Lab

Elective Option Elective Credits: 4

Option Electives

BIO-210 Population Ecology & Lab, ENV-211 Environmental Microbiology/Lab, ENV-250 Global Environmental Change, MAT-281 Calculus I, (see semester advising note), PHY-202 General Physics II/Lab, PHY-252 Physics II/Lab

- CHM-202 General Chemistry II & Lab Credits: 4
- GIS-224 Intro to Geographic Information Systems Credits: 4 \*

Total Credits: 16

### **Semester 4 Advising Note**

- MAT-281 Calculus I cannot be used as a program elective unless you have also completed MAT-197 Precalculus.
- Successful completion GIS-224 Intro to Geographic Information Systems course will require access outside of class to
  Windows computers with ArcGIS for Desktop installed; evaluation licenses will be made available for students to
  install ArcGIS onto their own Windows computers. ArcGIS for Desktop will also be provided in two public computers
  on campus for students without personal computers.
- Apply for Graduation
- Any course, other than those listed, must be approved by the program director.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Identify, define, and explore the major concepts of environment processes, problems, and solutions
- Investigate a variety of scientific methods and techniques to study the environment
- Demonstrate effective oral and written communication skills about environmental findings
- Analyze the cultural, ethical, economic, and government policy aspects of current and emerging environmental concerns

#### Career Outlook

Students majoring in Environmental Science prepare for a variety of entry-level careers in the private, public and non-profit sector involving resource conservation and sustainability. Entry-level careers include environmental monitors, assistants, and technicians. This program will allow students to transfer to four-year colleges and universities to seek a bachelor's degree in environmental science or environmental studies. A bachelor's or graduate degree is required for professional positions in education, outreach, environmental planning, environmental conservation, natural resource management, environmental consulting, environmental engineering, hazardous materials, and occupational health and safety.

Employment of environmental scientists and specialists is projected to grow 8 percent from 2018 to 2028, faster than the average for all occupations. Heightened public interest in the hazards facing the environment, as well as increasing demands placed on the environment by population growth, are expected to spur demand for environmental scientists and specialists Link to Bureau of Labor Statistics https://www.bls.gov/ooh/life-physical-and-social-science/environmental-scien-tists-and-specialists.htm

### **Transfer Options**

#### MassTransfer A2B Link

- University of Massachusetts Amherst
- University of Massachusetts Lowell

### **Transfer Guides**

University of Massachusetts Boston

### **Finance Option, A.S.**

This option provides students with fundamental knowledge of finance theories and practical analysis tools and skills that prepare students for success in undergraduate finance programs and for positions in financial services and business.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing | Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3
- ACC-101 Principles of Accounting | Credits: 3 \*
- BUS-101 Introduction to Business Credits: 3 \*
- FIN-106 Introduction to Corporate Finance Credits: 3

**Total Credits: 15** 

### **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Explore BHCC Student Activities offered i.e., BHCC's Entrepreneurship Club.
- Create and follow an Education Plan with an Academic Advisor.

- MAN-111 Principles of Management Credits: 3
- ENG-112 College Writing II Credits: 3
- ACC-102 Principles of Accounting II Credits: 3 \*

FIN-112 Personal Finance Credits: 3 \*

• ECO-201 Macroeconomics Credits: 3

**Total Credits: 15** 

### **Semester 2 Advising Note**

- Complete a volunteer activity in an area of interest.
- Learn about Alpha Beta Gamma (Business Honor Society) and Alpha Kappa Mu (General Honor Society).
- Inquire about the Commonwealth Honors Program.
- Meet with an advisor to begin career planning activities.

### Semester 3

- FIN-111 Investments Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4
   This course meets the General Education requirement for Quantitative Problem Solving Choose one MAT course from Quantitative Problem Solving Menu.
- ECO-202 Microeconomics Credits: 3 \*
- BUS-207 Professional Communication Credits: 3
- FIN-210 Financial Management Credits: 3

Total Credits: 15-16

# **Semester 3 Advising Note**

- Develop a financial plan for continued education and life after graduation.
- Complete a pre-graduation check with an advisor in LifeMap

### Semester 4

- MAN-112 Organizational Behavior/Design Credits: 3
- FIN-211 Money and Banking Credits: 3
- FIN-213 Mutual Fund Industry Credits: 3

or

MAN-299 Business Internship Credits: 3

or

- INT-299B Learn and Earn Business Internship Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning

Choose one course from Scientific Reasoning Menu

GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

# **Semester 4 Advising Note**

- Gather recommendation letters from faculty and staff.
- Apply for Graduation.
- Finalize your resume and upload it to your ePortfolio and LinkedIn website.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Understand personal financial planning areas including: debt management; credit scores; goal planning; budgeting and saving; insurance; retirement planning and beginning investing.
- Understand and apply fundamental finance concepts and calculations including time value of money and risk and return
- Evaluate and analyze stocks, mutual funds and other financial instruments.
- Evaluate corporate finance decisions including capital budgeting; capital structure and dividend policy
- Analyze and solve financial problems using Excel

### Career Outlook

This option qualifies graduates for a variety of positions in banking, insurance, finance, brokerage, and mutual fund operations.

### **Transfer Options**

#### **Transfer Advising Guides**

- Boston College Woods College of Advancing Studies
- Northeastern CPS B.S. Finance and Accounting Management
- Suffolk University B.S. Accounting

### Fire Protection and Safety Program, A.S.

This program prepares students with practical and technical information and instruction. Students may include both potential fire fighters and in-service fire fighters wishing to upgrade their career status. An associate degree in fire protection and safety may lead to higher scores on promotional examinations.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

- FPS-111 Fire Service, This Century and the Next, What Should We Expect? Credits: 3
- ENG-111 College Writing I Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4
   This course meets the General Education requirement for Quantitative Problem Solving Choose one MAT course from Quantitative Problem Solving Menu.
- COM-171 Public Speaking and Professional Comm Credits: 3
- CIT-110 Applications/Concepts Credits: 3

Total Credits: 15-16

# **Semester 1 Advising Note**

- General Education Requirements Scientific Reasoning satisfied by program.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- FPS-111: Students with previous college experience choose from the following career electives: FPS-125 or FPS-127 or FPS-221

### Semester 2

- ENG-112 College Writing II Credits: 3
- SOC-101 Principles of Sociology Credits: 3
- FPS-135 Fire Behavior and Combustion Credits: 3
- FPS-119 Principles of Fire and Emergency Services Safety and Survival Credits: 3
- CHM-120 Principles of Inorganic Chemistry & Lab Credits: 4

**Total Credits: 16** 

### Semester 3

- FPS-123 Principles of Emergency Services Credits: 3
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

- FPS-133 Fire Protection Systems Credits: 3
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective. Choose a course from the General Education Community and Cultural Context Menu

• Elective- Career Elective Credits: 3

Career Electives: FPS-125 Hazardous Materials Chemistry, FPS-127 Fire Protection Hydraulics and Water Supply, FPS-221 Strategy and Tactics

Total Credits: 15

### Semester 4

• Elective- Career Elective Credits: 3

Career Electives: FPS-125 Hazardous Materials Chemistry, FPS-127 Fire Protection Hydraulics and Water Supply, FPS-221 Strategy and Tactics

- FPS-223 Building Construction for Fire Protection Credits: 3
- FPS-107 Fire Company Officership Credits: 3
- Elective- Behavioral Science Elective Credits: 3

Choose one course from PSY or SOC

FPS-139 Fire Prevention Services Safety and Survival Credits: 3

# **Semester 4 Advising Note**

• Apply for graduation

### Admission Requirements

Contact Prior Learning Assessment Coordinator if student has gone through a firefighting academy or has on-the-job training.

Talk to the Advising Liaisons for Professional Studies before registering for classes.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Understand the principles of fire protection and safety.
- Demonstrate preparedness to be a fire company officer.
- Understand the principles of arson investigation.
- Demonstrate familiarity with inspections for fire prevention.
- Demonstrate preparedness to take promotional civil service fire exams.

#### Career Outlook

Graduates of this program qualify for careers in municipal, state and federal agencies, industry, and insurance companies. Graduates also qualify to transfer to four-year colleges or universities in fire protection and safety. This program also prepares fire fighters who wish to upgrade their career status.

### Gaming/Computer Artist Track Simulation Option, A.S.

Take your passion for gaming to the next level. The Gaming/Computer Artist Track Simulation Option at Bunker Hill Community College is an associate degree program designed for students who want to learn the basics elements of design, development and production skills that are necessary for entry into the Computer Gaming and Computer Simulation industries. This option allows students to focus their studies on the artistic design aspects of gaming and simulation, rather than the more programming-related elements.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CMT-101 Game Development Essentials Credits: 3 \*
- CMT-121 Maya Foundations Credits: 3 \*
- ENG-111 College Writing | Credits: 3
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from Community and Cultural Contexts Menu

Recommended: SOC-101

GenEd-E General Education Elective Credits: 3
 This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

**Total Credits: 15** 

# **Semester 1 Advising Note**

 CMT-101: New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year

#### Semester 2

- CMT-123 Maya Character Modeling Credits: 3 \*
- CMT-119 The Human Character Credits: 3
- CMT-103 Managing Game Development Credits: 3
- ENG-112 College Writing II Credits: 3
- CMT-229 Creating 3-D Special Effects Credits: 3 \*

**Total Credits: 15** 

# **Semester 2 Advising Note**

Meet with an advisor to begin career planning activities.

#### Semester 3

- CMT-217 3D Modeling & Sculpting Credits: 3 \*
- VMA-104 Drawing from Observation Credits: 3
- CMT-129 Photoshop for Gaming Credits: 3
- CMT-223 Maya Character Animation Credits: 3
- MAT-172 Contemporary Math I Credits: 3

**Total Credits: 15** 

# **Semester 3 Advising Note**

• Complete a pre-graduation check with an advisor in LifeMap

- CMT-249 3D Liquids Simulation Credits: 3
- COM-171 Public Speaking and Professional Comm Credits: 3
- VMA-151 Introduction to Audio Technology Credits: 3

- GenEd-SR Scientific Reasoning Credits: 4
   This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu
- Elective- Career Elective Credits: 3
  Choose one Computer Media Technology (CMT) or Visual and Media Arts (VMA) course.

# **Semester 4 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Create game characters.
- Create custom textures for clothing, surfaces and environmental objects.
- Create 3D objects as game constructs.
- Create 3D lakes, rivers, streams, beverages, soft candy products and liquefied solids to name a few.
- Effectively light and shade the game scene.
- Manage the game development process.

#### Career Outlook

Students completing this program qualify for entry level positions in local and national gaming and computer simulation companies. The career outlook for computer gaming/simulation opportunities is projected to grow at a rapid rate in the coming years. The inclusion of computer generated graphics in movies, television, educational tutorials and social media have made this career choice very attractive.

# Gaming/Computer Programming Track Simulation Option, A.S.

Take your passion for gaming to the next level. The Gaming/Computer Programming Track Simulation Option at Bunker Hill Community College is an associate degree program designed for students who want to learn the basics elements of design, development and production skills that are necessary for entry into the Computer Gaming and Computer Simulation industries. This option allows students to focus their studies on the programming aspects of gaming and simulation, rather than the more artistic design elements.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

- CMT-101 Game Development Essentials Credits: 3 \*
- CMT-121 Maya Foundations Credits: 3 \*
- ENG-111 College Writing I Credits: 3

• GenEd-CCC Community & Cultural Contexts Credits: 3

This course meets the General Education requirement for Community & Cultural Contexts Recommended: SOC-101

• GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

**Total Credits: 15** 

# **Semester 1 Advising Note**

• CMT-101: New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year

### Semester 2

- CMT-123 Maya Character Modeling Credits: 3 \*
- CMT-119 The Human Character Credits: 3
- CMT-103 Managing Game Development Credits: 3
- ENG-112 College Writing II Credits: 3
- CMT-229 Creating 3-D Special Effects Credits: 3 \*

**Total Credits: 15** 

# **Semester 2 Advising Note**

• Meet with an advisor to begin career planning activities.

#### Semester 3

- CMT-223 Maya Character Animation Credits: 3
- CMT-231 MEL Scripting in Maya Credits: 3
- VMA-104 Drawing from Observation Credits: 3
- COM-171 Public Speaking and Professional Comm Credits: 3
- MAT-172 Contemporary Math I Credits: 3

Total Credits: 15

# **Semester 3 Advising Note**

• Complete a pre-graduation check with an advisor in LifeMap

- CMT-249 3D Liquids Simulation Credits: 3
- CMT-232 Game Engines Credits: 3
- VMA-151 Introduction to Audio Technology Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4
   This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu
- Elective- Career Elective Credits: 3
  Select the career elective from the Computer Media Technology or Visual Media Arts Department

# **Semester 4 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Create game characters.
- Create 3D objects as game constructs.
- Create 3D lakes, rivers, streams, beverages, soft candy products and liquefied solids to name a few.
- Effectively light and shade the game scene.
- Animate the game scene.
- Manage the game development process.

#### Career Outlook

Students completing this program qualify for entry level positions in local and national gaming and computer simulation companies. The career outlook for computer gaming/simulation opportunities is projected to grow at a rapid rate in the coming years. The inclusion of computer generated graphics in movies, television, educational tutorials and social media have made this career choice very attractive.

### General Sonography Option Full-time, A.S.

This program prepares students to pursue careers and registry status in diagnostic medical sonography through comprehensive instruction and clinical experience. The program covers ultrasound physics, abdominal sonography, obstetrical and gynecological sonography, sonographic subspecialties, and cross-sectional anatomy.

\*Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Admission Requirements

- Diploma High School diploma or GED
- Session Attend a mandatory Information session
- ENG-111 College Writing | Credits: 3
- BIO-203 Anatomy/Physiology I & Lab Credits: 4 \*

- MATH College Algebra or Statistics Credits: 3
   Completion of any 3 credit College Algebra or Statistics course
- TEAS Complete the Test of Essential Academic Skills (TEAS) Allied Health

# **Admission Requirements Advising Note**

- TEAS scores must be at least 47.6 percent in Reading, 46.7 percent in Math and 47.6 percent in English/language
- All Admissions course requirements must be completed with a grade of C or better
- Anatomy and Physiology must be completed within ten (10) years of application unless currently working in a related healthcare position
- Approximate application dates for the Fall program are mid-October through mid-February for admission to the program for the next academic year. Check with the Admissions office for exact timelines
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

### Summer Before Starting the Program

- MIG-111 Imaging Technology I Credits: 3 \* or
- PHY-201 General Physics I/Lab Credits: 4 \*

**Total Credits: 3** 

Accepted and standby students must complete either the online MIG-111 or PHY-201 with a grade of C or better in the summer prior to the start of the program. Students will need access to a personal computer with Internet access for MIG-111.

### Semester 1 Fall

- MIG-101 Introduction to Ultrasound Credits: 2 \*
- MIG-109 Patient Care for Medical Imaging Credits: 4 \*
- MIG-105 Ultrasound Physics and Instrumentation Credits: 3 \*
- BIO-204 Anatomy/Physiology II & Lab Credits: 4 \*
- SON-113 Cross Sectional Anatomy Credits: 4 \*

**Total Credits: 17** 

### **Semester 1 Fall Advising Note**

- General Education Requirements Quantitative Problem Solving, Scientific Reasoning and Creative Work satisfied by program.
- Core courses (i.e. MIG prefix) are only offered once per year and must be taken as scheduled, as must BIO-204.

Fall start only.

### Semester 2 Spring

- SON-115 Abdominal Ultrasound Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3
- SON-117 Ultrasound Scanning and Pathology Credits: 4 \*
- SON-119 Subspecialty Sonography and Neurosonography Credits: 3 \*
- SON-121 General Sonography Clinical I Credits: 3 \*

**Total Credits: 16** 

#### Semester 3 Summer

- MIG-205 Vascular Ultrasound Credits: 3 \*
- SON-123 General Sonography Clinical II Credits: 3 \*

**Total Credits: 6** 

#### Semester 4 Fall

- ENG-112 College Writing II Credits: 3
- SON-213 Ultrasound Physics and Instrumentation for the General Sonographer Credits: 2\*
- SON-215 Advanced General Sonography | Credits: 2 \*
- SON-219 Obstetrical/Gynecological Sonography I Credits: 3 \*
- SON-223 General Sonography Clinical III Credits: 3 \*

**Total Credits: 13** 

### Semester 5 Spring

- SOC-101 Principles of Sociology Credits: 3
- SON-217 Advanced General Sonography II Credits: 2 \*
- SON-221 Obstetrical and Gynecological II Credits: 3 \*
- SON-225 General Sonography Clinical IV Credits: 3 \*

Total Credits: 11

# **Semester 5 Spring Advising Note**

All required general education courses must be completed by the end of the second spring semester.

### Semester 6 Summer

SON-227 General Sonography Clinical V Credits: 3 \*

**Total Credits: 3** 

### Upon Completion of This Concentration Graduates Will Be Able To:

- Recognize and identify the sonographic appearance of normal anatomic structures and Doppler flow patterns.
- Utilize ultrasound equipment to obtain an image and provide physicians with diagnostic information for treatment.
- Understand the role of ultrasound in patient management and discuss the biologic effects of ultrasound.
- Apply to take the national registry exam (ARDMS).

#### Career Outlook

Graduates of this option qualify for employment in hospitals, HMOs, clinics, doctors' offices, mobile units, community health agencies, equipment/film companies, and/or as application specialist sales representatives.

### **Global Languages Concentration, A.A.**

The mission of the Global Languages Department at Bunker Hill Community College is to expose students to languages, cultures, and literature in order to enable them to become knowledgeable and active members of a global society. Students learn to use language for meaningful communication in both spoken and written form. Students completing classes in the Global Languages program will gradually achieve course-appropriate outcomes in the four traditional language skills of speaking, listening comprehension, reading and writing of the target languages. The Global Languages Department promotes a cultural wealth approach in all courses, committed to provide our students with excellent education through a bidirectional process in which students explore their full potential and contribute to the college community through their own experiences and backgrounds. Through the study of courses on culture, students further develop sensitivity to other cultural and linguistic heritages and are prepared to participate in a society characterized by linguistic and cultural diversity. By exploring the masterpieces of world literature and further studying other literary courses, students develop a global scholarly understanding.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- HUM-120 Self, Culture and Society Credits: 3 \*
- Language Elective- 101 Global Language-1 Credits: 3 \*
   Example: FRE-101 Elementary French I
- Language Elective- 101 Global Language-2 Credits: 3 \* Example: SPN-101 Elementary Spanish I
- ENG-111 College Writing | Credits: 3 \*
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective. Choose a course from the General Education Creative Work Menu.

Total Credits: 15

# **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year
- Heritage speakers should not take an elementary course. Consult with the department for appropriate placement.
- For some languages, the first part of a sequence is offered in the Fall and the second in the Spring.
- General Education requirements Creative Work satisfied by program.

- Language Elective- 102 Global Language-1 Credits: 3 \*
  Any Language 102
- Language Elective- 102 Global Language-2 Credits: 3 \*
  Any Language 102
- ENG-112 College Writing II Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4

This course meets the General Education requirement for Quantitative Problem Solving Choose one MAT course from Quantitative Problem Solving Menu.

GenEd-CCC Community & Cultural Contexts Credits: 3
 This course meets the General Education requirement for Community & Cultural Contexts Choose one: GEO-101; REL-111; SOC-101; PSC-101; PSC-220.

Total Credits: 15-16

### **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

#### Semester 3

• Language Elective- 201 Global Language Credits: 3 \*

Example: SPN-201 Intermediate Spanish I or

- SPN-280 Spanish for Heritage Speakers Credits: 3 \*
- LIT-211 Masterpieces of World Literature I Credits: 3 \*
- Elective- History Elective Credit: 3 \*

Choose from HIS-102 or HIS-103 or HIS-111 or HIS-112

• Elective- Behavioral Science Elective Credits: 3

Choose one: GEO-101; REL-111; SOC-101; PSC-101; PSC-220

GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu

Total Credits: 16

# **Semester 3 Advising Note**

- The Department has only Spanish and French at the intermediate level.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer
- Complete a pre-graduation check with an advisor in LifeMap

- Language Elective- 202 Global Language Credits: 3
   Example: SPN-202 Intermediate Spanish II
- LIT-212 Masterpieces of World Literature II Credits: 3
- Elective- Mathematics Elective Credits: 3 or 4 Choose one college level MAT course
- Elective- History Elective Credits: 3 \*
  Choose from HIS-102 or HIS-103 or HIS-111 or HIS-112
- Elective- Lab Science Elective Credits: 4
  Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course.

Total Credits: 16-17

# **Semester 4 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- In one global language: Demonstrate intermediate listening and reading skills, basic oral skills, and express their thoughts and ideas in writing in an uncomplicated manner.
- In another global language: Demonstrate basic listening and reading skills, beginner oral skills, and express basic ideas
  in writing in an uncomplicated matter.
- Have a basic understanding of the world's literatures.
- Be culturally aware in two cultures.

#### Career Outlook

The Global Languages concentration prepares students to transfer to four-year colleges or universities with a major in language, cultural studies, or literature. The interdisciplinary approach allows students to consider a career in international relations, law, sociology, anthropology, history, education, or in any other discipline within Social Sciences and Humanities. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts. Graduates of this concentration often qualify for careers that require bilingual skills.

### **Transfer Options**

#### MassTransfer A2B Link

- Bridgewater State University
- Fitchburg State University

- Massachusetts College of Liberal Arts
- Salem State University
- Worcester State University
- University of Massachusetts Amherst
- University of Massachusetts Boston
- University of Massachusetts Lowell

### Health Science, A.A.

This program is designed for students who intend to apply for a health program at BHCC such Nursing, Medical Imaging, Surgical Technology, Medical Laboratory Tech, or Medical Laboratory Assistant. This program contains the science prerequisite courses required to apply for a health program at BHCC as well as satisfying all General Education requirements. The required application prerequisite courses will be completed in the first two semesters of this program. Students may then switch out of this program once they are admitted to a health program or they may continue and complete the entire program to receive their Associate in Arts Degree in Health Science. Students completing this associate degree will also be qualified to apply for baccalaureate level health programs such as nursing or nutrition science. This program also satisfies Mass Transfer requirements if a student decides to transfer into a program outside of health.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing | Credits: 3 \*
- BIO-108 Human Biology/Lab Credits: 4 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4 \*
   This course meets the General Education requirement for Quantitative Problem Solving Choose one course from Quantitative Problem Solving Menu (see Semester Advising Notes)
- HUM-120 Self, Culture and Society Credits: 3

Total Credits: 13-14

### **Semester 1 Advising Note**

- It is advised that students do not take General Biology I (BIO-195) to satisfy the prerequisite for BIO-203. BIO-195 is a more advanced biology designed for biology and biotechnology majors. BIO-195 also does not satisfy the General Education "Scientific Reasoning" requirement for AA degrees.
- If students cannot take MAT-194, MAT-181, or a General Education Menu math course during their first semester because of their math placement then they should enroll in the appropriate developmental math course during their first semester. This may delay the completion of this AA program.
- This program has five tracks to prepare students for applying to one of BHCC's health programs: 1) Nursing; 2) Medical Laboratory Technician; 3) Sonography or Medical Radiography; 4) Surgical Technology; 5) Medical Laboratory Assistant. Please note that the health programs have a competitive application process and students must attend a program advising session before they can apply. Students should attend an advising session before or during their first semester. Certain courses in this program should be selected based on the specific allied health program the student desires to enter.

- Nursing: Students should enroll in PSY-101 during their first semester as a prerequisite course for PSY-213. Students should also enroll in any math course listed on the General Education Quantitative Problem Solving menu during their first semester. MAT-181 is recommended.
- Medical Laboratory Technician: Students should enroll in PSY-101 and MAT-181 during their first.
- General Sonography, Cardiac Sonography, and Medical Radiography: Students should enroll in SOC-101 during their first. Students should also enroll in either MAT-194 or MAT-181 during their first.
- Surgical Technology: Students should enroll in PSY-101 during their first semester. Students should also enroll in any math course listed on the General Education Quantitative Problem Solving menu during their first semester.
- Medical Laboratory Assistant: Students should enroll in BIO-108 their first semester.

- ENG-112 College Writing II Credits: 3 \*
- BIO-203 Anatomy/Physiology I & Lab Credits: 4 \*
- CHM-120 Principles of Inorganic Chemistry & Lab Credits: 4 \*
- PSY-101 Principles of Psychology Credits: 3 or
- SOC-101 Principles of Sociology Credits: 3

Total Credits: 14

### **Semester 2 Advising Note**

- After completing their second semester, students will have the prerequisite courses required to apply to a BHCC health program. Please note that health programs have a competitive application process and students must attend a mandatory advising session before they can apply.
- Students should consider taking one or two courses during the summer session to lighten their course load in semesters
  three and four.

#### Semester 3

- BIO-204 Anatomy/Physiology II & Lab Credits: 4 \*
- CHM-121 Principles of Organic & Chemistry W/Lab Credits: 4 \*
- Elective- Literature Elective Credits: 3

Choose one LIT course

• Elective- Behavioral Science Elective Credits: 3

Choose one PSY or SOC course

• Elective-Elective Credits: 3-4

Choose any course

Total Credits: 17-18

### **Semester 3 Advising Note**

- General Physics I (PHY-201) is an option of the Sonography programs to replace MIG-111 and can be taken as a
  general elective in this program as long as the student has completed MAT-197.
- It is recommended that pre-Nursing students take PSY-213 for the Behavioral Science Elective.
- For a general elective, it is highly recommended that a language course be taken.

- BIO-205 Microbiology & Lab Credits: 4 \*
- BIO-115 Nutrition Science & Lab Credits: 4
- Elective- Social Science Elective Credits: 3
  Choose one HIS or PSC course
- Elective- Literature, Humanities or Fine Arts Elective Credits: 3
   Any Literature, Humanities or Fine Arts course
- Elective- Elective Credits: 3-4
  Choose one course

Total Credits: 17-18

# **Semester 4 Advising Note**

- Students should consider taking one or two courses during the summer sessions to lighten their course load in semesters
  three and four.
- Social Science, Humanities, and Fine Arts Electives are not required in the curriculum of any health programs at BHCC. These electives only need to be taken if a student is not accepted into a health program and they wish to complete this AA degree for transfer. It is also highly recommended that a language course be taken if a general elective is needed.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Express scientific ideas and results of investigations with appropriately written reports.
- Apply mathematical tools to analyze scientific data.
- Explain the major concepts of cell structure, function and cellular processes that are key to life.
- Make connections between human anatomy, physiology, and disease.
- Relate biological and chemical concepts to the development and use of drugs and medical procedures to treat medical conditions.
- Use currently accepted biological, chemical, and physical concepts to investigate human issues concerning health and wellness.
- Use laboratory technology, equipment, and techniques to investigate medically related problems critically and safely using a scientific approach.

#### Career Outlook

Although there are limited employment opportunities with only an Associate in Arts in Health Science, this program will prepare students to apply for admission to various Associate in Science health related programs or to transfer into a four-year health related program.

### **History Concentration, A.A.**

Historians investigate the past to envision a better future. Majoring in history offers specialized techniques for analysis, research, and imagination that are distinctive to the study of history and transferable to many career fields. As historians, students interpret artifacts and documents; collect and preserve vital knowledge of community members; and reveal previously-obscured realities of people in the past. Students of history develop traditional and innovative communication skills to tell the stories of previous generations, in classrooms, in neighborhoods, and in contemporary media. Critiquing errors, silences, and lies embedded in public memory, students participate in repairing historical wrongs.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- HUM-120 Self, Culture and Society Credits: 3 \* or
- Elective- Elective Credits: 3 \*
- ENG-111 College Writing I Credits: 3
- HIS-112 Modern World History Credits: 3 \*
- Elective- Global Language Elective Credits: 3
  Any 101-level language course
- MAT-181 Statistics | Credits: 3

Total Credits: 15

### **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Students who are bilingual are encouraged to work with the Office of Prior Learning Assessment to have their language skills recognized for college credit to fulfill the required language courses.

#### Semester 2

- HIS-121 Found. of Historical Thinking & Analysis Credits: 3 \*
- ENG-112 College Writing II Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4
   This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu
- HIS-151 US History: Colonization through the Civil War Credits: 3
  or
- HIS-152 US History: Reconstruction to Present Credits: 3
- Elective- Global Language Elective Credits: 3
  Any 102-level language course

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# **Semester 2 Advising Note**

- Students who are progressing toward their degree with fewer than 15 credits per semester are encouraged to prioritize HIS-121, HIS-151 or HIS-152, and ENG-112.
- Begin exploring transfer options: attend a transfer workshop and the Transfer Fair.
- Meet with an advisor to begin transfer and career planning activities.

#### Semester 3

- HIS-231 African American History Credits: 3 \* or
- HIS-117 Women in U.S. History Credits: 3 \* or
- Other specialized department-approved course Credits: 3 \*
- Elective- 100-level History course Credits: 3
- Elective- Aligned Interdisciplinary Course Credits: 3
  Any ECO, GEO, PHL, PSC, REL course
- Elective- Natural or Physical Science Elective Credits: 4
- Elective- Humanities and Fine Arts Elective Credits: 3

Total Credits: 16

### **Semester 3 Advising Note**

- Electives should be based on the career goals and interests of the student. Consider courses in Economics,
   Environmental Science, Literature, Languages, Philosophy, Political Science, Religious Studies, and/or Sociology.
- Students are encouraged to consider the Honors Seminar and/or internship experiences aligned with their goals to fulfill
  their electives.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap
- See an advisor about World Studies emphasis certification

#### Semester 4

- Elective- 200-level History course Credits: 3
- Elective- Elective Credits: 3
- Elective- Elective Credits: 3
- Elective- Elective Credits: 3
- Elective-Elective Credits: 3

**Total Credits: 15** 

### **Semester 4 Advising Note**

- Students who changed their major to History after one or more semesters in another degree program will typically
  apply those courses to fulfill the electives identified here.
- The many free electives in the program are intended to provide flexibility for students who previously were working toward a different degree program (e.g. Business, Biology, Criminal Justice, IT, Nursing, Sociology), so that they could change their major to History without delaying graduation. Students who reach the 4 semester with free electives available are strongly encouraged to select 200-level courses in history, languages, or in other fields relevant to their goals and interests; consult with department advisors to learn about special topics courses, internships, and other possibilities.
- See an advisor about World Studies emphasis certification.
- Apply for graduation.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Interpret historical artifacts and documents (primary sources) using various specialized techniques
- Develop historical explanations at multiple levels, from long-range global structures to microcosmic personal experiences
- Demonstrate distinctive ways of thinking in the study of history, including narrative, causal explanation, and historical imagination
- Analyze historians' works in various media, including essays, books, documentary films, and podcasts
- Contribute to preserving living history (e.g. archiving oral histories of community members)
- Critically analyze how social power, cultural context, and historical position influence the construction of historical parratives
- Reflect on their ethical responsibilities &community accountability as a historian
- Communicate with a range of audiences in traditional and innovative ways
- Produce signature research contributing to historical knowledge

#### Career Outlook

- Graduates of this concentration may qualify to transfer to four-year colleges or universities as juniors. The
  concentration is excellent preparation for careers in law, teaching, government, museums, or similar public service
  fields.
- A bachelor's degree is the minimum requirement for entry into many of these fields.
- Graduate work may be necessary, as well.

### **Hospitality Management, A.S.**

The mission of the BHCC Hospitality Program is to provide a comprehensive understanding of hotel and restaurant operations focusing on managing in a customer-service driven environment and emphasizing communication skills and the use of technology.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

HRT-105 Hospitality Seminar Credits: 3 \*

- HRT-121 Business in Hospitality Credits: 3 \*
- ENG-111 College Writing I Credits: 3
- MAT-181 Statistics | Credits: 3
- MAT-171 Finite Mathematics Credits: 3
- MAT-172 Contemporary Math I Credits: 3
- PSY-101 Principles of Psychology Credits: 3
- SOC-101 Principles of Sociology Credits: 3

# **Semester 1 Advising Notes**

- Quantitative Problem Solving and General Education Elective General Education requirements satisfied by Program.
- Consult with an Advisor or Hospitality Department member early in your academic career.

#### Semester 2

- HRT-112 Food and Beverage Management Credits: 3 \*
- HRT-131 Front Office Operations Credits: 3 \*
- ENG-112 College Writing II Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning.

Choose one course from Scientific Reasoning Menu.

Recommended: BIO-115 Nutrition Science & Lab

Total Credits: 13

#### Summer Semester

- HRT-210 Hotel/Rest/Tour Field Exp Internship Credits: 3 or
- INT-299H Learn and Earn Hospitality Internship Credits: 3

**Total Credits: 3** 

- HRT-231 Advanced Lodging Operations Credits: 3 \*
- HRT-117 Hospitality Law Credits: 3 \*
- BUS-207 Professional Communication Credits: 3
- ACC-101 Principles of Accounting I Credits: 3

GenEd-CCC Community and Cultural Contexts Credits: 3

This course meets the General Education requirement for Community and Cultural Contexts.

Choose one course from the Community and Cultural Contexts Menu.

Recommended: ECO-201 Macroeconomics or GEO-101 World Regional Geography

**Total Credits: 15** 

### Semester 4

- HRT-224 Hospitality Finance Credits: 3 \*
- HRT-109 Hospitality Sales and Marketing Credits: 3 \*
- HRT-134 Culinary Operations Credits: 4
- HRT-119 Meeting and Event Management Credits: 3
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work.

Choose one course from Creative Work Menu.

Total Credits: 16

### Upon Completion of This Concentration Graduates Will Be Able To:

- Explore career opportunities, gain knowledge, and apply skills through experiential learning and internship.
- Examine foundations of management, leadership, and the global perspective of the hospitality field.
- Analyze, understand, and demonstrate hospitality operations with a focus on sustainability, while gaining the skills needed to provide quality goods and exceptional services.
- Earn appropriate industry and technology certifications including hospitality computer applications required for employment in the hospitality industry.
- Appreciate and foster the role of diversity in the hospitality industry.
- Understand and apply effective legal and ethical strategies impacting the operation of hospitality businesses.
- Collect and analyze data, create reports, explain the financial implications of managerial decision-making.
- Communicate effectively and work collaboratively using written, oral, and nonverbal techniques including the use of technology in professional communications.

#### Career Outlook

Qualified candidates in this field are in high demand with rising wages and strong opportunities for growth. Students completing the degree could expect to enter the workforce in a hotel as a Front Desk Agent, Account Manager or Front of House Supervisor or in a restaurant as a Server or Dining Room Supervisor. Growth potential will lead to management positions.

### **Human Services, A.S.**

The Human Services program is designed to prepare students to be assistants and paraprofessionals in careers that direct the delivery of services to community members. To this end, the program: provides knowledge, training and skill development for persons interested in working in the area of social services; and serves the community as an information and knowledge-base in the area of social service.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

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- ENG-111 College Writing | Credits: 3 \*
- HSV-101 Intro Human Services W/Field Practice Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4 \*
   This course meets the General Education requirement for Quantitative Problem Solving Choose a course from the Quantitative Problem Solving Menu
- HUM-120 Self, Culture and Society Credits: 3
- AHE-104 Understd Hum Beh for Health Care Prof, Behavior for the Health Care Professional Credits: 3
- PSY-101 Principles of Psychology Credits: 3 \*

Total Credits: 15-16

# **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- LCS and/or AHE-104 must be taken in first semester and is only allowed for those students still with freshman status
  and little or no college experience; if student is transferring or has prior college experience student should take a career
  elective in lieu of freshman seminar/LCS at later semester. AHE-104 is recommended for those students interested in
  community health work in social service agency. Those with prior college experience should take career elective in lieu
  of LCS or AHE-104 PSY-233 or PSY-227.
- CORI/SORI/fingerprints after acceptance to program, before practicum course can be completed are required of all students in program. Those with concerns about this requirement should see the College's CORI officer before beginning the program.

#### Semester 2

- ENG-112 College Writing II Credits: 3 \*
- PSY-215 Counseling Credits: 3 \*
- HSV-112 Addiction Credits: 3
- PSY-224 Adolescent & Adult Development Credits: 3 \*
- HSV-216 Pre-Practicum Prep With Field Experience Credits: 3 \*

Total Credits: 15

### **Semester 2 Advising Note**

• HSV-216 requires a 50-hour pre-practicum experience. Fulfillment of the pre-practicum is required prior to enrollment in HSV-220. A grade of B or better is required in this course to allow for enrollment in further practicum coursework in the program.

- ECE-103 Child Growth and Development Credits: 3 \*
- HSV-214 Ethics in Human Services Credits: 3
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work.

Choose a course from the Creative Work Menu

- HSV-220 Practicum in Human Services I Credits: 3 \*
- HSV-218 Case Management in Human Services Credits: 3

Total Credits: 15

### Semester 4

GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective. Students may choose a course from: GEO-101, PSC-101 or REL-111

- HSV-217 Current Issues in Human Services Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning.

Choose one course from Scientific Reasoning

- HSV-221 Practicum in Human Services II Credits: 3 \*
- Elective Career Elective Credits: 3 \*

Career Elective Options:

PSY-233 Intro to Psychiatric Rehabilitation, PSY-227 Abnormal Psychology, PSY-107 Group Dynamics, PSY-141 Social Aspects of Aging, SOC-206 Juvenile Delinquency, SOC-227 The Sociology of Race and Ethnicity, INT-101 Introduction to Yoga Studies, HSV-215 Introduction to Substance Abuse Counseling

**Total Credits: 16** 

### **Semester 4 Advising Note**

• Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Use formal and informal assessment practices to respond to the needs, desires, and interests of participants receiving
  information and support from a Human Service organization, enhancing the persons' ability to lead a self determining
  life.
- Communicate effectively and demonstrate skills needed to establish collaborative relationships with participants receiving services.
- Demonstrate knowledge about formal and informal supports available, as well as diverse challenges facing participants, using advocacy strategies to overcome these challenges by mobilizing resources to reach participant goals.
- Demonstrate knowledge and skill in handling crisis prevention, intervention, and resolution techniques with detailed documentation of the work in a human services agency.
- Understand the mission and practices of human services organizations, fully participating in the life of the agency as a
  professional and be able to identify areas of self improvement and professional development needed for future goal
  attainment.

#### Career Outlook

Graduates of this program qualify for careers in social welfare, mental health, community development, public administration, youth work, work with elderly, family counseling and social service agencies.

### Information Technology Transfer Option, A.S.

This program is designed to meet the needs of our Information Technology students who wish to pursue a Baccalaureate Degree. This program will allow our students to move seamlessly to colleges offering Baccalaureate Degrees in Information Technology. This program provides a core foundation in the major pillars of information technology and will allow a student to concentrate in one of the areas before transferring.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CIT-113 Information Technology Problem Solving Credits: 3 \* or
- CIT-110 Applications/Concepts Credits: 3 \*
- ENG-111 College Writing I Credits: 3
- MAT-181 Statistics | Credits: 3
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from the Community and Cultural Context Menu
- GenEd-E General Education Elective Credits: 3
   This course meets the General Education requirement for General Education Elective.
   Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

Total Credits: 15

# **Semester 1 Advising Note**

• New degree-seeking student enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.

#### Semester 2

- CSC-125 Python Programming Credits: 3 \*
- CMT-111 HTML5 Credits: 3
- CIT-162 CISCO Networking | Credits: 3 \*
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

• MAT-194 College Algebra for STEM Credits: 4

# **Semester 2 Advising Note**

- Begin exploring transfer options: attend a transfer workshop and the College transfer fair; follow-up with an advisor.
- Meet with an advisor to begin career planning activities.

#### Semester 3

- CSC-225 Advanced Python Programming Credits: 3 \*
- CSC-236 SQL Programming Credits: 3
- CIT-268 Operating Systems Credits: 3 \* or
- CIT-270 Linux Administration/Lab Credits: 4 \*
- Elective- Elective or CIT Elective Credits: 3-4

Recommended Electives:

CIT-118, CIT-121, CIT-219, CIT-221, CIT-223, CSC-240, CIT-264, CIT-282, CRJ-103, CRJ-245, CRJ-202, Any other programming course

• Elective- Elective or CIT Elective Credits: 3-4

Recommended Electives:

CIT-118, CIT-121, CIT-219, CIT-221, CIT-223, CSC-240, CIT-264, CIT-282, CRJ-103, CRJ-245, CRJ-202, Any other programming course

Total Credits: 15-18

### **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

• Elective- Elective or CIT Elective Credits: 3-4

Recommended Electives:

CIT-118, CIT-121, CIT-219, CIT-221, CIT-223, CSC-240, CIT-264, CIT-282, CRJ-103, CRJ-245, CRJ-202, Any other programming course

• Elective- Elective or CIT Elective Credits: 3-4

Recommended Electives:

CIT-118, CIT-121, CIT-219, CIT-221, CIT-223, CSC-240, CIT-264, CIT-282, CRJ-103, CRJ-245, CRJ-202, Any other programming course

- MAT-231 Calculus for Management Science Credits: 4
- ENG-112 College Writing II Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning

Choose one course from the Scientific Reasoning Menu

Total Credits: 17-19

# **Semester 4 Advising Note**

- Students entering UMASS Boston through the College of Management may choose to complete the Calculus for Management Sciences courses at UMB and therefore should take an elective at BHCC.
- Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate an understanding of the major pillars of Information Technology.
- Demonstrate the ability to solve technical programs and to apply critical thinking principles to Information Technology issues.
- Demonstrate an upper level understanding of networking, programming, database, or other technology fields.

#### Career Outlook

Graduates of this program can transfer to bachelor's programs at four-year colleges.

### **Transfer Options**

#### MassTransfer A2B Link

• University of Massachusetts Boston

### **Integrated Media Design Option, A.S.**

The Associate in Science Degree in Integrated Media Design is a multidisciplinary program intended to lay the foundations for entry-level jobs that require cross-disciplinary skills in video, visual design, web/interactive design, storytelling, and social media strategy, and for transfer to four-year design and media programs. Working through the program, students will produce a portfolio of work that demonstrates their preparedness in industry-standard technical skills, critical-thinking skills, and visual and audio content creation.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- VMA-100 Cultures and Careers in Visual Art Credits: 3 \* Satisfies Learning Community Seminar requirement
- VMA-132 Typography I, Form, Style, & Hierarchy Credits: 3 \*
- VMA-104 Drawing from Observation Credits: 3 \*
- VMA-261 Digital Photography Techniques Credits: 3
- ENG-111 College Writing I Credits: 3

**Total Credits: 15** 

# **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Consider taking Gen. Ed. Courses during the summer.
- Take VMA-100 and VMA-132 as soon as possible.
- VMA majors cannot substitute VMA-161 for VMA-261

#### Semester 2

- ENG-112 College Writing II Credits: 3
- VMA-133 Typography II: Layout, Typesetting, and Systems Credits: 3 \*
- VMA-129 Visual Design with HTML & CSS Credits: 3 \*
- VMA-106 Digital Imaging for Artists and Designers Credits: 3
- VMA-102 Visual Design: Composition and Color Credits: 3

**Total Credits: 15** 

# **Semester 2 Advising Note**

- Students, please consult with a VMA faculty member before registering.
- Consider taking Gen. Ed. Courses during the summer.
- VMA majors should not substitute VMA-105 for VMA-106

#### Semester 3

- VMA-262 Video Techniques Lab Credits: 3
- VMA-263 Video Concepts Lab Credits: 3
- VMA-232 Visual Design Lab I Credits: 3
- VMA-275 Interactive Design I Credits: 3
   Fall only
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective. Choose a course from the General Education Scientific Reasoning, Creative Work or Elective Menus.

- VMA-110 Audio for Media Credits: 3
- VMA-111 Introduction to Mass Media Credits: 3

**Total Credits: 18** 

# **Semester 3 Advising Note**

• Students, please consult with a VMA faculty member before registering.

• Consider taking Gen. Ed. Courses during the summer.

#### Semester 4

- VMA-140 Media in Motion Credits: 3 \*
- VMA-130 Social Media Strategy Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3
   This course meets the General Education requirement for Quantitative Problem Solving Choose one course from Quantitative Problem Solving Menu. Take in summer if possible.
- VMA-115 The Moving Image Credits: 3 \*
  - GenEd-SR Scientific Reasoning Credits: 4

    This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning menu.

Total Credits: 16

# **Semester 4 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

Upon the successful completion of the requirements of this option, graduates will be able to:

- Approach multimedia design as a responsive process of problem identification, ideation, creation and iteration.
- Apply basic skills in video, still images, visual design, typography, web/interactive design, storytelling and social
  media strategy to produce a portfolio of work that demonstrates their preparedness in industry-standard technical and
  critical-thinking skills.
- Demonstrate proficiency in software applications for image editing, and layout and content creation.
- Produce content using industry standard procedures for publication of content on electronic devices, websites and print.
- Use social media platforms for social media interaction and public relations and marketing strategy.
- Work within a team.
- Plan and execute projects to meet deadlines and design objectives.
- Practice effective communication and presentation skills necessary to engage in professional practice.
- Engage in creative and analytical discourse in order to communicate concepts to colleagues and clients.
- Produce portfolio content that is suitable for applying to four-year design programs, internships, and entry-level employment.
- Cultivate habits of independent learning and creativity

#### Career Outlook

The Integrated Media Design program addresses current demands for cross-disciplinary skills in the contemporary job market. Visual designers, interactive designers, social media specialists and many other professions require people to understand various aspects of content creation in video, web, and visual design, and social media strategy. People with a multimedia portfolio find work in advertising agencies, visual design firms, web design companies, publishing companies, game design companies, preand post-production houses, public relations firms, colleges, and many kinds of private, public, and non-profit companies. Examples of occupations that require cross-disciplinary skills are:

- The visual designer who needs to know web content management, social media, video, and motion graphics.
- The promotions manager who needs to know web architecture, video production and editing, social media strategy, and storytelling skills.
- The communications specialist, or journalist, who needs photography, video, sound and social media strategy
- The videographer who needs to know social media, typography and web content management.
- Interactive designer who needs to know animation, storyboarding, and content management.

Further, more concentrated study can lead to jobs such as animator, motion graphic designer, art director, advertising account manager, public relations specialist, communications specialist, journalist, multimedia designer, multimedia production artist, multimedia developer, illustrator, videographer, filmmaker, film video editor, sound designer, 3-D artist, web designer, multimedia coordinator, technical artist, multimedia developer, experience designer, game designer, storyboard artist, interface designer, virtual reality specialist. art director/creative director, web designer, broadcast designer, software application designer, interface designer, information designer, product designer, environmental designer, broadcast design, educator, instructional designer, artist, and special effects designer.

### **Transfer Options**

#### MassTransfer A2B Link

University of Massachusetts Lowell

### Liberal Arts, A.A.

This concentration prepares students who have not yet chosen a major field of study to transfer to four-year colleges or universities. The college encourages students to take electives in disciplines in which they may major at a four-year institution. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus.

For current information on eligible programs, see Transfer Options below.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- HUM-120 Self, Culture and Society Credits: 3 \*
- ENG-111 College Writing | Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4 \*
   This course meets the General Education requirement for Quantitative Problem Solving

Choose one MAT course from Quantitative Problem Solving Menu.

- GenEd-CCC Community & Cultural Contexts Credits: 3 \*
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from Community and Cultural Contexts Menu
- GenEd-CW Creative Work Credits: 3 \*
  This course meets the General Education requirement for Creative Work
  Choose one course from the Creative Work Menu

Total Credits: 15-16

# **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.

- ENG-112 College Writing II Credits: 3 \*
- Elective- Elective Credits: 3

Choose one college-level course.

The first semester of a two-semester global language sequence is recommended.

• Elective- Humanities Elective Credits: 3

Choose one course from the Humanities Electives menu.

• Elective- Elective Credits: 3

Choose one college-level course

GenEd-SR Scientific Reasoning Credits: 4 \*

This course meets the General Education requirement for Scientific Reasoning

Choose one course from Scientific Reasoning Menu

**Total Credits: 16** 

### **Semester 2 Advising Note**

- A two-semester language sequence is recommended for two of the electives.
- Students should consult their intended transfer institution to determine appropriate electives for this program.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair
- Meet with an advisor to begin career planning activities.

#### Semester 3

• Elective- Literature Elective Credits: 3

Choose one LIT course

• Elective- Behavioral Science Elective Credits: 3

Choose one PSY or SOC course

• Elective- Social Science Elective Credits: 3

Choose one course from Social Science Elective Menu

• Elective- Lab Science Elective Credits: 3-4

Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course

• Elective Credits: 3

Choose one college-level course.

The second semester of a two-semester global language sequence is recommended.

Total Credits: 15-16

### **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

- Elective- Elective Credits: 3
  Choose one college-level course.
- Elective-Elective Credits: 3
  Choose one college-level course.
- Elective- Elective Credits: 3
  Choose one college-level course.
- Elective- Elective Credits: 3
  Choose one college-level course.
- Elective- Elective Credits: 3
  Choose one college-level course.

**Total Credits: 15** 

# **Semester 4 Advising Note**

- Students should consult their intended transfer institution to determine appropriate electives for this program.
- Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Discuss the interaction of history, culture, literature, economics, and science as studied within a broad liberal arts curriculum
- Develop skills as critical and creative thinkers, readers, and writers
- Construct ideas and arguments with intention, listen actively, and facilitate inclusive dialogue
- Discover interests, skills and values that may inform course selection, career choice and pathway to degree completion
- Demonstrate the ability to navigate a variety of digital tools that facilitate evaluation of information, creation of knowledge and expression of self
- Apply classroom learning to local and global challenges

#### Career Outlook

Graduates of this concentration qualify for a variety of careers depending upon the chosen major. A bachelor's degree is the usual minimum requirement for entry into most fields. Graduate work may be necessary, as well.

### **Transfer Options**

#### **Transfer Advising Guides**

- Lesley University
- Suffolk University

#### MassTransfer A2B Map

- Bridgewater State University
- Fitchburg State University
- Framingham State University
- Massachusetts College of Liberal Arts
- Salem State University
- Westfield State University
- Worcester State University
- University of Massachusetts Amherst
- University of Massachusetts Dartmouth

#### MassTransfer A2B Link

- University of Massachusetts Boston
- University of Massachusetts Lowell

### **Management Option, A.S.**

This program prepares students for employment and for transfer to four-year colleges and universities. The College has transfer articulation agreements with many of the four-year colleges and universities in the area. The College encourages students to meet with their advisors for additional information. This program makes a concentrated effort to demonstrate how the subject matter relates to the cultures of our diversified student population. The program places emphasis on student participation and creates an interactive forum in which to learn. This option prepares students with a solid foundation of managerial principles and concepts that are standard practice in business. The upper-level management courses focus on the case study approach, allowing students to analyze and solve realistic management problems. The college has transfer articulation agreements with many of the four-year colleges and universities in the area, allowing students to transfer in this option. Students should speak with the Department chair for specific transfer information.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing | Credits: 3 \*
- ACC-101 Principles of Accounting I Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3
- MAN-105 Principles of Marketing Credits: 3
- BUS-101 Introduction to Business Credits: 3 \*

Total Credits: 15

### **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Explore BHCC Student Activities offered i.e., BHCC's Entrepreneurship Club.
- Create and follow education plan.

- ENG-112 College Writing II Credits: 3
- ACC-102 Principles of Accounting II Credits: 3
- MAN-111 Principles of Management Credits: 3
- ECO-201 Macroeconomics Credits: 3
- ECO-202 Microeconomics Credits: 3
  - **GenEd-QPS** Quantitative Problem Solving **Credits: 3-4**\*

    This course meets the General Education requirement for Quantitative Problem Solving Choose one MAT course from Quantitative Problem Solving Menu.

Total Credits: 15-16

# **Semester 2 Advising Note**

- Complete a volunteer activity in an area of interest.
- Learn about Alpha Beta Gamma (Business Honor Society) and Alpha Kappa Mu (General Honor Society).
- Inquire about the Commonwealth Honors Program.
- Meet with an advisor to begin career planning activities
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

#### Semester 3

• GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu

- MAN-112 Organizational Behavior/Design Credits: 3
- BUS-201 Business Law I Credits: 3
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

• Elective- Career Elective Credits: 3

Choose one course from ACC or BUS or FIN or MAN

Total Credits: 16

### **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer
- Develop a financial plan for continued education and life after graduation.
- Complete a pre-graduation check with an advisor in LifeMap

- FIN-106 Introduction to Corporate Finance Credits: 3
- BUS-207 Professional Communication Credits: 3
- MAN-201 Management Seminar Credits: 3 or
- INT-299B Learn and Earn Business Internship Credits: 3 or
- MAN-299 Business Internship Credits: 3
- Elective- Career Elective Credits: 3
  Choose one course from ACC or BUS or FIN or MAN
- Elective- Career Elective Credits: 3
  Choose one course from ACC, BUS, FIN, or MAN

# **Semester 4 Advising Note**

- The Management Seminar in this program is a Capstone course and should be taken in the student's final semester.
- Gather recommendation letters from faculty and staff.
- Apply for Graduation.
- Finalize your resume and upload it to your ePortfolio and LinkedIn website.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Apply the concepts needed to direct, plan, organize, and control the operations of a business.
- Demonstrate the necessary leadership skills to mobilize and motivate employees to accomplish business goals.
- Employ effective decision-making techniques in the workplace.
- Utilize human relations techniques when working with individuals or groups to help meet business objectives and resolve conflicts.

#### Career Outlook

This option qualifies graduates to enter the workforce as productive entry-level managers.

### **Transfer Options**

#### **Transfer Advising Guides**

- Boston College Woods College of Advancing Studies
- Northeastern CPS B.S. Management
- Northeastern CPS B.S. Healthcare Management
- Northeastern CPS B.S. Project Management
- Suffolk University B.S. Management

### **Mathematics Concentration, A.A.**

This concentration prepares students to transfer to four-year colleges or universities to seek bachelors' degrees in mathematics. After transferring, students study to become more proficient in areas such as abstract algebra, complex variables, vector calculus, number theory and partial differential equations. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, see Transfer Options below.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- ENG-111 College Writing | Credits: 3
- MAT-281 Calculus I Credits: 4 \*
- CSC-120 Intro to Comp Sci & Object Oriented Prog Credits: 4
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from the Community & Cultural Contexts Menu

**Total Credits: 14** 

## **Semester 1 Advising Note**

- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by program.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- This map assumes that students have completed MAT-197 or tested into MAT-281.

## Semester 2

- ENG-112 College Writing II Credits: 3
- MAT-282 Calculus II Credits: 4 \*
- MAT-291 Linear Algebra Credits: 4
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from the Creative Work Menu

• Elective- Behavioral Science Elective Credits: 3 Choose any PSY or SOC course

**Total Credits: 17** 

# **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

### Semester 3

- MAT-283 Calculus III Credits: 4 \*
- PHY-251 Physics I/Lab Credits: 4 \*
- CSC-237 C++ Programming Credits: 4
- CSC-239 JAVA Programming Credits: 4
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose one course from Creative Work Menu

**Total Credits: 15** 

## **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

### Semester 4

- MAT-285 Ordinary Differential Equations Credits: 4 \*
- Elective- Social Science Elective Credits: 3
  Choose one course from the Social Science Elective menu
- PHY-252 Physics II/Lab Credits: 4 \*
- Elective- Humanities Elective Credits: 3
  Choose one course from the Humanities Elective menu

Total Credits: 14

# **Semester 4 Advising Note**

Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Solve quantitative problems using critical thinking skills and a variety of problem-solving strategies, incorporating technology when suitable.
- Develop complete logical arguments from hypothesis to conclusion, using appropriate mathematical language and notation.
- Interpret and solve problems relevant to other disciplines by applying analytical approaches used to solve abstract problems.
- Construct new mathematical knowledge through independent and collaborative work.

### Career Outlook

Graduates of this concentration should transfer to a four-year college or university, as most entry-level employment opportunities in industry require a minimum of a bachelor's degree. Professional positions in education and research fields usually require a minimum of a master's degree.

## Transfer Options

#### MassTransfer A2B Map

- Fitchburg State University
- Framingham State University
- Westfield State University
- University of Massachusetts Amherst
- University of Massachusetts Boston
- University of Massachusetts Dartmouth

#### MassTransfer A2B Link

- Bridgewater State University
- Massachusetts College of Liberal Arts

## Medical Imaging, A.S.

The Medical Imaging Program prepares students in four different Associate in Science Degree options:

Cardiac Sonography Option Full-time, A.S. - 24 months.

General Sonography Option Full-time, A.S. - 24 months.

Medical Radiography Option Full-time, A.S. - 21 months.

Medical Radiography Option Part-time, A.S. - 35 months.

# **Program accreditations are as follows:**

The Medical Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JCERT), 20 North Wacker Drive, Suite 2850, Chicago, IL 60606-3182, Phone: (312) 704-5300; Fax: (312) 704-5304, Email: mail@jrcert.org; URL: www.jrcert.org.

The program prepares students for entry-level positions in the respective fields. Graduates are eligible to apply to take the American Registry of Radiologic Technologists Exam (Medical Radiography) or the American Registry of Diagnostic Medical Sonography Exam (Sonography Options). Medical Radiography graduates are also eligible to apply to take the Massachusetts State Licensing Examination. The program begins in the fall semester, and didactic and clinical education are carefully correlated to provide reinforcement in the clinical setting of skills learned in the classroom. Students in the program must earn a numerical course grade of 80 percent or better in all imaging courses, and a minimum grade of C in all general education courses. Failure to meet clinical objectives or failure to meet the academic standard in any course will result in withdrawal from the program. Students may apply for readmission to the program one time, on a space-available basis. Prior to re-application students must successfully repeat failed course(s).

Readmission is considered on a case-by-case basis. All medical imaging students must undergo a physical examination, complete the necessary immunization forms, including the three (3) dose Hepatitis B immunization series, have CPR certification, carry

malpractice and health insurance, and undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. The application process for the Medical Imaging Program is highly competitive and selective. Potential applicants are ranked based on prerequisite grades, Test of Essential Academic Skills V (TEAS V) results in Reading, Math and English/Language, as well as grades earned in any program required noncore courses. The highest ranked students for each A.S. Program will be invited to complete the TEAS Allied Health test. Standby lists will be generated annually for each A.S. Degree option. Stand- by students not obtaining a seat in that year will be required to reapply for future admission to any Medical Imaging Program.

## Prerequisites for all medical imaging options:

- Attend one MANDATORY information session within one year of application. (Refer to BHCC website for dates).
- Possess a high school diploma or GED certificate.

Books/Software

- Complete the following courses with a grade of C or better:
- One semester of any three credit College Algebra or statistics course.
- One semester of college level Anatomy/Physiology I/Lab (must be completed within five years of application unless currently working in related healthcare position).
- One semester of College Writing I (ENG-111) or equivalent with a grade of C or better.

## After all prerequisites are completed:

- Prospective students must apply online through Admissions during the enrollment period. Approximate application
  dates for the Fall program are mid-October mid-February for admission to the program for the next academic year.
  Check with Admissions for exact timelines.
- All applicants in each option must complete the TEAS Allied Health Test (TEAS). Job shadows will be recommended to accepted students and those on the stand-by list.
- Applicants must score at least 47.6% in reading, 46.7% in math and 47.6% in English/Language on the TEAS test to be considered for the Medical Imaging Programs.
- The Medical Imaging Admissions Committee will evaluate each candidate's record after completion of the TEAS V test. Admission to the Program will be based on overall ranking of applicants as described previously.
- Stand-by lists will be developed for each option annually. Stand-by students not offered a seat will need to reapply the next year for future consideration.
- Applicants not selected for admission to the Medical Imaging Program must meet with a member of the advising staff for guidance before reapplication.

# Tuition and fees for Medical Imaging students\*

Massachusetts Residents \$12,500.00 for 2 years

Non-Massachusetts Residents \$25,700.00 for 2 years

Uniforms \$200.00

Malpractice/Liability Insurance \$15.00 annually

\$900.00 annually

Medical Imaging Pin \$10.00

Certification Exam Fees \$200.00 Radiography

\$250.00 - \$500.00 Sonography

Note: A college physics course, with a grade of C or better, is required for accepted General Sonography or Cardiac Sonography students. For accepted Sonography students, MIG-111 Imaging Technology I (web-based), will be offered in the summer prior to the start of the program.

## **Medical Information Management Option, A.S.**

The Medical Information Management Option prepares students to work as professionals within a medical office environment. The option prepares students in basic medical terminology, which is then applied using MediSoft computer applications, a patient accounting software package. It also prepares students in third-party billing and coding. Students participate in an internship in a medical office setting during their last spring semester to reinforce skills learned.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- OIM-103 Microsoft Word I Credits: 3 \*
  - OIM-103 is a pre-requisite or co-requisite to the program, which should be taken prior to or during the first semester. An exemption exam is available through the Center for Self-Directed Learning (H-165) for students who type 40 words per minute or more with accuracy and know MS Word and document format.
- OIM-105 Skills for Administrative Success Credits: 3
- CIT-110 Applications/Concepts Credits: 3 \*
- NHP-180 Medical Terminology Credits: 3 \*
- OIM-132 Administrative Business Communication I Credits: 3

Total Credits: 15

## **Semester 1 Advising Note**

- Some courses in this program are offered as hybrid or Web (online).
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.

## Semester 2

- OIM-106 Records and Information Management Credits: 3 \*
- OIM-112 Microsoft Word II Credits: 3 \*
- ENG-111 College Writing I Credits: 3
- OIM-200 Introduction to Physicians' Billing Credits: 3 \*
- OIM-190 Medical Information Management Credits: 3 \*

<sup>\*</sup> Costs are estimated and subject to change. Please refer to Admissions and Enrollment Services for exact cost.

**Total Credits: 15** 

## **Semester 2 Advising Note**

Some courses in this program are offered as hybrid or Web (online). Web (online) courses do not meet with the
instructor - these courses involve extensive reading and independent work on assignments. For some courses, students
need to come to campus to take exams.

### Semester 3

- OIM-232 Administrative Business Communication II Credits: 3 \*
- CIT-118 Principles of Internet & Info Security Credits: 3
- ENG-112 College Writing II Credits: 3
- CIT-128 Database Design with MS Access Credits: 3 or
- CIT-250 Collaboration, Communication, and Integrating Credits: 3
- OIM-115 Administrative Technology and Procedures Credits: 3 \*

Total Credits: 15

## Semester 4

- OIM-299 Office and Information Management Internship Credits: 3 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3

This course meets the General Education requirement for Community & Cultural Contexts PSY 107 is recommended

• GenEd-QPS Quantitative Problem Solving Credits: 3-4

This course meets the General Education requirement for Quantitative Problem Solving Choose one MAT course from Quantitative Problem Solving Menu.

• GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose one course from Scientific Reasoning Menu

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

Total Credits: 19-20

## **Semester 4 Advising Note**

Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate proficiency in computer operations and software applications unique to a medical setting.
- Demonstrate proficiency in understanding and using medical terminology.
- Use the complete range of Microsoft applications effectively and efficiently.
- Demonstrate proficiency in medical office operations and communication media

### Career Outlook

Graduates of this option qualify for job opportunities in physicians' and dentists' offices, clinics, HMOs, community health agencies, long-term care facilities, and hospitals. Students also qualify for jobs in large corporations that provide on-site health services, engage in medical research, or produce medical products. Graduates qualify for entry-level positions such as medical receptionists, medical records management specialists, medical office managers, patient service representatives, and medical administrative assistants. Students also may qualify for at-home opportunities as medical transcriptionists.

## Medical Laboratory Technician, A.S.

This program prepares students through lectures, laboratory activities and hospital-based clinical experience to become Clinical/Medical Laboratory Technicians. Students will acquire the skills and knowledge essential for working in a medical laboratory and performing tests that aid in the diagnosis and treatment of disease and the maintenance of health.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

## Admission Requirements

- **Diploma** High School diploma or GED
- Session Attend Mandatory information session
- ENG-111 College Writing | Credits: 3 \*
- MAT-181 Statistics | Credits: 3 \*
- BIO-203 Anatomy/Physiology I & Lab Credits: 4

Credits for Anatomy and Physiology/Lab that were earned more than five (5) years prior to enrollment in the Medical Laboratory Technician program are not accepted. Must earn a grade of C or better.

- BIO-204 Anatomy/Physiology II & Lab Credits: 4 \*
  - Credits for Anatomy and Physiology/Lab that were earned more than five (5) years prior to enrollment in the Medical Laboratory Technician program are not accepted. Must earn a grade of C or better.
- BIO-205 Microbiology & Lab Credits: 4 \*
- CHM-120 Principles of Inorganic Chemistry & Lab Credits: 4 \*
   Must earn a grade of C or better
- CHM-121 Principles of Organic & Chemistry W/Lab Credits: 4 \*

**Total Credits: 26** 

# **Admission Requirements Advising Note**

• All Medical Laboratory Technician students are required to: undergo a physical examination, complete the necessary immunization forms, including a three (3) dose Hepatitis B immunization series; carry malpractice and health insurance

As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal
Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more
information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

## Semester 1 Fall

- MLT-101 Introduction to Medical Lab Science and Urinalysis Credits: 4 \*
   Must earn a grade of B- or better.
- MLT-213 Immunology & Serology Credits: 4 \* Must earn a grade of B- or better.
- ENG-112 College Writing II Credits: 3
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

**Total Credits: 14** 

# **Semester 1 Fall Advising Note**

General Education Requirements Creative Work and Scientific Reasoning satisfied by program.

## Semester 2 Spring

- MLT-212 Medical Microbiology & Lab Credits: 4 \*
- MLT-211 Hematology & Hemostasis Credits: 4 \*
- MLT-241 Immunohematology Credits: 4 \*

Total Credits: 12

#### Semester 3 Summer

- MLT-242 Clinical Chemistry Credits: 4 \*
- MLT-243 Parasitology and Mycology Credits: 2
- PSY-101 Principles of Psychology Credits: 3

**Total Credits: 9** 

## Semester 4 Fall

MLT-251 Clinical Laboratory Sciences Practicum Credits: 12

Total Credits: 12

## Upon Completion of This Concentration Graduates Will Be Able To:

- Collect and prepare clinical specimens for analysis.
- Operate laboratory instruments.
- Prepare a variety of diagnostic analyses according to prescribed methodology.
- Relate test results to other patient information to the extent required for understanding the analyses.

## Career Outlook

Graduates of this program are eligible to take the CLT/MLT certification exam administered by the American Society of Clinical Pathology. Graduates are then qualified for employment in hospitals, clinics and health maintenance organizations.

## Medical Radiography Option Full-time, A.S.

This option prepares students to perform general radiographic and fluoroscopic examinations on patients utilizing digital technology to produce diagnostic images in a diverse healthcare environment. Graduates of this option may apply to take the ARRT Certification Exam, and once experienced and certified in general radiography may elect to pursue advanced education and certification in computed tomography (CT), magnetic resonance imaging (MRI), mammography, cardiac interventional, or vascular interventional radiography.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

## Admission Requirements

- Diploma High School diploma or GED
- Session Attend a mandatory Information session
- ENG-111 College Writing I Credits: 3
- BIO-203 Anatomy/Physiology I & Lab Credits: 4
- MATH College Algebra or Statistics Credits: 3
   Completion of any 3 credit College Algebra or Statistics course
- TEAS Complete the Test of Essential Academic Skills (TEAS) Allied Health

Total Credits: 10

# **Admission Requirements Advising Note**

- TEAS scores must be at least 47.6 percent in Reading, 46.7 percent in Math and 47.6 percent in English/language
- Anatomy and Physiology must be completed within ten (10) years of application unless currently working in a related healthcare position
- Approximate application dates for the Fall program are mid-October through mid-February for admission to the program for the next academic year. Check with the Admissions office for exact timelines
- As a prerequisite for a clinical placement this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

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## Semester 1 Fall

- MIG-107 Introduction to Medical Radiography Credits: 2 \*
- MIG-109 Patient Care for Medical Imaging Credits: 4 \*
- MIG-122 Positioning I Credits: 3 \*
- MIG-124F FT Medical Radiography Clinical I Credits: 2 \*

Total Credits: 11

# **Semester 1 Fall Advising Note**

- General Education Requirements Quantitative Problem Solving, Scientific Reasoning, Creative Work and Elective satisfied by program.
- Core courses (i.e. MIG prefix) are only offered once per year and must be taken as scheduled.
- If needed for financial aid (i.e. 12 credits for full-time) consider taking SOC-101 or ENG-112. If you have completed them, consider taking an introductory language course of interest, which would be valuable in the healthcare profession. Another reasonable alternative would be an art or music class for your personal enrichment and enjoyment.
- Choose sections that do not conflict with your core courses. Core courses will be demanding, so plan to spend 3-4
  hours each day this semester studying outside of class to achieve success as you consider additional courses or work
  schedules.
- Keep course work for each class organized and readily accessible for review at the end of the program as you prepare for your national certification exam.

## Semester 2 Spring

- BIO-204 Anatomy/Physiology II & Lab Credits: 4
- MIG-120 Radiologic Imaging I Credits: 3
- MIG-111 Imaging Technology I Credits: 3
- MIG-126 Positioning II Credits: 3
- MIG-128F Full Time Medical Radiography II Credits: 2

**Total Credits: 15** 

# **Semester 2 Spring Advising Note**

This semester begins a series of challenging technical courses that are vital to your success, in addition to clinical and
positioning class. Stay organized within each course, and plan to spend 4-5 hours of studying outside of class daily
from this point in the program through degree completion.

### Semester 3 Summer

- MIG-222F Full-Time Medical Radiography Clin III Credits: 3 \*
- SOC-101 Principles of Sociology Credits: 3

**Total Credits: 6** 

# **Semester 3 Summer Advising Note**

You may take and complete your required general education courses at any time, but they MUST be completed by the
end of the Spring semester of the second year in order to graduate on time.

### Semester 4 Fall

- MIG-220 Positioning III Credits: 2 \*
- MIG-228F Full-Time Medical Radiography Clin V Credits: 3 \*
- MIG-224 Radiologic Technology II Credits: 3 \*
- MIG-226 Radiologic Imaging II Credits: 3 \*
- MIG-227 Pharmacology of Radiology Credits: 1 \*
- ENG-112 College Writing II Credits: 3

**Total Credits: 15** 

## Semester 5 Spring

- MIG-230 Radiation Protection Credits: 3 \*
- MIG-236F FT Medical Radiography Clinical V Credits: 3 \*
- MIG-234 CT/Cross Section Anatomy Credits: 2 \*
- CIT-110 Applications/Concepts Credits: 3
- MIG-238 Advanced Medical Radiography Seminar Credits: 2 \*

**Total Credits: 13** 

## **Semester 5 Spring Advising Note**

• MIG-234 is a web-based course.

## Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate clinical competence
- Apply critical thinking skills
- Demonstrate communication skills
- Model professionalism

## Career Outlook

Graduates of this option qualify for employment in hospitals, HMOs, clinics, doctors' offices, mobile units, community health agencies, industrial x-ray, and equipment/film companies. Successful graduates will qualify to take the American Registry of Radiologic Technologists Registry Examination and the State of Massachusetts Licensing Examination for entry-level Radiologic Technologists.

## **Transfer Options**

**Transfer Advising Guide** 

• Regis College

## Medical Radiography Option Part-time, A.S.

This option prepares students to perform general radiographic and fluoroscopic examinations on patients utilizing digital technology to produce diagnostic images in a diverse healthcare environment. Graduates of this option may apply to take the ARRT Certification Exam, and once experienced and certified in general radiography may elect to pursue advanced education and certification in computed tomography (CT), magnetic resonance imaging (MRI), mammography, cardiac interventional, or vascular interventional radiography

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

## Admission Requirements

- Diploma High School diploma or GED
- Session Attend a mandatory Information session
- ENG-111 College Writing I Credits: 3
- BIO-203 Anatomy/Physiology I & Lab Credits: 4
- MATH College Algebra or Statistics Credits: 3
   Completion of any 3 credit College Algebra or Statistics course
- TEAS Complete the Test of Essential Academic Skills (TEAS) Allied Health

Total Credits: 10

# **Admission Requirements Advising Note**

- TEAS scores must be at least 47.6 percent in Reading, 46.7 percent in Math and 47.6 percent in English/language
- All pre-requisite courses must be completed with a grade of C or better.
- Anatomy and Physiology must be completed within ten (10) years of application unless currently working in a related healthcare position
- Approximate application dates for the Fall program are mid-October through mid-February for admission to the program for the next academic year. Check with the Admissions office for exact timelines
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal
  Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more
  information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

#### Semester 1 Fall

- MIG-109 Patient Care for Medical Imaging Credits: 4 \*
- MIG-107 Introduction to Medical Radiography Credits: 2 \*

## **Total Credits: 6**

# **Semester 1 Fall Advising Note**

- General Education Requirements Quantitative Problem Solving, Scientific Reasoning, Creative Work and Elective satisfied by program
- Core Courses (i.e. MIG prefix) in this program are only offered once per year, and must be taken as scheduled.
- Required general education courses (i.e. ENG-112, SOC-101 and CIT-110) may be taken as scheduled, or when
  convenient for the individual student, with the exception of BIO-204 which must be completed by the end of Spring
  Year 2 to prepare the student for success in the clinical setting. They must be completed by the last semester of the
  program to graduate on time.
- Please remember that this is a part-time program, and that may impact financial aid options. Plan ahead financially for the last two daytime semesters of clinical, which are a mandatory requirement of this program.

## Semester 2 Spring

- MIG-111 Imaging Technology I Credits: 3 \*
- MIG-120 Radiologic Imaging I Credits: 3 \*
- ENG-112 College Writing II Credits: 3

**Total Credits: 9** 

### Semester 3 Summer

- MIG-224 Radiologic Technology II Credits: 3 \*
- SOC-101 Principles of Sociology Credits: 3
- CIT-110 Applications/Concepts Credits: 3

**Total Credits: 9** 

### Semester 4 Fall

- MIG-226 Radiologic Imaging II Credits: 3 \*
- MIG-230 Radiation Protection Credits: 3 \*

**Total Credits: 6** 

## Semester 5 Spring

- MIG-122 Positioning I Credits: 3 \*
- MIG-124P Part Time Medical Radiography Clinical I Credits: 1 \*
- BIO-204 Anatomy/Physiology II & Lab Credits: 4 \*

**Total Credits: 8** 

# **Semester 5 Spring Advising Note**

• All didactic courses and clinical are held in the evenings this semester.

#### Semester 6 Summer

- MIG-126 Positioning II Credits: 3 \*
- MIG-128P Part Time Medical Radiography Clin II Credits: 1
- MIG-227 Pharmacology of Radiology Credits: 1 \*

**Total Credits: 5** 

# **Semester 6 Summer Advising Note**

• All didactic courses and clinical are held in the evening this semester.

### Semester 7 Fall

- MIG-220 Positioning III Credits: 2 \*
- MIG-222P Part Time Medical Radiography Clin III Credits: 1 \*
- MIG-234 CT/Cross Section Anatomy Credits: 2 \*

**Total Credits: 5** 

## Semester 8 Spring

- MIG-228P Part-Time Medical Radiography Clin V Credits: 5 \*
- MIG-238 Advanced Medical Radiography Seminar Credits: 2 \*

**Total Credits: 7** 

## Semester 9 Summer

• MIG-236P PT Medical Radiography Clinical V Credits: 5 \*

**Total Credits: 5** 

## Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate clinical competence.
- Apply critical thinking skills.
- Demonstrate communication skills.

• Model professionalism.

### Career Outlook

Graduates of this option qualify for employment in hospitals, HMOs, clinics, doctors' offices, mobile units, community health agencies, industrial x-ray, and equipment/film companies. Successful graduates will qualify to take the American Registry of Radiologic Technologists Registry Examination and the State of Massachusetts Licensing Examination for entry-level Radiologic Technologists.

## **Transfer Options**

**Transfer Advising Guide** 

Regis College

## Music Concentration, A.A.

The Music concentration provides the practical and academic foundation for continued education or a career in music. Through group and individual instruction, students develop instrumental or vocal performance skills suitable for a variety of styles of music and professional roles. Additionally, students gain knowledge of the theory, history, and business of music.

This concentration prepares students for transfer to four-year programs in music, as well for entry-level positions in the music industry. For information on specific transfer agreements with four-year music programs in the area, see the Department Chair. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, see Transfer Options below.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- MUS-101 Music Fundamentals Credits: 3 \*
- MUS-180 Introduction to the Music Business Credits: 3
- MUS-151 Piano I Credits: 2
- Elective- Performance Ensemble Elective Credits: 1
  See semester advising note
- MUS-195 Applied Music I Credits: 1
  or
- MUS-295 Applied Music II Credits: 1
- ENG-111 College Writing | Credits: 3 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4
   This course meets the General Education requirement for Quantitative Problem Solving Choose one MAT course from Quantitative Problem Solving Menu

Total Credits: 16-17

## **Semester 1 Advising Note**

- General Education Requirements Creative Work satisfied by program.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Students with basic keyboarding skills may replace Piano I with Piano II (MUS-152). Those with intermediate or
  advanced keyboarding skills may satisfy this requirement with 2 or more credits of Music Electives. See the department
  Chair for more information.
- Performance Ensemble Elective: Students are required to take four credits of performance ensemble electives and may repeat these electives. Students may be required to audition for performance ensemble electives. See the department Chair for more information.
- Applied Music Elective: Students are required to take four credits of applied music electives and may repeat these electives. Students should register for the section of Applied Music that fits the instrument (or voice) they would like to study. An audition may be required. See the department Chair for more information.

### Semester 2

- MUS-105 Music Theory and Aural Skills I Credits: 4 \*
- MUS-171 Intro to Music Technology Credits: 3
- Elective- Performance Ensemble Elective Credits: 1
  See semester advising note
- MUS-195 Applied Music I Credits: 1
- MUS-295 Applied Music II Credits: 1
- ENG-112 College Writing II Credits: 3
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from Community and Cultural Contexts Menu

Total Credits: 15

# **Semester 2 Advising Note**

- Performance Ensemble Elective: Students are required to take four credits of performance ensemble electives and may repeat these electives. Students may be required to audition for performance ensemble electives. See the department Chair for more information.
- Applied Music Elective: Students are required to take four credits of applied music electives and may repeat these electives. Students should register for the section of Applied Music that fits the instrument (or voice) they would like to study. An audition may be required. See the department Chair for more information.
- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.

#### Semester 3

- MUS-106 Music Theory and Aural Skills II Credits: 4
- MUS-133 Music History I Credits: 3 \*
- Elective- Performance Ensemble Elective Credits: 1 See semester advising note.
- MUS-195 Applied Music I Credits: 1

or

- MUS-295 Applied Music II Credits: 1
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose any course from Scientific Reasoning Menu

Elective- Behavioral or Social Science Elective Credits: 3
 Choose one course from Behavioral or Social Science Elective Menu.

Total Credits: 16

# **Semester 3 Advising Note**

- Performance Ensemble Elective: Students are required to take four credits of performance ensemble electives and may repeat these electives. Students may be required to audition for performance ensemble electives. See the department Chair for more information.
- Applied Music Elective: Students are required to take four credits of applied music electives and may repeat these electives. Students should register for the section of Applied Music that fits the instrument (or voice) they would like to study. An audition may be required. See the department Chair for more information.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

### Semester 4

- MUS-134 Music History II Credits: 3
- Elective- Music Elective Credits: 3

Choose one course with a MUS prefix. MUS-130 is not a qualifying music elective.

- Elective- Performance Ensemble Elective Credits: 1 See semester advising note.
- MUS-195 Applied Music I Credits: 1

or

- MUS-295 Applied Music II Credits: 1
- GenEd-E General Education Elective Credits: 3-4

This course meets the General Education requirement for General Education Elective.

Choose a course from the Scientific Reasoning Menu

• Elective- Behavioral or Social Science Elective Credits: 3

Choose one course from Behavioral or Social Science Elective Menu.

Total Credits: 14-15

## **Semester 4 Advising Note**

• Performance Ensemble Elective: Students are required to take four credits of performance ensemble electives and may repeat these electives. Students may be required to audition for performance ensemble electives. See the department Chair for more information.

- Applied Music Elective: Students are required to take four credits of applied music electives and may repeat these
  electives. Students should register for the section of Applied Music that fits the instrument (or voice) they would like to
  study. An audition may be required. See the department Chair for more information.
- Apply for graduation.

## Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate foundational music skills suitable for a variety of situations including music notation and terminology, aural skills and sight-reading skills.
- Interpret core elements of a musical work.
- Demonstrate technical skills in various creative activities.
- Discuss the cultural context of music from a variety of styles and eras.
- Exhibit creativity and artistic sensitivity in their musical activity.
- Demonstrate facility in essential professional skills beyond those related to music.

### Career Outlook

The Music concentration provides the core skills that lead to a variety of careers related to music, including performance, music education, music production, composition, and music management. Graduates of this program qualify for entry-level positions in various sectors of the music industry. Additionally, graduates are well-prepared to transfer to bachelor's programs in a variety of specializations within music.

## **Transfer Options**

#### **Transfer Advising Guides**

- Berklee Online
- Bridgewater State University
- Salem State University

#### MassTransfer A2B Link

- Bridgewater State University
- Fitchburg State University
- Massachusetts College of Liberal Arts
- Westfield State University
- Worcester State University
- University of Massachusetts Amherst
- University of Massachusetts Lowell

## Paralegal Studies, A.S.

This program prepares students for legal employment by training them to assist lawyers in gathering and analyzing factual data, drafting correspondence, researching legal questions, and preparing legal documents. Paralegal employment provides flexibility (full-time, part-time, per diem, temporary or freelance) and the opportunity to enter the legal field without first obtaining a law degree. Graduates of the program may directly enter the workforce or opt to continue their education and pursue a four year degree.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing I Credits: 3
- GenEd-QPS Quantitative Problem Solving Credits: 3-4

This course meets the General Education requirement for Quantitative Problem Solving Choose one MAT course from Quantitative Problem Solving Menu.

- PLG-101 Introduction to Law Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3
- GenEd-CCC Community & Cultural Contexts Credits: 3

This course meets the General Education requirement for Community & Cultural Contexts

Choose one course from Community and Cultural Contexts menu

Recommended courses: PSY-101 or SOC-101

Total Credits: 15-16

# **Semester 1 Advising Note**

• New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year

## Semester 2

- ENG-112 College Writing II Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning

Choose one course from the Scientific Reasoning Menu

Recommended courses: BIO-115 or ENV-105

Elective- Behavioral Science Elective Credits: 3

Choose one course from PSY or SOC Recommended: PSY-101 or SOC-101

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

- PLG-103 Litigation Credits: 3 \*
- Elective- Paralegal Option Elective Credits: 3

Paralegal Option Elective Courses:

CRJ-103 Criminal Law, PLG-201 Family Law, PLG-203 Real Estate Law, PLG-204 Wills, Estates and Trusts, PLG-299 Paralegal Internship, PLG-105 Practical Legal Writing

Total Credits: 19

#### Semester 3

Elective- Humanities Elective Credits: 3
 Choose one course from Humanities Elective Menu

Elective- Lab Science Elective Credits: 4
 Choose one course from Lab Science Menu
 Recommended course: BIO-115 or ENV-105

Elective- Behavioral Science Elective Credits: 3

Choose one course from PSY or SOC Recommended course: PSY-107

• PLG-104 Legal Ethics Credits: 3

PLG-202 Business Organizations Credits: 3

**Total Credits: 16** 

### Semester 4

• Elective- Humanities Elective Credits: 3
Choose one course from Humanities Elective Menu

- PLG-102 Legal Research & Writing Credits: 3
- Elective- Paralegal Option Elective Credits: 3

Paralegal Option Elective Courses:

CRJ-103 Criminal Law, PLG-201 Family Law, PLG-203 Real Estate Law, PLG-204 Wills, Estates and Trusts, PLG-299 Paralegal Internship, PLG-105 Practical Legal Writing

• Elective- Paralegal Option Elective Credits: 3

Paralegal Option Elective Courses:

CRJ-103 Criminal Law, PLG-201 Family Law, PLG-203 Real Estate Law, PLG-204 Wills, Estates and Trusts, PLG-299 Paralegal Internship, PLG-105 Practical Legal Writing

GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

**Total Credits: 15** 

# **Semester 4 Advising Note**

Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Understand the legal process and the nature of law practice.
- Construct and evaluate logical arguments in support of specific positions.
- Conduct effective legal research and oversee legal projects.
- Understand, identify and resolve legal and ethical issues associated with the paralegal profession.

### Career Outlook

Paralegals typically find jobs with law firms, corporations, government offices, non-profit entities, banks, health care organizations, bio-tech companies and financial institutions. Areas of specialization include litigation, corporate law, criminal law, regulatory compliance, intellectual property, bankruptcy, labor law, immigration, family law, and real estate. The number of

jobs in the paralegal field is expected to grow much faster than average through 2016, and the position of paralegal is consistently ranked among the best jobs in America. Boston is home to one of the top legal markets in the United States and BHCC's main campus is minutes away from many courthouses, law schools, law firms, and government offices.

### Unauthorized Practice Of Law Statement

A Legal Studies graduate may work as a paralegal only under the supervision of an attorney and is not authorized to engage in the practice of law. The ABA (American Bar Association) defines a paralegal or legal assistant as "a person, qualified by education, training or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible.

## **Transfer Options**

#### **Transfer Advising Guides**

Suffolk University

#### MassTransfer A2B Link

• University of Massachusetts Lowell

## Paramedic Studies, A.S.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

## Admission Requirements

- Diploma High School Diploma or GED
- Session Attend a mandatory Information Session
- License Submit a copy of valid driver's license or obtain prior to the start of classes
- EMT Submit copy of valid EMT card or obtain prior to the start of classes
- CPR Possess a current American Heart Association, Basic Life Support Health Care Provider Card
- BIO-108 Human Biology/Lab Credits: 4 \*
- ENG-111 College Writing | Credits: 3 \*

**Total Credits: 7** 

## **Admission Requirements Advising Note**

- Submit letter of completion of one year experience as an EMT on company letterhead
- Ten panel drug testing and medical clearances
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal
  Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more
  information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

## Semester 1

- EMS-205 Principles of Paramedicine I Credits: 10 \*
- EMS-214 Paramedic Clinical Rotation | Credits: 3 \*

**Total Credits: 13** 

# **Semester 1 Advising Note**

Successful completion of EMS-205 and EMS-214 with a grade of B- or higher is required to advance in the program.

### Semester 2

- EMS-206 Principles of Paramedicine II Credits: 10 \*
- EMS-215 Paramedic Clinical Rotation II Credits: 3 \*

**Total Credits: 13** 

# **Semester 2 Advising Note**

• Successful completion of EMS-206 and EMS-215 with a grade of B- or higher is required to advance in the program.

### Semester 3

- EMS-207 Principles of Paramedicine III Credits: 4 \*
- EMS-216 Paramedic Clinical Rotation III Credits: 1 \*

**Total Credits: 5** 

## **Semester 3 Advising Note**

• Successful completion of EMS-207 and EMS-216 with a grade of B- or higher is required to advance in the program.

## Semester 4

- EMS-208 Principles of Paramedicine IV Credits: 4 \*
- EMS-217 Paramedic Clinical Rotation IV Credits: 1 \*

**Total Credits: 5** 

• Successful completion of EMS-208 and EMS-217 with a grade of B- or higher is required to advance in the program.

### Semester 5

• EMS-218 Paramedic Field Internship Credits: 3 \*

**Total Credits: 3** 

### Semester 6

- ENG-112 College Writing II Credits: 3 \*
- PSY-101 Principles of Psychology Credits: 3 \*
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

- MAT-181 Statistics | Credits: 3 \*
- GenEd-CW Creative Work Credits: 3
   This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

Total Credits: 15-16

## Upon Completion of This Concentration Graduates Will Be Able To:

- After successful completion of the program, the student will receive a Certificate of Completion enabling him or her to apply for and take the National Registry of Emergency Medical Technicians (NREMT) Paramedic written and practical examinations.
- Participants who successfully pass the NREMT certification examination may go onto practice with fire departments, private ambulance services, third service ambulance services, hospital emergency departments, and various clinical settings where advanced emergency care is require.

### Career Outlook

The U.S. Bureau of Labor Statistics predicts that employment of emergency medical technicians (EMTs) and paramedics will grow nine percent between 2008 and 2018, which is about as fast as the average percentage for all occupations (www.BLS.gov). As our population ages and individuals face increased medical concerns, the likelihood of medical emergencies will increase; thus increasing the need forEMTs and paramedics. In addition emergency rooms are frequently overcrowded, which increases the amount of time that the EMTs and paramedics must spend with each patient. This is also likely to increase the number of potential positions. Job prospects are expected to be good since paid employees are needed to replace volunteers who have a high turnover rate.

## **Physics Concentration, A.A.**

This concentration prepares students to transfer to four-year colleges or universities to seek bachelors' degrees in physical science or physics. After transferring, students study to become more proficient in one or more of the divisions of the physical sciences; e.g., theoretical physics, particle physics, astrophysics, biophysics, or applied physics. Graduates of the concentration may qualify to transfer using benefits of MassTransfer to one of the Massachusetts State Universities or the University of Massachusetts. For current information on eligible programs, see Transfer Options below.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

ENR-101 Introduction to Engineering/Lab Credits: 4
or

• Elective- Computer Elective Credits: 3-4

Choose one CIT course

- ENG-111 College Writing I Credits: 3
- MAT-281 Calculus I Credits: 4 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from Community and Cultural Contexts Menu

Total Credits: 13-14

## **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously
- General Education Requirements Quantitative Problem Solving and Scientific Reasoning satisfied by Program.
- This map assumes a student enters the College ready to enroll in MAT 281.

## Semester 2

- PHY-251 Physics I/Lab Credits: 4 \*
- MAT-282 Calculus II Credits: 4
- ENG-112 College Writing II Credits: 3
- CHM-201 General Chemistry I & Lab Credits: 4
- Elective- Social Science Elective Credits: 3
  Choose one course from Social Science Elective Menu.

Total Credits: 18

# **Semester 2 Advising Note**

- Students with strong math background may want to start the Physics sequence during Semester 1.
- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

### Semester 3

- PHY-252 Physics II/Lab Credits: 4
- MAT-283 Calculus III Credits: 4
- MAT-291 Linear Algebra Credits: 4

• Elective- Literature Elective Credits: 3

Choose one LIT course

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work VMA-104 is strongly recommended due to the extensive diagram drawing involved in solving physics problems.

**Total Credits: 18** 

# **Semester 3 Advising Note**

- Student may want to discuss elective selection with Physics advisor.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer
- Complete a pre-graduation check with advisor.

## Semester 4

- MAT-285 Ordinary Differential Equations Credits: 4
- CHM-202 General Chemistry II & Lab Credits: 4
- Elective- Literature Elective Credits: 3

Choose one LIT course.

• Elective- Behavioral Science Elective Credits: 3

Choose one PSY or SOC course

• GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective. Choose a course from the General Education Community and Cultural Context Menu

Total Credits: 17

## **Semester 4 Advising Note**

Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate the connections between the major concepts and theories in the field of physics.
- Analyze and create solutions for problems involving principles of physics.
- Apply mathematical techniques in scientific problem solving.
- Properly report on the findings of a designed experiment.

### Career Outlook

Graduates of this concentration should transfer to a four-year college or university because employment opportunities in physical science such as lab technicians usually require a minimum of a bachelor's degree. Professional positions such as researchers or college instructors usually require a minimum of a master's degree.

## **Transfer Options**

### MassTransfer A2B Map

Bridgewater State University

#### MassTransfer A2B Link

- Massachusetts College of Liberal Arts
- Westfield State University
- University of Massachusetts Amherst

# **Political Science Concentration, A.A.**

The Political Science degree introduces students to the four main fields in the discipline in most undergraduate programs in the United States: American Politics, Political Theory, Comparative Politics, and International Relations. The curriculum prepares students for further study in the discipline at our main transfer institutions, including University of Massachusetts at Boston, University of Massachusetts at Amherst, University of Massachusetts at Lowell, Simmons University, and Salem State University.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Semester 1

- HUM-120 Self, Culture and Society Credits: 3 or
- Elective Humanities or Fine Arts Elective Credits: 3
   This course satisfies Learning Communities requirement.
- ENG-111 College Writing I Credits: 3
- PSC-101 Government/Politics in US Credits: 3 \*
- PSC-150 Introduction to Political Theory Credits: 3
- MAT-181 Statistics | Credits: 3

**Total Credits: 15** 

## **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.

## Semester 2

PSC-210 State/Local Politics Credits: 3

or

- Elective- Approved PSC 200-level course Credits: 3
- ENG-112 College Writing II Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning.

- PSC-220 Introduction to International Relations Credits: 3
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work.

Total Credits: 16

## **Semester 2 Advising Note**

- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- Meet with an advisor to begin career planning activities.
- PSC-210 is recommended for students interested in public policy.

### Semester 3

- GEO-101 World Regional Geography Credits: 3 or
- ECO-201 Macroeconomics Credits: 3
- ECO-202 Microeconomics Credits: 3
- PSC-211 Introduction to Comparative Politics Credits: 3 \*
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

- Elective Natural or Physical Science Elective Credits: 4
- Elective Humanities and Fine Arts Elective Credits: 3

Total Credits: 16

# **Semester 3 Advising Note**

- Electives should be based on the career goals and interests of the student, e.g. Political Science, International Relations, Public Policy, Pre Law.
- PSC-211 serves as the capstone course for the concentration for those students who do not choose HON-200 as an elective or complete internships through the Community Engagement office.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

### Semester 4

REL-111 World Religions Credits: 3

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- HIS-111 History of Pre-Modern World Credits: 3
- HIS-112 Modern World History Credits: 3
- HIS-151 US History: Colonization through the Civil War Credits: 3
  or
- HIS-152 US History: Reconstruction to Present Credits: 3
- Elective Humanities and Fine Arts Elective Credits: 3
- Elective Elective Credits: 3
   Elective Elective Credits: 3
   Elective Elective Credits: 3

**Total Credits: 15** 

## **Semester 4 Advising Note**

- Electives should be based on the career goals and interests of the student, e.g. Political Science, International Relations,
   Public Policy, Pre Law.
- A third Humanities and Fine Arts elective will not be necessary if taken during first semester.
- See an advisor about World Studies emphasis certification
- Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Articulate the legal, ideological, and theoretical basis for different governing systems.
- Interpret what the US Constitution and other foundational documents mean in light of current social issues and debates.
- Exhibit a fundamental knowledge of the dynamics of governmental institutions and politics at the national and international levels.
- Engage in dialogue about contemporary policy issues such as finance, economic development, education, criminal justice, social justice, healthcare, and environmental policy.
- Research the development and implementation of public policy.
- Analyze the dynamics of participatory democracy by engaging the institutions of civil society.
- Explain how the various channels of citizen influence operate at each level of government.
- Generate scholarly arguments about enduring and contemporary political questions.

### Career Outlook

Graduates of this concentration qualify for entry-level positions with an associate's degree, and are encouraged to transfer to a four-year college or university to earn a bachelor's degree for further career advancement. Degrees in political science prepare students for careers in fields including public policy, government, journalism, activism, polling and research, community advocacy, labor organizing, and international relations. Political science is often described as a "pre-law" major, an ideal foundation for students planning to go to law school.

## **Psychology Concentration, A.A.**

The Department of Behavioral Sciences aspires to develop and foster a passion for lifelong learning and academic excellence. The department integrates students' diverse backgrounds into the teaching and learning experience, creating a

civically engaged community of learners who are able to think critically of current issues in our complex world. Graduates of the program will carry with them a strong sense of collegiality and responsibility that will help them succeed in their long-term academic, professional, and personal goals.

#### The vision of our department is carried out through our mission of:

- teaching foundational behavioral science courses that support the general education mission of the college and engage our students in the broad domains and applications of Psychology, Sociology, and Cultural Anthropology;
- offering concentration courses that help our students develop a firm understanding of the various fields within a specific behavioral science discipline;
- engaging our students in research that allows them to apply critical thinking skills using scientific approaches;
- supporting our majors as they prepare to transfer to four-year institutions and/or successfully navigate the professional world through the application of the principles, concepts and theories that they have learned from the program;
- supporting our students to apply what they have learned towards becoming civically engaged and lifelong learners.

### Semester 1

- HUM-120 Self, Culture and Society Credits: 3 \* or
- Elective Natural & Physical Sciences OR Humanities & Fine Arts OR Behavioral & Social Sciences Credits: 3 \*
- ENG-111 College Writing | Credits: 3 \*
- PSY-101 Principles of Psychology Credits: 3 \*
- SOC-101 Principles of Sociology Credits: 3
- MAT-181 Statistics | Credits: 3 \*

Total Credits: 15

## **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning CommunityCluster within their first year.

#### Semester 2

- PSY-235 Introduction to Behavioral Research Credits: 3 \*
- ENG-112 College Writing II Credits: 3
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

A Social Science elective is highly recommended in order to comply with Mass Transfer guidelines.

• GenEd-SR Scientific Reasoning Credits: 4 \*

This course meets the General Education requirement for Scientific Reasoning Choose one course from the Scientific Reasoning Menu

<sup>\*</sup> Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from the Creative Work Program Menu

**Total Credits: 16** 

# **Semester 2 Advising Note**

- Upload in ePortfolio required Psychology majors courses artifacts PSY-235 onwards
- PSY-235 introduces students to research methods
- Participate in Psychology discipline conference offered by department
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- Meet with an advisor to begin career planning activities.

### Semester 3

PSY-209 Child Psychology Credits: 3 \*

PSY-224 Adolescent & Adult Development Credits: 3 \*

• Elective- Psychology Elective Credits: 3

Elective Options:

PSY-201 Learning and Memory, PSY-203 Psychology of Personal Adjustment, PSY-215 Counseling, PSY-223 Personality, PSY-227 Abnormal Psychology, PSY-233 Intro to Psychiatric Rehabilitation

• Elective- Humanities Elective Credits: 3

Choose one course from the Humanities electives

Sequence courses in a foreign language starting at 102 levels are highly recommended as most four-year colleges require intermediate proficiency in a foreign language.

• Elective- Liberal Arts Elective Credits: 3

Choose one course from the Liberal Arts electives menu

Elective- Lab Science Elective Credits: 4

Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course

**Total Credits: 16** 

# **Semester 3 Advising Note**

- Select the career elective from PSY, HSV, or ECE courses. The Department encourages students to take a computer course for one of the three electives.
- PSY-213 Human Growth and Development does not satisfy the A.A. Psychology concentration requirements. It is
  offered only to non-Psychology majors.
- Complete a Learn and Earn Internship or Community Engagement activity in any of your Psychology courses
- Upload in ePortfolio required Psychology major courses artifacts

### Semester 4

• Elective- Psychology Elective Credits: 3

Elective Options:

PSY-201 Learning and Memory, PSY-203 Psychology of Personal Adjustment, PSY-215 Counseling, PSY-223 Personality, PSY-227 Abnormal Psychology, PSY-233 Intro to Psychiatric Rehabilitation

- PSY-219 Social Psychology Credits: 3
- Elective- Humanities Elective Credits: 3

Choose one course from the Humanities electives

Sequence courses in a foreign language starting at 102 levels are highly recommended as most four-year colleges require intermediate proficiency in a foreign language.

Elective- Humanities Elective Credits: 3

Choose one course from the Humanities electives

• Elective- Literature Elective Credits: 3

Choose one LIT course

**Total Credits: 15** 

## **Semester 4 Advising Note**

- Select the career elective from PSY, HSV, or ECE courses. The Department encourages students to take a computer course for one of the three electives.
- PSY-219 ePortfolio to be completed and presented
- See an advisor about World Studies emphasis certification
- Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- a basic knowledge and understanding of the different principles and concepts of Psychology (foundational knowledge)
- the ability to apply learned concepts to the intrapersonal and interpersonal experiences embedded within diverse cultural contexts
- the ability to evaluate, compare and contrast, critique various theoretical perspectives and complex/debatable and current issues as they relate to the various domains of Psychology
- the ability to use learned knowledge to actively engage in and produce scientific research.

### Career Outlook

Graduates of this concentration should plan to transfer to a four-year college or university because entry-level positions in the general field of psychology require a bachelor's degree. Career positions generally require a master's degree.

## **Transfer Options**

#### **Transfer Advising Guides**

- Boston College Woods College of Advancing Studies
- Lesley University
- Suffolk University

#### MassTransfer A2B Map

- Fitchburg State University
- Framingham State University
- Westfield State University
- Worcester State University
- University of Massachusetts Boston
- University of Massachusetts Dartmouth
- University of Massachusetts Lowell

#### MassTransfer A2B Link

- Bridgewater State University
- Massachusetts College of Liberal Arts

## Registered Nursing Program: Day/Alternative Options, A.S.

This program includes 39 credits of nursing theory and clinical practice in health care facilities. Each nursing course requires clinical practice. Clinical practice requirements can vary from 90 to 157.5 hours per semester. Students must earn a grade of 78 or higher in all NUR courses. Students who fail to meet either the clinical objective or the grade requirement of an NUR course fail that course. To ensure currency, credits for BIO-203, 204 and 205 earned more than ten years prior to enrollment in the nursing clinical sequence are not accepted. Note that there are many requirements that must be met for acceptance to the nursing programs. These requirements are spelled out in detail in the Associate in Science Degree: Nursing Program description.

The Associate Degree Registered Nursing Program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; telephone: 404-975-5000; fax: 404-975-5020; email: info@acenursing.org; URL: acenursing.org, and approved by the Massachusetts Board of Registration in Nursing, 239 Causeway Street, Suite 500, 5th Floor, Boston, MA 02114; telephone: 617-973-0900; or 1-800-414- 0168; fax: 617-973-0984 URL: mass.gov/dph/boards/rn

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

## Admission Requirements

- Diploma High School diploma or GED
- Session Attend mandatory information session, must have attended in the last year.
- TEAS Complete the ATI Test of Essential Academic Skills (TEAS) Nursing
- ENG-111 College Writing | Credits: 3 \*
- BIO-203 Anatomy/Physiology I & Lab Credits: 4 \*
- Chem One year of high school chemistry with lab or one semester of college chemistry with lab Credits: 0 \*
- Math MAT-097 Foundations of Algebra or placement above MAT 097 Credits: 0 \*

**Total Credits: 7** 

## **Admission Requirements Advising Note**

• Complete TEAS VI Exam with a score of 60 percent in each of the four sections (Reading, Math, Science and English). All courses for admissions requirements must be completed with a C or better.

- Credits for Anatomy and Physiology/Lab that were earned more than ten (10) years prior to enrollment in the nursing program are not accepted.
- As a prerequisite for a clinical placement this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/
- View the Nurse Education department page for more information https://www.bhcc.edu/nursing/

### Semester 1

- NUR-120 Foundation of Patient Centered Care Credits: 10 \*
- BIO-204 Anatomy/Physiology II & Lab Credits: 4 \*
- PSY-101 Principles of Psychology Credits: 3

**Total Credits: 17** 

# **Semester 1 Advising Note**

General Education Requirements Creative Work and Scientific Reasoning satisfied by program.

## Semester 2

- NUR-150 Patient Ctr Care-Adult & Mental Health Credits: 10 \*
- BIO-205 Microbiology & Lab Credits: 4 \*
- PSY-213 Human Growth and Development Credits: 3

Total Credits: 17

### Semester 3

- NUR-220 Paitent Ctr Care-Adulsts & Families Credits: 10 \*
- SOC-101 Principles of Sociology Credits: 3
- ENG-112 College Writing II Credits: 3

**Total Credits: 16** 

### Semester 4

- NUR-250 Patient Ctr Care-Adults W Multisystem Credits: 9 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3

  This course meets the General Education requirement for Quantitative Problem Solving. Statistics is recommended. Choose one MAT course from Quantitative Problem Solving Menu.

Total Credits: 12

## Upon Completion of This Concentration Graduates Will Be Able To:

- Evaluate nursing care provided to patients and families from diverse backgrounds in a variety of settings to ensure that it is compassionate, age and culturally appropriate and based on a patient's preferences, values and needs.
- Collaborate with members of the interprofessional health care team to manage and coordinate the provision of safe, quality care for patients and families.
- Use current evidence from scientific, peer reviewed sources and clinical expertise when making clinical decisions in the provision of patient-centered care.
- Use evidence-based quality improvement processes to effect change in the delivery of patient-centered care.
- Analyze effective use of strategies to mitigate errors and reduce the risk of harm to patients, self and others in a variety
  of settings.
- Use evidence-based information and patient care technology to communicate relevant patient information, manage care and mitigate error in the provision of safe, quality patient-centered care.
- Integrate integrity and accountability into practices that uphold established regulatory, legal, and ethical principles while providing patient-centered, standard-based nursing care.
- Use leadership, management and priority-setting skills in the provision and management of safe, quality patientcentered care.

## Career Outlook

Graduates of this option qualify for employment in hospitals, long-term care facilities, HMOs, clinics, doctors' offices, and other community health agencies.

## **Transfer Options**

#### **Transfer Advising Guides**

- Emmanuel College
- Fitchburg State
- Framingham State
- UMass Boston
- Westfield State University

## Sociology Concentration, A.A.

The Department of Behavioral Sciences aspires to develop and foster a passion for lifelong learning and academic excellence. The department integrates students' diverse backgrounds into the teaching and learning experience, creating a civically engaged community of learners who are able to think critically of current issues in our complex world. Graduates of the program will carry with them a strong sense of collegiality and responsibility that will help them succeed in their long-term academic, professional, and personal goals.

#### The vision of our department is carried out through our mission of:

- Teaching foundational behavioral science courses that support the general education mission of the college and engage our students in the broad domains and applications of Psychology, Sociology, and Cultural Anthropology;
- Offering concentration courses that help our students develop a firm understanding of the various fields within a specific behavioral science discipline;
- Engaging our students in research that allows them to apply critical thinking skills using scientific approaches;

- Supporting our majors as they prepare to transfer to four-year institutions and/or successfully navigate the professional world through the application of the principles, concepts, and theories that they have learned from the program;
- Supporting our students to apply what they learn towards becoming civically engaged and lifelong learners.

#### Semester 1

- HUM-120 Self, Culture and Society Credits: 3 \* or
- Elective Natural & Physical Sciences OR Humanities & Fine Arts OR Behavioral & Social Sciences Credits: 3 \*
- SOC-101 Principles of Sociology Credits: 3 \*
- PSY-101 Principles of Psychology Credits: 3
- ENG-111 College Writing | Credits: 3 \*
- MAT-181 Statistics | Credits: 3 \*

Total Credits: 15

## **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- HUM-120 satisfies the Learning Community Requirement
- Attend Behavioral Sciences Group Advising Workshop: Transfer, Job Shadowing / Internship, Educational Planning
- The department encourages students to explore curricular or extra curricular Student and Community Engagement Activities (recommendation: join Behavioral Sciences Club).
- Create Eportfolio and Upload participation.

## Semester 2

- SOC-109 Cultural Anthropology Credits: 3 \*
- SOC-211 The Family Credits: 3 \*
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning

Choose one course from Scientific Reasoning Menu

• GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

• ENG-112 College Writing II Credits: 3

**Total Credits: 16** 

## **Semester 2 Advising Note**

• Upload in ePortfolio required Sociology majors courses artifacts SOC-109 and SOC-211

<sup>\*</sup> Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

- Participate in Sociology Discipline conference offered by department
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair.
- Meet with an advisor to begin career planning activities.

### Semester 3

- Elective-Elective Credits: 3 \*
- Elective- Behavioral Science Elective Credits: 3

Choose one PSY or SOC course

• Elective- Math Elective Credits: 3-4

Recommended: MAT-171 or MAT-172 or MAT-173

• GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work

Choose one course from Creative Work Menu

• Elective- Literature Elective Credits: 3

Choose one course from LIT

Total Credits: 15-16

## **Semester 3 Advising Note**

- Upload in ePortfolio: required Sociology majors courses artifacts from SOC-204 and/or Learn and Earn Placement; conference participation
- SOC-204 is recommended or students unable to do a Learn and Earn Internship because of required hours. This course provides job shadowing opportunities to explore career options in Sociology.
- Speak to an Advisor about the World Studies Emphasis certification.
- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.

### Semester 4

- SOC-203 Social Problems Credits: 3 \* Capstone Course
- SOC-227 The Sociology of Race and Ethnicity Credits: 3 \*
- Elective- Lab Science Elective Credits: 4

Choose one 4-credit AST or BIO or CHM or GIS or ENV or PHY course

- COM-171 Public Speaking and Professional Comm Credits: 3
- Elective- Literature Elective Credits: 3

Choose one LIT course

**Total Credits: 16** 

# **Semester 4 Advising Note**

- SOC-203 ePortfolio to be completed and presented
- Apply for graduation

#### Upon Completion of This Concentration Graduates Will Be Able To:

- a basic knowledge and understanding of the different principles and concepts of Sociology (foundational knowledge)
- the ability to apply learned concepts to intrapersonal experiences, social institutions, and social issues embedded within diverse cultural contexts
- the ability to evaluate, compare and contrast, critique various theoretical perspectives and complex/debatable and current issues as they relate to the various domains of Sociology
- the ability to use learned knowledge to actively engage in and produce scientific research

#### Career Outlook

Graduates of this concentration qualify for entry-level positions in the general field of Sociology. Students will be able to choose which career track they intend to pursue by taking classes that are relevant to their interest. Graduates may wish to transfer to a four-year college or university, or will be able to work in the community with an associate's degree.

## **Transfer Options**

#### **Transfer Advising Guides**

Suffolk University

#### MassTransfer A2B Map

- Bridgewater State University
- Fitchburg State University
- Westfield State University
- Worcester State University
- University of Massachusetts Boston
- University of Massachusetts Dartmouth
- University of Massachusetts Lowell

## **Sport Management Option, A.S.**

This option introduces students to the principles and concepts of sport management operations. The program provides students with a comprehensive foundation in business management along with specialized courses in the areas that are critical for success in the sport management industry. Students will gain a comprehensive business foundation combined with specific competencies in management, marketing, communications and operations as they relate to the sport and leisure industry. Students will have the foundation to continue their education at a four-year institution or seek entry-level positions in the field.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing | Credits: 3 \*
- ACC-101 Principles of Accounting I Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3
- SPM-101 Principles of Sport Management Credits: 3 \*

• BUS-101 Introduction to Business Credits: 3 \*

**Total Credits: 15** 

## **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Explore BHCC Student Activities offered i.e., BHCC's Entrepreneurship Club.
- Create and follow education plan.

#### Semester 2

- SPM-211 Sport Facility and Event Management Credits: 3
- SPM-215 Sport Marketing and Promotion Credits: 3
- ENG-112 College Writing II Credits: 3 \*
- ACC-102 Principles of Accounting II Credits: 3
- BUS-201 Business Law I Credits: 3

**Total Credits: 15** 

## **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair
- Complete a volunteer activity in an area of interest.
- Learn about Alpha Beta Gamma (Business Honor Society) and Alpha Kappa Mu (General Honor Society).
- Inquire about the Commonwealth Honors Program.

#### Semester 3

- SPM-201 Psychology of Sport Credits: 3
- MAT-181 Statistics | Credits: 3 \*
- ECO-201 Macroeconomics Credits: 3
- BIO-108 Human Biology/Lab Credits: 4
- PSY-101 Principles of Psychology Credits: 3 \*

**Total Credits: 16** 

## **Semester 3 Advising Note**

 Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.

- Develop a financial plan for continued education and life after graduation.
- Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

- BUS-207 Professional Communication Credits: 3
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work Choose one course from Creative Work Menu

- MAN-107 Introduction to Entrepreneurship Credits: 3
- SPM-217 Seminar in Sport Management Credits: 3
- SPM-299 Sport Management Internship Credits: 3
- VMA-130 Social Media Strategy Credits: 3
- CIT-130 Data Visualization Credits: 3
- MAN-112 Organizational Behavior/Design Credits: 3

**Total Credits: 15** 

## **Semester 4 Advising Note**

- Gather recommendation letters from faculty and staff.
- Apply for graduation
- Finalize your resume and upload it to your ePortfolio and LinkedIn website.

## Upon Completion of This Concentration Graduates Will Be Able To:

- Integrate principles of management to organize people and resources to succeed in the sport management industry.
- Apply the concepts needed to plan, lead, organize, control and staff the operations of a sport management enterprise.
- Understand the basic principles of sport management as they relate to legal issues, managing and marketing a sports
  organization, communications and administration.

#### Career Outlook

This option prepares students to seek employment in many entry-level positions in the areas of health and fitness, sport and leisure, park and recreation and the professional sport industry including opportunities in the management of professional, college, secondary school and community sports.

## **Studio Arts Option, A.S.**

The program offers foundation training for artists, photographers, media-creators, and studio designers by providing traditional and digital based art instruction and conceptual ideation towards individual expression. Gaining technical mastery over the foundational basic elements of art and principles of design provides them the flexibility to produce compelling artwork in any

medium; skills with obvious, translatable commercial value. Graduates of this option may qualify to transfer using benefits of MassTransfer Pathways to a four-year state college or University of Massachusetts campus.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- VMA-100 Cultures and Careers in Visual Art Credits: 3
   Satisfies Learning Community Requirement
- VMA-104 Drawing from Observation Credits: 3 \*
- VMA-102 Visual Design: Composition and Color Credits: 3 \*
- VMA-103 Elements of Form Credits: 3

ENG-111 College Writing | Credits: 3

Total Credits: 15

## **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- Students, please consult with a VMA faculty member before registering.
- VMA-100 and VMA-104 should be completed as soon as possible.
- VMA-104 is pre-requisite for multiple courses.
- Consider taking Gen. Ed. courses during Summer.

#### Semester 2

- VMA-205 Inventive Drawing Credits: 3
- VMA-207 Figure Drawing Credits: 3 \*
   Spring only
- VMA-111 Introduction to Mass Media Credits: 3
- GenEd-QPS Quantitative Problem Solving Credits: 3-4
   This course meets the General Education requirement for Quantitative Problem Solving Choose one course from Quantitative Problem Solving Menu
- ENG-112 College Writing II Credits: 3

Total Credits: 15-16

## **Semester 2 Advising Note**

- Students, please consult with a VMA faculty member before registering.
- Consider taking Gen. Ed. courses during Summer.

#### Semester 3

- VMA-221 Multimedia Paint & Theory Credits: 3 \*
  Fall only
- VMA-118 Elements of Time Credits: 3
- Elective Career Elective Credits: 3

Choose one VMA course not already required for the program.

- VMA-112 Art History: Prehistoric to Medieval Credits: 3
- GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Creative Work, Community/Cultural Contexts, Scientific Reasoning and Elective menus.

**Total Credits: 15** 

## **Semester 3 Advising Note**

- Students, please consult with a VMA faculty member before registering.
- Student should select electives based on their specialization in order to strengthen portfolio.
- Consider taking Gen. Ed. courses during Summer.

#### Semester 4

VMA-227 Studio Portfolio Credits: 3

Spring Only

VMA-225 Painting Concepts Credits: 3 \*

Spring only

• Elective- Career Elective Credits: 3

Choose one VMA course not already required for the program.

- VMA-113 Art History: Renaissance-Contemporary Credits: 3
- GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning

Choose one course from Scientific Reasoning Menu

Total Credits: 16

## **Semester 4 Advising Note**

- Students, please consult with a VMA faculty member before registering.
- Student should select electives based on their specialization in order to strengthen portfolio.
- Consider taking Gen. Ed. courses during Summer.

## Upon Completion of This Concentration Graduates Will Be Able To:

- Develop a portfolio in preparation for transfer to a four-year college or university.
- Adapt the fundamental elements and principles of design to individual aesthetic.
- Demonstrate proficiency in Drawing, painting, and creating works in traditional as well as digital technologies and experimental forms.

- Apply the basic principles of color theory.
- Combine conceptual and critical thinking skills as applied to Studio Art

#### Career Outlook

Graduates of this option qualify to transfer to bachelor's degree-granting colleges or universities. Potential entry level careers in the visual arts, which vary according to the chosen major, may include: Fine Arts, Commercial Arts, Graphic/visual Design, Photography, Sculpture/3-D Designer, Illustration, Animation, Filmmaker, Videography, Architecture/Interior Architecture, Fashion Designer, Art Therapy, Art Education, Art Criticism and Theory, Art Historian, Art Critic, Curator, Gallerist/Art Dealer, Video Game Designer, Audio/Visual Artist, Audio Technician, Web Designer, Display Designer, Product Designer, and more. Students of all these tracks receive the same foundational curriculum within a typical four-year art college.

#### **Transfer Options**

#### MassTransfer A2B Map

- Bridgewater State University
- Massachusetts College of Liberal Arts
- Westfield State University
- Worcester State University
- University of Massachusetts Amherst

#### MassTransfer A2B Link

University of Massachusetts Lowell

## **Surgical Technology Option, A.S.**

Through classroom teaching, lab observation and practice, and clinical experience, this full-time, Associate Degree program prepares students to work closely with surgeons, anesthesiologists, registered nurses, and other surgical personnel to deliver patient care in the operating room. The program prepares students to handle the instruments, supplies, and equipment necessary during the surgical procedure; to understand the procedures being performed and anticipate the needs of the surgeon; to have the necessary knowledge and ability to provide quality patient care during the operative procedure and to maintain sterile technique Students will have four semesters of clinical experience starting the second semester of the program.

This is a Selective Program. View the Selective Admission Program Requirements

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

## Admission Requirements

**Diploma** High School diploma or GED

**Session** Attend Mandatory information session

**Test** Take College Placement Test

- BIO-108 Human Biology/Lab Credits: 4
- MAT-097 Foundations of Algebra Credits: 3

**Total Credits: 7** 

## **Admission Requirements Advising Note**

Students must maintain a grade of B- or better in all surgical technology courses. Applicants to this program are required to undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check.

The outcome of the CORI check may impact the student's ability to participate in the clinical experience. For further information, see the Department chair.

Students must apply to the program through BHCC's Admissions Office and:

- Possess a high school diploma or GED certificate.
- Attend an information session.
- Complete Human Biology and Lab (BIO-108).
- Complete Foundations of Algebra (MAT-097) or exemption by placing into higher level course.

After completion of the admission requirements, qualified applicants will be evaluated using an admissions rubric.

#### Semester 1

- SGT-105 Surgical Technology I Credits: 4 \*
- NHP-180 Medical Terminology Credits: 3 \*
- SGT-115 Asepsis for Surgical Technology Credits: 2 \*
- ENG-111 College Writing I Credits: 3 \*
- BIO-203 Anatomy/Physiology I & Lab Credits: 4 \*

**Total Credits: 16** 

## **Semester 1 Advising Note**

- The Surgical Technology Program has a Fall semester start date.
- General Educational requirement Scientific Reasoning satisfied by program requirements.

#### Semester 2

- SGT-106 Surgical Technology II Credits: 6 \*
- PSY-101 Principles of Psychology Credits: 3
- PMT-103 Pharmacology for the Surgical Technologist I Credits: 1 \*
- BIO-204 Anatomy/Physiology II & Lab Credits: 4 \*

Total Credits: 14

#### Semester 3

SGT-107 Surgical Technology III Credits: 4 \*

**Total Credits: 4** 

## **Semester 3 Summer Advising Note**

Students must earn a grade of B- or better in all Surgical Technology (SGT) courses for progression in the program.

#### Semester 4

- PMT-105 Pharmacology for the Surgical Technologist II Credits: 1 \*
- SGT-208 Surgical Technology IV Credits: 5 \*
- GenEd-QPS Quantitative Problem Solving Credits: 3-4

  This course meets the General Education requirement for Quantitative Problem Solving.

  Choose one course from Quantitative Problem Solving Menu
- ENG-112 College Writing II Credits: 3

Total Credits: 12-13

#### Semester 5

- SGT-216 Surgical Seminar Credits: 4
- SGT-251 Principles of Surgical Technology Clinical Credits: 4
- GenEd-CW Creative Work Credits: 3

This course meets the General Education requirement for Creative Work.

Choose one course from Creative Work Menu

• GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Creative Work, Community/Cultural Contexts, Scientific Reasoning and Elective menus.

**Total Credits: 14** 

## **Semester 5 Spring Advising Note**

Apply for graduation.

## Upon Completion of This Concentration Graduates Will Be Able To:

- Assist the operative team during the pre-operative, intra-operative, and post-operative phases of surgery.
- Prepare equipment and supplies for use during surgery.
- Function as "first scrub" on most surgical procedures.

#### Career Outlook

Graduates of this program qualify for surgical technologist positions in hospitals. The prospect for jobs is very good at the present time as the cost of health care rises. Graduates of the program qualify to take the national certification exam.

## **Theatre Concentration, A.A.**

This concentration prepares students to transfer to four-year colleges or universities to seek bachelor's degrees in theatre arts, theatre education (elementary or secondary), early childhood education, literature/drama, public speaking, or communication. Students should complete the requirements for the associate's degree before transferring to a four-year institution for the bachelor's degree. Graduates of this concentration may qualify to transfer using benefits of MassTransfer to a four-year state college or University of Massachusetts campus. For current information on eligible programs, see Transfer Options below.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- HUM-120 Self, Culture and Society Credits: 3 \* or
- Elective Elective Credits: 3 \*
  HUM-120 satisfies the Learning Community Requirement OR Choose one college-level course as an elective.
- THR-107 Acting | Credits: 3 \*
- ENG-111 College Writing I Credits: 3 \*
- GenEd-CCC Community & Cultural Contexts Credits: 3
   This course meets the General Education requirement for Community & Cultural Contexts
   Choose one course from Community and Cultural Contexts Menu
- GenEd-QPS Quantitative Problem Solving Credits: 3-4 \*
   This course meets the General Education requirement for Quantitative Problem Solving Choose one course from Quantitative Problem Solving Menu

Total Credits: 15-16

## **Semester 1 Advising Note**

- Students enrolling in this degree program can earn World Studies Emphasis certification simultaneously.
- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.

#### Semester 2

- THR-109 Play Production Workshop Credits: 3
- COM-171 Public Speaking and Professional Comm Credits: 3
- ENG-112 College Writing II Credits: 3 \*
- Elective- Mathematics Elective Credits: 3-4 Choose a college-level MAT course
- THR-108 Acting II Credits: 3

Total Credits: 15-16

## **Semester 2 Advising Note**

- Meet with an advisor to begin career planning activities.
- Begin exploring transfer options: attend a transfer workshop and the College transfer fair

#### Semester 3

• Elective- Theatre Elective Credits: 3

Choose a course with a prefix of THR (Elective may not be a required Theatre course)

• Elective- Behavioral or Social Science Elective Credits: 3

Choose one course from Behavioral or Social Science Electives menu

• Elective- Literature Elective Credits: 3

Choose one LIT course

GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning Choose any course from the Scientific Reasoning Menu

• Elective- Humanities Elective Credits: 3

Choose one course from Humanities Electives menu

**Total Credits: 16** 

## **Semester 3 Advising Note**

- Continue preparations for transfer: write essays for transfer institution, collect letters of recommendation, apply for transfer.
- Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

• Elective- Theatre Elective Credits: 3

Choose a course with a prefix of THR (Elective may not be a required Theatre course)

• Elective- Elective Credits: 3

Choose one college level course

• Elective- Literature Elective Credits: 3

Choose one LIT course

• Elective- Behavioral or Social Science Elective Credits: 3

Choose one course from Behavioral or Social Science Electives menu

GenEd-E General Education Elective Credits: 4

This course meets the General Education requirement for General Education Elective.

Choose a course from the Scientific Reasoning Menu

**Total Credits: 16** 

## **Semester 4 Advising Note**

Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Apply fundamental technique to the practice of theatre
- Demonstrate the ability to engage in the collaborative process
- Create work that demonstrates artistic intent
- Express and understanding of the connection between theatre and society`

#### Career Outlook

Graduates of this concentration with a strong theatre background qualify for careers in all aspects of print and broadcast journalism; radio/TV production; dance and expressive movement; art and art therapies, as they are related to counseling and psychology; elementary and secondary teaching; communication; and literature.

#### **Transfer Options**

#### MassTransfer A2B Link

University of Massachusetts Lowell

## Visual Design Option, A.S.

The Associate in Science Degree in Visual Design is intended to prepare students for transfer to 4-year design schools and for entry into the field of visual design. This program is comparable to the first two years of a typical four-year design program. It provides students with rigorous foundation and design courses, and pragmatic experience. Working through the program, students will produce a portfolio of design work that demonstrates their preparedness in industry-standard technical and visual-thinking skills essential for transfer into undergraduate design programs, and entry-level jobs.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- VMA-100 Cultures and Careers in Visual Art Credits: 3 \* Satisfies the Learning Community Requirement
- VMA-132 Typography I, Form, Style, & Hierarchy Credits: 3 \*
- VMA-102 Visual Design: Composition and Color Credits: 3
- VMA-104 Drawing from Observation Credits: 3
- VMA-114 History of Graphic Design Credits: 3

Total Credits: 15

## **Semester 1 Advising Note**

- New degree-seeking students enrolled in 9 credits or more must take a Learning Community Seminar or a Learning Community Cluster within their first year.
- VMA-132 Typography I, Form, Style, & Hierarchy and VMA-104 Drawing from Observation must be successfully
  completed to move through the program.
- Consider taking Gen. Ed. Courses during the summer.

#### Semester 2

- VMA-133 Typography II: Layout, Typesetting, and Systems Credits: 3 \*
- VMA-129 Visual Design with HTML & CSS Credits: 3 \*
- VMA-135 Digital Illustration Credits: 3
- VMA-106 Digital Imaging for Artists and Designers Credits: 3
- ENG-111 College Writing I Credits: 3

**Total Credits: 15** 

## **Semester 2 Advising Note**

- Students, please consult with a VMA faculty member before registering.
- Consider taking Gen. Ed. Courses during the summer.
- VMA-105 is not for VMA majors do not take. VMA-129 required for VMA-275 in semester 3 (Fall).
- VMA-133 required for VMA-232 in semester 3 (fall semester).

#### Semester 3

- VMA-232 Visual Design Lab I Credits: 3 \*
- VMA-275 Interactive Design I Credits: 3
- Elective Career Elective Credits: 3

Career Elective Courses:

VMA-103, VMA-118, VMA-130, VMA-140, VMA-205, VMA-207, VMA-261, VMA-262, VMA-299G

- ENG-112 College Writing II Credits: 3
- VMA-111 Introduction to Mass Media Credits: 3
- GenEd-QPS Quantitative Problem Solving Credits: 3-4

This course meets the General Education requirement for Quantitative Problem Solving.

Choose one course from Quantitative Problem Solving Menu

Total Credits: 18-19

## **Semester 3 Advising Note**

- Students, please consult with a VMA faculty member before registering.
- Consider taking Gen. Ed. Courses like ENG-112 and GenEd-QPS during the summer.
- VMA-232 only offered in the Fall. Must have VMA-232 for VMA-233.

#### Semester 4

- VMA-233 Visual Design Lab II Credits: 3
- Elective Career Elective Credits: 3

Career Elective Courses:

VMA-103, VMA-118, VMA-130, VMA-140, VMA-205, VMA-207, VMA-261, VMA-262, VMA-299G

• GenEd-SR Scientific Reasoning Credits: 4

This course meets the General Education requirement for Scientific Reasoning (Formerly Area 5)

Choose one course from Scientific Reasoning Menu

• GenEd-E General Education Elective Credits: 3-4

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

Total Credits: 13-14

## **Semester 4 Advising Note**

• Students, please consult with a VMA faculty member before registering.

- Consider taking Gen. Ed. Courses during the summer.
- At least one Gen Ed will have to be taken over the semester; the program is 64 credits.
- Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Approach visual design as a responsive process of problem identification, ideation, and creation.
- Apply design skills in typography, color, image, form, and materials to print and digital media projects.
- Produce portfolio content that is suitable for applying to four-year design programs, internships, and design-related employment.
- Demonstrate proficiency in software applications for drawing, image editing, and layout.
- Use industry standard procedures to produce files and materials for print and digital production.
- Plan and execute projects to meet deadlines and design objectives.
- Practice effective communication and presentation skills necessary to engage in professional visual design practice.
- Engage in creative and analytical discourse about design in order to communicate concepts to colleagues and clients.
- Cultivate habits of life-long learning and creativity.

#### Career Outlook

Graduates of this program will produce a portfolio of design work demonstrating foundation and entry-level skills and knowledge needed for careers in fields such as: advertising, print and digital book design, editorial design, environmental design, experience design, identity design, illustration, information design, in-house design, interaction design, motion graphics, packaging, print design, product design, typography, UX design, and web design.

## **Transfer Options**

#### **Transfer Advising Guides**

- Lesley University Visual Design Graphic-Interactive Program
- Lesley University Visual Design UX-Design Program

MassTransfer A2B Map

- Bridgewater State University
- Salem State University
- Westfield State University

#### MassTransfer A2B Link

University of Massachusetts Lowell

## Web Development Option, A.S.

This program prepares students for entry level positions in firms that specialize in web-based delivery and development of products, services, and web technologies. Additionally, students may fill entry-level positions in businesses that employ in-house staff to support and develop their own web delivery mechanisms for such support services as company directories and real time content presentation. The program also provides students with a sound basis to enter the ever-growing opportunities available for independent web development. Students are trained in the concepts and applications of leading-edge web delivery mechanisms such as HTML5, CSS3, JavaScript, PHP/MySQL, and XML (Extensible Markup Language) languages, advanced graphical techniques and database incorporation into web delivery technologies. The program prepares students to apply their knowledge towards the pursuit of Webmaster certification through an independent certification agency.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing | Credits: 3 \*
- CMT-111 HTML5 Credits: 3 \*
- COM-171 Public Speaking and Professional Comm Credits: 3 \*
- VMA-105 Digital Imaging With Photoshop Credits: 3
- GenEd-QPS Quantitative Problem Solving Credits: 3-4
   This course meets the General Education requirement for Quantitative Problem Solving Choose one course from Quantitative Problem Solving Menu

Total Credits: 15-16

#### Semester 2

- ENG-112 College Writing II Credits: 3
- CMT-113 JavaScript Credits: 3 \*
- CMT-125 Cascading Style Sheets Credits: 3 \*
- GenEd-SR Scientific Reasoning Credits: 4

  This course meets the General Education requirement for Scientific Reasoning
- GenEd-CW Creative Work Credits: 3 \*
   This course meets the General Education requirement for Creative Work

**Total Credits: 16** 

## **Semester 2 Advising Note**

Meet with an advisor to begin career planning activities.

#### Semester 3

- CMT-225 jQuery Credits: 3 \*
- CMT-228 Web Design With Ajax Credits: 3
- CMT-241 PHP/MySQL Credits: 3
- VMA-111 Introduction to Mass Media Credits: 3 \*
- CMT-117 XML Credits: 3 \*

**Total Credits: 15** 

## **Semester 3 Advising Note**

Complete a pre-graduation check with an advisor in LifeMap

#### Semester 4

- CMT-227 Javascript Object Notation Credits: 3
- CMT-235 Node.js Credits: 3
- CMT-250 Mobile Web Applications Credits: 3
- Elective- Career Elective Credits: 3

Career Elective Options:

VMA-132 Typography I, Form, Style, & Hierarchy, CMT-299 Web Development Internship

GenEd-E General Education Elective Credits: 3

This course meets the General Education requirement for General Education Elective.

Choose a course from the General Education Scientific Reasoning, Community/Cultural Contexts, Creative Work or Elective Menus.

**Total Credits: 15** 

## **Semester 4 Advising Note**

• Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Design, implement, publish, and maintain websites in support of creating a web presence for businesses and organizations.
- Create animated, event driven multimedia content for web delivery.
- Construct, extract, transform, and present database resident content directly into a web delivery mechanism.
- Construct event driven action scripts within a web page to respond to user stimulations and provide dynamic results in a real time environment.

#### Career Outlook

Graduates of this program will qualify as web developers and for web development support positions, and will have a solid basis for pursuing certification as a Webmaster

## **Certificate**

## **Accounting Information Certificate**

This program prepares students for entry-level training positions in firms where accounting departments may be specialized or all-inclusive (examples: accounts payable, accounts receivable, or inventory control). In addition, the program certifies those who are currently performing bookkeeper functions at their present employment.

The certification enhances students' opportunities for growth. The program prepares graduates with skills directly transferable to the workplace through a combination of technical accounting training and financial accounting. The certificate program prepares students who feel that a degree program is not an appropriate choice.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ACC-101 Principles of Accounting | Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3 \*
- MAT-181 Statistics | Credits: 3 \*

**Total Credits: 9** 

#### Semester 2

- ACC-102 Principles of Accounting II Credits: 3 \*
- ACC-105 Accounting Information Systems Credits: 3
- CIT-234 Decision Support Using MS Excel Credits: 3

**Total Credits: 9** 

#### Semester 3

- ACC-201 Intermediate Accounting I Credits: 3 \*
- Elective- Concentration Elective Credits: 3

Choose Concentration Elective from:

ACC-202 Intermediate Accounting II, ACC-207 Cost Accounting, ACC-203 Personal Income Tax, FIN-210 Financial Management, CIT-128 Database Design with MS Access

• Elective- Concentration Elective Credits: 3

Choose Concentration Elective from:

ACC-202 Intermediate Accounting II, ACC-207 Cost Accounting, ACC-203 Personal Income Tax, FIN-210 Financial Management, CIT-128 Database Design with MS Access

**Total Credits: 9** 

## **Semester 3 Advising Note**

- Gather recommendation letters from faculty and staff.
- Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Describe and demonstrate an understanding of cash vs. accrual accounting.
- Compare and contrast different concepts of depreciation of property, plant and equipment assets.
- Explain in detail the nature of receivables, payables and inventory.
- Analyze and evaluate revenues, expenses cash flows, and behavior of cost.
- Assess and analyze integrated accounting systems, setup, and applications.
- Use spreadsheet models addressing a range of practical and business applications.
- Record transactions and input data from initial investment in the business cycle, ending entries that are necessary to ready the books for period-ending financial statements.
- Prepare and evaluate financial statements and process and maintain computerized records, accounts, and information.

#### Career Outlook

This program qualifies graduates for entry-level accounting, billing, or advanced bookkeeping positions. Students may also transfer many of these courses into the following degrees: Associate in Science Degree: Business Administration Accounting option or Business Administration Management option.

## **Android Mobile App Certificate**

This program prepares students to be able to have an entry-level position as a mobile app developer in an Android environment.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CIT-102 IT Career Exploration Credits: 1
- CIT-113 Information Technology Problem Solving Credits: 3 \* or
- CIT-110 Applications/Concepts Credits: 3 \*
- CSC-120 Intro to Comp Sci & Object Oriented Prog Credits: 4 \*
- CSC-129 Mobile App Development Credits: 3 \*
- CSC-131 Introduction to Creating Mobile Apps Credits: 3 \*

Total Credits: 10

## Semester 2 Spring

- CSC-135 Design for Mobile Devices Credits: 3 \*
   This course is only offered during the Spring Semester
- CSC-229 Programming With Android I Credits: 3 \*
  This course is only offered during the Spring Semester

**Total Credits: 6** 

## **Semester 2 Spring Advising Note**

- Apply for graduation
- Any BHCC CIT programming course may be used as a prerequisite for CSC-229

## Upon Completion of This Concentration Graduates Will Be Able To:

- Tackle large problems by systematically breaking them down into smaller, more manageable problems.
- Use their knowledge, skills, and resources to effectively adapt to change.
- Utilize a foundation in programming practices and principles.
- Utilize skills and competencies required to program basic Android applications in Java.
- Utilize skills and competencies required to design basic mobile applications on several device platforms.

#### Career Outlook

This Certificate Program is designed to align with the needs specified by industry partners. This option will have stackable credentials ideal for the working professional who is not seeking a degree, but looking to enhance their existing information technology skills.

## **Apple Mobile App Starter Certificate**

This program prepares students to be able to have an entry-level position as a mobile app developer in an iOS (Apple device) environment.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CSC-120 Intro to Comp Sci & Object Oriented Prog Credits: 4 or
- CIT-110 Applications/Concepts Credits: 3
- CIT-113 Information Technology Problem Solving Credits: 3
- CSC-129 Mobile App Development Credits: 3 \*
   Fall Taught in class
   Spring Taught online

- CSC-131 Introduction to Creating Mobile Apps Credits: 3 \*
- CIT-102 IT Career Exploration Credits: 1

Total Credits: 10

#### Semester 2

- CSC-135 Design for Mobile Devices Credits: 3 \*
   NOTE: VMA-275 Interactive Design I can also satisfy this requirement CSC-135 Taught in Spring Only
- CSC-238 Programming for iOS | Credits: 3 \*
   Taught in Spring Only

Total Credits: 6

## **Semester 2 Advising Note**

This certificate is intended to be completed in two semesters.

Suggested courses to take:

- CSC-125 Python Programming Credits: 3
- CSC-236 SQL Programming Credits: 3
- CSC-239 JAVA Programming Credits: 4

## Upon Completion of This Concentration Graduates Will Be Able To:

- Tackle large problems by systematically breaking them down into smaller, more manageable problems.
- Use their knowledge, skills, and resources to effectively adapt to change.
- Utilize a foundation in programming practices and principles.
- Utilize skills and competencies required to program basic iOS applications.
- Utilize skills and competencies required to design basic mobile applications on several device platforms.

#### Career Outlook

This Certificate Program is designed to align with the needs specified by industry partners. This option will have stackable credentials ideal for the working professional who is not seeking a degree, but looking to enhance their existing information technology skills.

## **Central Processing Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

## Admission Requirements

- Diploma High School diploma or GED
- Session Attend mandatory information session
- Test Complete the College Placement Test
- ENG-090 Writing Skills | Credits: 3

**Total Credits: 3** 

## **Admission Requirements Advising Note**

- Program offered at the Chelsea Campus as a part-time evening program.
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal
  Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more
  information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

#### Semester 1

- SGT-109 Central Processing I Credits: 2 \*
- SGT-109A Central Processing I Clinical Credits: 2 \*
- NHP-180 Medical Terminology Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3

Total Credits: 10

## **Semester 1 Advising Note**

- Students must maintain a grade of C or better in all surgical technology courses.
- Program offered at the Chelsea Campus as a part-time evening program.

#### Semester 2

- SGT-110 Central Processing II Credits: 2 \*
- SGT-110A Central Processing II Clinical Credits: 2 \*
- SGT-111 Central Processing Clinical Credits: 2 \*
- AHE-117 Communication Skills for Health Care Credits: 3

**Total Credits: 9** 

## **Semester 2 Advising Note**

- Students must maintain a grade of C or better in all surgical technology courses.
- Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Qualify for the CBSPD Central Processing Technician certifying exam.
- Support the operative team during surgical procedures.
- Prepare equipment and supplies for use throughout the hospital.
- Assist in resource allocation and budget preparation for central processing.

#### Career Outlook

Graduates of this program qualify as Central Processing Technicians who perform duties in one or more of the functional areas of sterile processing and distribution, materials management, and distribution. Graduates qualify for positions in healthcare facilities and industry. Graduates qualify for advanced responsibilities within the profession, and job prospects are excellent.

## **Data Analytics Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CIT-113 Information Technology Problem Solving Credits: 3 \*
   or
- CIT-110 Applications/Concepts Credits: 3 or
- CSC-120 Intro to Comp Sci & Object Oriented Prog Credits: 4
- MAT-181 Statistics | Credits: 3 \*

**Total Credits: 6** 

#### Semester 2

- CSC-236 SQL Programming Credits: 3 \*
- CIT-137 Intro to Big Data with R & R-Studio Credits: 4 \*
- CIT-234 Decision Support Using MS Excel Credits: 3 \*
- CIT-268 Operating Systems Credits: 3 \*

Total Credits: 13

#### Semester 3

- CSC-125 Python Programming Credits: 3 \*
- CIT-187 Data Analytics and Predictive Analysis Credits: 3 \*
- CSC-240 Database Programming Credits: 3 \*

**Total Credits: 9** 

## Upon Completion of This Concentration Graduates Will Be Able To:

- Design and code complex queries in SQL and PSQL
- Demonstrate the use of procedures, cursors, triggers, collections, and manipulation of tables
- Utilize existing databases, and convert the data into analyzable formats in R and Python
- Demonstrate the use of Pandas and scikit-learn libraries in Python
- Design basic algorithms associated with machine learning such as CART and Regression in R

#### Career Outlook

Students who complete this program will be prepared for internships and entry-level data analysis positions in a wide variety of companies and organizations.

## **Data Management (Fast-Track) Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CIT-110 Applications/Concepts Credits: 3 \*
- CIT-113 Information Technology Problem Solving Credits: 3 \*
- CSC-120 Intro to Comp Sci & Object Oriented Prog Credits: 4 \*

Total Credits: 3-4

#### Semester 2

- MAT-181 Statistics | Credits: 3 \*
- CIT-137 Intro to Big Data with R & R-Studio Credits: 4 \*
- CSC-236 SQL Programming Credits: 3 \*
- CIT-234 Decision Support Using MS Excel Credits: 3 \*

**Total Credits: 13** 

## **Semester 2 Advising Note**

Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Design and code complex queries.
- Find databases, and convert the data into readable and analyzable formats.

- Support Excel functions and databases.
- Support basic data gathering and manipulation with R programming.

#### Career Outlook

Graduates of this program qualify for entry-level database and spreadsheet support positions in a wide range of organizations.

## **Early Childhood Development Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ECE-103 Child Growth and Development Credits: 3 \*
- ECE-106 Program Environments Credits: 3 \*
- ENG-111 College Writing I Credits: 3 \*
- HUM-120 Self, Culture and Society Credits: 3 or
- Elective Career Elective Credits: 3
  See career elective options in semester note

Total Credits: 12

## **Semester 1 Advising Note**

- Employment in Early Childcare and Education requires criminal background checks to ensure the safety of young
  children. Where this program does not require students to undergo a CORI background check, students with concerns
  about completing a CORI background check prior to entering employment in the field should contact the Department
  Chair before beginning this program.
- ECE-103 and ECE-106 are courses required to be certified by Massachusetts Department of Early Education and Care (DEEC).
- No other developmental Psychology courses may be substituted for ECE-103. Only ECE-103 is allowed for this degree plan and others will not be counted toward qualifications for certification by Massachusetts DEEC.
- Career electives: ECE-108, ECE-151 through ECE-168, ECE-207, ECE-209, ECE-210, ECE-223, EDU-102 or INT-123

#### Semester 2

- ECE-101 Guidance and Discipline Credits: 3 \*
- ECE-104 Curriculum in Early Childhood Education Credits: 3 \*

**Total Credits: 6** 

## **Semester 2 Advising Note**

- ECE-101 and ECE-104 may not be taken unless student has received a C or better in ECE-103 in previous semester. Students without C or better in any ECE course will be barred from practicum until this measure is completed.
- ECE-101 and ECE-104 are courses required to be certified by the Massachusetts Department of Early Education and Care.
- Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Use knowledge of child development and relationships with children and families to understand children as individuals
  and plan for their unique development by organizing environments which facilitate development in all developmental
  areas.
- Design and implement developmentally appropriate learning experiences using methods and materials which promote
  growth and development.
- Work with parents, families, and community leaders to support growth and development of children by engaging each child in meaningful experiences.
- Observe children in their care to analyze and synthesize information about those children so as to improve their work with children, families, and communities.
- Analyze, evaluate and strengthen their work with children by reflecting upon effective practices and collaborating with other professionals in the field.

#### Career Outlook

Graduates of this program qualify as teacher's aides in the State of Massachusetts. For more information on minimal requirements for employment, contact the Department chair.

## Criminal Offender Record Information and Sex Offender Registry Information Checks

As a prerequisite for a clinical placement in the Childhood Development Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. The College is authorized by the Commonwealth's Department of Criminal Justice Information Services, pursuant to Massachusetts General Laws, Chapter 6, Sections 167-178 B, 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 College CORI/SORI Officer at 617-228-2193.

# Early Childhood Development with Child Development Associate Credential Certificate

The Early Childhood Development Associate (CDA) Credential Certificate program at Bunker Hill Community College prepares students who wish to be certified by the CDA Council for Professional Recognition. The CDA is a performance-based assessment of childcare workers, home visitors, center, and family childcare providers. Our CDA program provides students with the 120 hours of training needed for the CDA credentialing program. Our program includes formal supervised practicum and portfolio development in Early Childhood Education centers to help students gain hours of professional work required by the Council for Professional Recognition. Student will earn 150 hours of work experience in the required ECE-223 CDA

Professional Portfolio&Practicum development course. Students requiring more work experience in the field will take ECE-224 CDA Professional Portfolio&Practicum2 for an additional 150 hours.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Admission Requirements

- Age Must be 18 years of age
- **Diploma** High School diploma or GED
- Hours Must have completed specific number of hours in ECE see note
- Courses Completed minimum of three ECE courses with C or better

## **Admission Requirements Advising Note**

- Must be at least 18 years of age and have U.S. Work Authorization
- Must have completed 120 hours of formal training in Early Childhood Education in subject areas covered by the Early Childhood Development with Child Development Associate Credential Certificate
- Must have completed within the last 3 years 300 hours of professional work experience in a group setting supervised by a professional Early Childhood educator
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal
  Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more
  information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

#### Semester 1

- ECE-103 Child Growth and Development Credits: 3 \*
- ECE-106 Program Environments Credits: 3 \*

**Total Credits: 6** 

## **Semester 1 Advising Note**

- Employment in Early Childcare and Education requires criminal background checks to ensure the safety of young
  children. Students in the Early Childhood Development program will undergo CORI background checks before starting
  ECE-223 CDA Professional Portfolio&Practicum, and ECE 224 CDA Professional Portfolio&Practicum2. Students
  with concerns about this requirement should contact the Department Chair before beginning this program.
- ECE-103 and ECE-106 are courses required to be certified by Massachusetts Department of Early Education and Care (EEC).
- PSY-209 Child Psychology may not be substituted for ECE-103 Child Growth and Development.

#### Semester 2

ECE-104 Curriculum in Early Childhood Education Credits: 3 \*

**Total Credits: 3** 

## **Semester 2 Advising Note**

ECE-104 is required to be certified by the Massachusetts Department of Early Education and Care (EEC).

#### Semester 3

- ECE-223 CDA Professional Portfolio&Practicum Credits: 3 \*
- Elective- Early Childhood Elective Credits: 3

  Early Childhood Elective Options: ECE-101 Guidance and Discipline, ECE-108 Infant/Toddler Curriculum Development, ECE-224 CDA Professional Portfolio&Practicum2
- Elective- Early Childhood Elective Credits: 3
   Early Childhood Elective Options: ECE-101 Guidance and Discipline, ECE-108 Infant/Toddler Curriculum Development, ECE-224 CDA Professional Portfolio&Practicum2

**Total Credits: 9** 

## **Semester 3 Advising Note**

- ECE-101 is a course required to be certified by the Massachusetts Department of Early Education and Care (EEC).
- ECE-108 is required to be certified as an infant toddler teacher by the Massachusetts Department of Early Education and Care (EEC).
- ECE-223 and ECE-224 require that students are working in a classroom for development of portfolio and completion
  of the credentialing requirements. Students are required to pay their own credentialing fee at the end of the program
  upon taking the national test and sitting for other requirements of the CDA Council for Professional
  Recognition. Usually, it is recommended that students complete ECE-223 before moving to ECE-224, however, a
  waiver of this requirement is possible if student is completing program and will be ready to graduate at the end of this
  third semester.

## Upon Completion of This Concentration Graduates Will Be Able To:

- Use knowledge of child development and relationships with children and families to understand children as individuals
  and plan for their unique development by organizing environments which facilitate development in all developmental
  areas.
- Design and implement developmentally appropriate learning experiences using methods and materials which promote
  growth and development.
- Work with parents, families, and community leaders to support growth and development of children by engaging each child in meaningful experiences.
- Observe children in their care to analyze and synthesize information about those children so as to improve their work with children, families, and communities.
- Analyze, evaluate and strengthen their work with children by reflecting upon effective practices and collaborating with other professionals in the field.

#### Career Outlook

Graduates of this certificate program may qualify for employment in a variety of settings, including day care centers, preschools, head start programs, family home care. Upon completion of this enhanced certificate, graduates are eligible to apply for the national program known as Child Development Associate Credential and will be recognized by DEEC as lead teacher qualified.

## General Advising Notes For This Program

- All developmental courses: RDG-090, RDG-095 or ESL-098, ENG-090 and ENG-095 must be taken and completed
  with a grade of C or higher before beginning the first semester towards a two semester certificate plan.
- Students are encouraged to take fewer courses and go slower if they have life responsibilities with family, work and
  personal challenges; these part-time students and/or those taking 1, 2 or 3 per semester are encouraged to use a longer
  route to completion to assure quality work.
- ECE-103 must be completed in first semester with a C or better to move to other ECE courses in subsequent semesters. All ECE courses after the first semester require ECE-103 to be completed with this grade requirement.
- No other developmental Psychology courses may be substituted for ECE-103. Only ECE-103 is allowed for this degree plan and will not be counted toward qualifications for certification by Massachusetts DEEC.

## **Entrepreneurship Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ACC-101 Principles of Accounting I Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3
- MAN-107 Introduction to Entrepreneurship Credits: 3 \*
- MAN-105 Principles of Marketing Credits: 3 \*
- MAN-111 Principles of Management Credits: 3

Total Credits: 15

#### Semester 2

- MAN-204 Entrepreneurship and Innovation Credits: 3
- Elective- Career Elective Credits: 3
  Choose one course from ACC, BUS, FIN, or MAN.
- ACC-105 Accounting Information Systems Credits: 3
- MAN-112 Organizational Behavior/Design Credits: 3
- BUS-201 Business Law I Credits: 3

Total Credits: 12

## Upon Completion of This Concentration Graduates Will Be Able To:

- Analyze viability of opportunities from various points of view.
- Understand the leadership skills and personal characteristics needed for success in starting and managing a small business.
- Develop and implement a business plan.
- Prepare a set of financial statements for a service, merchandising or manufacturing business that is structured as a sole proprietorship, partnership or a corporation.

- Analyze a set of financial statements to determine strengths or weaknesses of the business.
- Understand the basic principles of business law, contracts and agency, intellectual property and product liability.
- Demonstrate proficiency in computer applications as required to operate and manage a small business.
- Examine management theory and practice, and explain basic business methodology and management issues.
- Be able to identify and analyze the marketing strategies of an organization that can be used to advance its mission.
- Understand the techniques useful in achieving the full potential from limited resources and improving productivity and
  effectiveness.

#### Career Outlook

This certificate prepares graduates to start and manage a small business, and to move into management and supervisory positions.

## **Excel Applications Support Specialist Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CIT-110 Applications/Concepts Credits: 3 \*
- CIT-133 Introduction to Microsoft Office Credits: 3 \*
- CIT-162 CISCO Networking | Credits: 3 \*
- CIT-182 PC Hardware & Software Credits: 3 \*
- OIM-100 PC Keyboarding Techniques Credits: 1

Total Credits: 13

## **Semester 1 Advising Note**

• Students can also complete the Challenge Exam for OIM-100. Please email pla@bhcc.edu for more information.

#### Semester 2

- CIT-118 Principles of Internet & Info Security Credits: 3 \*
- CIT-230 Help Desk Techniques Credits: 3 \*
- CIT-234 Decision Support Using MS Excel Credits: 3 \*
- CIT-250 Collaboration, Communication, and Integrating Credits: 3
- ACC-101 Principles of Accounting I Credits: 3

Total Credits: 15

## **Semester 2 Advising Note**

Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Use spreadsheet models, analyze and evaluate revenues, expenses and cash flows.
- Understand and utilize collaboration techniques of the Microsoft Office Suite.
- Understand the requirements of securing data and computer systems.

#### Career Outlook

Most organizations, across all industry segments have increased utilization of Excel software. As a result, the employment prospects for students completing this certificate program are extremely high. Over 1,500 requests for Excel skills can be found through Boston-area searches of job placement websites.

## Fire Protection and Safety Certificate

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing | Credits: 3
- FPS-111 Fire Service, This Century and the Next, What Should We Expect? Credits: 3 \*
- FPS-119 Principles of Fire and Emergency Services Safety and Survival Credits: 3 \*
- FPS-123 Principles of Emergency Services Credits: 3 \*
- FPS-135 Fire Behavior and Combustion Credits: 3 \*

**Total Credits: 15** 

## **Semester 1 Advising Note**

• This program is offered in the late afternoon and evening.

#### Semester 2

- FPS-133 Fire Protection Systems Credits: 3 \*
- FPS-223 Building Construction for Fire Protection Credits: 3 \*
- Elective Career Elective Credits: 3 \*

Choose from the following options:

FPS-125 Hazardous Materials Chemistry, FPS-127 Fire Protection Hydraulics and Water Supply, FPS-221 Strategy and Tactics

FPS-139 Fire Prevention Services Safety and Survival Credits: 3 \*

Total Credits: 12

## **Semester 2 Advising Note**

• Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Understand the principles of fire protection and safety.
- Demonstrate preparedness to be a fire company officer.
- Understand the principles of arson investigation.
- Demonstrate familiarity with inspections for fire prevention.
- Demonstrate preparedness to take promotional civil service fire exams.

#### Career Outlook

Graduates of this program qualify for careers in municipal, state and federal agencies, industry, and insurance companies. Graduates also qualify to transfer to the two-year Fire Protection and Safety Program, A.S. This program also prepares fire fighters who wish to upgrade their career status.

## **Health IT Systems Support Certificate**

The Health IT Systems Support Certificate Program is designed for students who wish to enter the Healthcare IT field and for current healthcare workers who wish to apply Healthcare IT competencies to their current skillset. The program will provide students with the knowledge and skills concerning Healthcare IT privacy, security, networking, and mobility to successfully understand the Healthcare IT industry and provide hardware, software, networking, security and systems support in the healthcare environment. Students will also gain the skills in health information management and workflow analysis needed to utilize Healthcare IT effectively to manage patient care, improve communications, and support secure information sharing. The Health IT Systems Support Certificate Program is designed to be "Stackable", allowing students to apply completed courses to additional IT degrees and IT certificates.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CIT-113 Information Technology Problem Solving Credits: 3 \* or
- CIT-110 Applications/Concepts Credits: 3 \*
- CIT-183 Healthcare IT Concepts I Credits: 3
- CIT-182 PC Hardware & Software Credits: 3 \*
- CIT-162 CISCO Networking | Credits: 3 \*

Total Credits: 12

## **Semester 1 Advising Note**

- CIT-182 is the equivalent to Ciscos' IT Essentials A+
- CIT-162 is the equivalent to Cisco's CCNA R&S Semester 1
- Upon completion of CIT-182, prepare and take the CompTiA A+ certifications
- Speak to an Advisor about internship and career opportunities.

#### Semester 2

- CIT-167 CISCO Networking II Credits: 3 \*
- CIT-288 Healthcare IT Concepts II Credits: 3 \*
- CIT-262 Wireless Technology Credits: 3
- CIT-267 CISCO Networking III Credits: 3

Total Credits: 12

## **Semester 2 Advising Note**

- CIT-167 is the equivalent to Cisco's CCNA R&S Semester 2
- Upon completion of CIT-167, prepare and take the Cisco Certified Networking Technician certification.
- Upon completion of CIT-288, prepare and take the Certified Healthcare Technology Specialist certification.
- Speak to an Advisor about internship and career opportunities.
- Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Apply for entry-level Healthcare IT positions.
- Apply for entry-level Healthcare IT Systems Support positions.
- Apply for entry-level Healthcare Hardware/Software Support positions.
- Apply for entry-level Healthcare Network Support positions.
- Achieve the national Healthcare Technology and Information Management competencies.
- Apply Healthcare IT competencies to current Healthcare positions.
- Prepare to take the CompTIA A+ Certification Examination(s).
- Prepare to take the Cisco CCENT Certification Examination

#### Career Outlook

The Health Information Technology Certificate Program prepares students for entry-level Healthcare IT careers in a variety of healthcare settings including physician offices, clinics, hospitals, and with third-party contractors. Students also gain the knowledge and skills needed to achieve the national Health Information Technology competencies and will be prepared to take multiple IT certification exams.

## **Hotel and Restaurant Management Certificate**

This option prepares students in skills training and decision making in such crucial areas as guest services, human resources, and hotel and restaurant operations. A variety of teaching methods lead students to a better understanding of the importance of the hotel and restaurant industry as an economic growth vehicle and as a method of working with a culturally diverse workforce.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing I Credits: 3 \*
- HRT-121 Business in Hospitality Credits: 3 \*
- ACC-101 Principles of Accounting I Credits: 3
- HRT-131 Front Office Operations Credits: 3
- HRT-112 Food and Beverage Management Credits: 3

**Total Credits: 15** 

#### Semester 2

- HRT-231 Advanced Lodging Operations Credits: 3
   Spring course
- CIT-110 Applications/Concepts Credits: 3
- CUL-111 Food Service Sanitation and Skills Credits: 3
- HRT-134 Culinary Operations Credits: 4

**Total Credits: 13** 

## Upon Completion of This Concentration Graduates Will Be Able To:

- Perform technical skills in basic cooking and kitchen operations, basic skills in front desk, reservations and housekeeping procedures.
- Perform administrative skills in basic business bookkeeping procedure, business cost controls, and planning and coordinating hotel and restaurant operations.
- Demonstrate conceptual skills necessary to understanding the needs of the hotel and restaurant industry.

#### Career Outlook

Graduates of this option qualify for entry level managerial positions as well as for management training programs in hotels and restaurants. Students also qualify to transfer all credits to the Associate in Science Degree in Hospitality Management.

## **IT Support Certificate**

The purpose of this IT Support Certificate program is to provide our students the necessary courses and skills so that they can earn an IT industry certification credential. Having that industry credential increases the likelihood that our students will land an entry level job in the IT Support field. IT industry credentials that are well-known industry wide for which this program will prepare students include the following; Comp TIA A+, Comp TIA Network+, Comp TIA Security+, Certified Wireless Network Associate (CWNA), and RedHat Linux CSA/CE certifications.

The first courses in this certificate program build a solid foundation in Computer Systems and Applications. PC Hardware and Software, entry level networking, and Operating Systems and Systems Administration activities. The second semester goes much deeper in the areas of Cisco networking, including Wireless technology. Students will also gain detailed knowledge in IT Security, and Linux Systems Administration skills medium and enterprise class IT organizations.

The IT Support Certificate program will provide our students with focused, current, and relevant technical expertise and skills to prepare for and earn industry-recognized certification credentials, and enable our students to land entry-level jobs as IT Support technicians in the IT field. Lastly, students who complete this certificate program can complete the Networking and Security Certificate Program by successfully completing only four additional courses.

#### Semester 1

- CIT-110 Applications/Concepts Credits: 3
- CIT-182 PC Hardware & Software Credits: 3
- CIT-162 CISCO Networking | Credits: 3 \*
- CIT-230 Help Desk Techniques Credits: 3

Total Credits: 12

## **Semester 1 Advising Note**

- Part-time students should take CIT-162 CISCO Networking I first because it is a pre- or co-requisite for many classes in this certificate.
- CIT-182 is the equivalent to Cisco's IT Essentials, preparing students for the CompTIA A+ certification;
- CIT-162 is the equivalent to Cisco's CCNA Course 1;
- CIT-230 prepares students for Zendesk Support Administrator certification.

#### Semester 2

- CIT-167 CISCO Networking II Credits: 3
- CIT-262 Wireless Technology Credits: 3
- CIT-268 Operating Systems Credits: 3
- CIT-264 IT Security Credits: 3

Total Credits: 12

## **Semester 2 Advising Note**

- CIT-167 is the equivalent to Cisco's CCNA Course 2;
- CIT-262 prepares students for the Certified Wireless Network Administrator (CWNA) or equivalent certification;
- CIT-264 prepares students for the CompTIA Security+ certification exam;
- CIT-268 prepares students for Red Hat Certified System Administrator certification exam.

## Upon Completion of This Certificate Graduates Will Be Able To:

- Troubleshoot, repair, update, and build a complete PC computer system
- Build, analyze, troubleshoot, computer networks
- Create, test, analyze, debug, and successfully develop Python programs to solve problems in Networking and Information Security
- Build, install, and provide system administration duties for both desktop and server class computers
- Demonstrate deep understanding of Cisco network technology and systems including wireless systems
- Demonstrate a deep understanding of Information Security threats, countermeasures, mitigation strategies, and "Best Practices" for Information Security practitioners in today's environment

#### Career Outlook

The IT Support Certificate prepares students with knowledge and skills required for entry and associate level IT support positions. Completing credentialing exams will make students stronger candidates for a broad range of IT support positions including Network and Computer Systems Administrators, Computer Network Support Specialists, and Computer Support Specialists. In 2021, the U.S. Department of Labor reported the following median wages for positions in the Greater Boston Area for the following positions: Computer Support Specialists (\$62,400), Computer Network Support Specialist (\$89,870), and Network and Computer Systems Administrator (\$100,670).

## **Magnetic Resonance (MR) Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Admission Requirements

- AART Card Submit copy of current ARRT
- Letter Submit letter of interest
- Recommendation Submit letter of recommendation from a supervisor on letterhead
- Clinical Submit a letter of guarantee of clinical site for the Clinical Internship

## **Admission Requirements Advising Note**

- All MR students are required to undergo a physical examination; complete the necessary immunization forms, including three (3) Hepatitis B series; have malpractice and health insurance
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal
  Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more
  information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

#### Semester 1 Fall

MRC-111 MR Concepts I Credits: 3 \*

**Total Credits: 3** 

## Semester 2 Spring

MRC-211 MR Concepts II Credits: 3 \*

MRC-299 MR Clinical Internship Credits: 3 \*

**Total Credits: 6** 

## **Semester 2 Spring Advising Note**

• Apply for graduation

## Upon Completion of This Concentration Graduates Will Be Able To:

- Demonstrate competence in the essential aspects of MR imaging at the entry-level.
- Understand the importance of life-long continuing education in the field of MR imaging.

#### Career Outlook

It is expected that the number of positions in this modality will continue to grow in the near future. Opportunities exist in hospitals, outpatient clinics and free-standing medical imaging facilities.

#### **Medical Assistant Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Admission Requirements

- Diploma High School diploma or GED
- Session Attend Mandatory information session
- ENG-095 Writing Skills II Credits: 3

**Total Credits: 3** 

## **Admission Requirements Advising Note**

- This program is Offered for a Fall and Spring start at the Chelsea Campus only
- Prior to clinical placement this program requires that all students undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more information, please contact the College CORI/SORI Officer at 617-228-2193 or visit

https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

#### Semester 1

- AHE-110 Principles of Clinical Practice Credits: 3 \*
- AHE-112 Medical Assistant Skills Credits: 3 \*
- NHP-180 Medical Terminology Credits: 3 \*
- AHE-104 Understd Hum Beh for Health Care Prof, Behavior for the Health Care Professional Credits: 3 \*
- PSY-213 Human Growth and Development Credits: 3 \*
- OIM-102 Medical Computer Applications Credits: 3 \*
  or
- CIT-110 Applications/Concepts Credits: 3 \*

**Total Credits: 15** 

## **Semester 1 Advising Note**

- Students must achieve a B- in AHE-110 and AHE-112 to proceed to the second semester.
- Review graduation requirements with Program Coordinator

#### Semester 2

- AHE-201 Advanced Clinical Skills Credits: 3 \*
- AHE-205 Practicum Medical Assistant Credits: 3 \*
- AHE-209 Allied Health Practicum Seminar Credits: 1 \*
- OIM-170 Medical Office Procedures Credits: 3 \*
- Elective- Elective Credits: 3
   Choose one college-level course. Recommended: College Writing 1 (ENG-111); Principles of Sociology (SOC-101);
   Human Biology/Lab (BIO-108).

Total Credits: 13

## **Semester 2 Advising Note**

- Attend a resume writing workshop
- Participation in employer panel
- Review graduation requirements with Program Coordinator
- Submit graduation application online

## Upon Completion of This Concentration Graduates Will Be Able To:

- Assist with the examination and treatment of patients in clinical areas, phlebotomy, and EKG.
- Perform computer and medical office tasks.

#### Career Outlook

Graduates of this program qualify for employment in hospitals, clinics, health maintenance organizations, and physicians' offices as multi-skilled workers, medical assistants, medical aides, clinical assistants, and clinical practice assistants.

## **Medical Information Management Assistant Certificate**

This certificate program is designed to prepare students to work as professionals within a medical office environment. Students learn basic medical terminology, which is then applied using MediSoft patient accounting software, a patient accounting software package. It also prepares students in third-party billing and coding. All program requirements may be applied to the Associate in Science Degree: Office and Information Management Program.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- OIM-103 Microsoft Word | Credits: 3 \*
- OIM-105 Skills for Administrative Success Credits: 3
- CIT-110 Applications/Concepts Credits: 3 \*
- NHP-180 Medical Terminology Credits: 3 \*
- OIM-132 Administrative Business Communication I Credits: 3 \*

### Semester 2

- OIM-106 Records and Information Management Credits: 3 \*
- OIM-112 Microsoft Word II Credits: 3 \*
- OIM-190 Medical Information Management Credits: 3
- OIM-200 Introduction to Physicians' Billing Credits: 3

Total Credits: 12

### **Semester 2 Advising Note**

Apply for graduation.

### Upon Completion of This Certificate Graduates Will Be Able To:

- Demonstrate proficiency in computer operations and software applications unique to a medical setting.
- Demonstrate proficiency in understanding and using medical terminology.
- Use the complete range of Microsoft applications effectively and efficiently.
- Have demonstrated proficiency in medical office operations and communication media.

#### Career Outlook

Graduates of the program qualify for job opportunities in physicians' and dentists' offices, clinics, HMOs, community health agencies, long-term care facilities, and hospitals. They also qualify for jobs within large corporations that provide on-site health services, engage in medical research, or produce medical products. Graduates will qualify for entry-level positions such as medical receptionists, medical records management specialists, patient service representatives, and medical administrative assistants. Students also may qualify for at-home opportunities as medical transcriptionists.

## **Medical Laboratory Assistant Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Admission Requirements

- Diploma High School diploma or GED
- Session Attend Mandatory information session
- BIO-108 Human Biology/Lab Credits: 4

## **Admission Requirements Advising Note**

Students are encouraged to meet with the Program Director to discuss the application process and to explore the profession.

If you are accepted into the program, you must complete the following steps:

- Complete a CORI Form during the first semester in the Program.
- Complete the first page of a Student Health Form this form must go to your doctor, and when completed, must be brought to Room E154 at the Charlestown Campus of BHCC. Health clearance is required to participate in clinical internships.

#### Semester 1

- MLA-120 Medical Terminology Clinical Lab Prof Credits: 1 \*
- MLA-121 MLA I: Phlebotomy & Specimen Processing Credits: 4 \*
- ENG-111 College Writing I Credits: 3

**Total Credits: 8** 

## **Semester 1 Advising Note**

• MLA-120 and MLA-121 must be completed with a B- or higher.

#### Semester 2

- MLA-222 MLA II: Clinical Laboratory Techniques Credits: 4 \*
- BIO-203 Anatomy/Physiology I & Lab Credits: 4

Total Credits: 8

## **Semester 2 Advising Note**

- MLA-222 must be completed with a B- or higher.
- Credits for Anatomy and Physiology/Lab that were earned more than five (5) years prior to enrollment in the Medical Laboratory Assisstant Certificate program are not accepted. Must earn a grade of C or better.

#### Semester 3 Summer

- MLA-223 MLA III: Clinical Practicum Credits: 4
- MAT-181 Statistics | Credits: 3

**Total Credits: 7** 

## **Semester 3 Summer Advising Note**

MLA-223 must be completed with a B- or higher.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Develop an attitude of professionalism and be knowledgeable of the ethical considerations of dealing with patient and laboratory information.
- Correctly perform basic venipuncture techniques using a variety of blood drawing apparatuses.
- Explain the proper method to process and store various specimens used for laboratory testing.
- Describe the routine workflow of the clinical laboratory.
- Describe the importance of and correctly utilize a laboratory information system (LIS).
- Discuss the various types of laboratory equipment that would be best utilized for various testing procedures.
- Describe the roles of laboratory staff.
- Discuss the advantages and disadvantages of instrumentation.
- Discuss the importance of and how to perform maintenance and quality control on instrumentation.
- Perform assigned procedures, demonstrating competency in the performance of the test, understanding the underlying
  principles of the test, and the determination of appropriate actions necessary in handling and reporting of sensitive data.
- Demonstrate organizational skills in the performance of assigned workload in a timely manner.

#### Career Outlook

A Medical Lab Assistant (MLA) is someone who works in a laboratory setting and assists in the processing of patient samples and the preparation of tests that need to be done. They play a key role in aiding the medical technologist and allowing for everything to run as efficiently as possible. They perform phlebotomy, specimen processing, testing preparation for the Medical Technologist to perform the actual testing, maintenance and calibration of instrumentation, and work with the Laboratory Information System (LIS).

### **Microsoft Applications Support Specialist Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CIT-110 Applications/Concepts Credits: 3 \*
- CIT-133 Introduction to Microsoft Office Credits: 3 \*
- OIM-100 PC Keyboarding Techniques Credits: 1

#### **Total Credits: 7**

 For students proficient in keyboarding techniques, a challenge exam is available. For more information please email pla@bhcc.edu

- CIT-233 Advanced Microsoft Office Credits: 3 \*
- CIT-250 Collaboration, Communication, and Integrating Credits: 3 \*
- CIT-230 Help Desk Techniques Credits: 3 \*

## **Semester 2 Advising Note**

Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Understand in-depth and support the most common desktop Office Applications.
- Understand and support the Integration features among all Microsoft Office applications.
- Set-up, support and conduct on-line meetings.
- Troubleshoot end-user Office application problems.
- Demonstrate good communication skills and professional behavior while working with customers.
- Qualify to take the Microsoft Office Word, Excel & Outlook Certification Examinations.

#### Career Outlook

Graduates completing this certificate may find employment in information support services departments in organizations large and small as applications support and/or "Help Desk" specialists.

### **Networking and Security Certificate**

The purpose of this Networking and Security Certificate program is to provide our students the necessary courses and skills so that they can earn an IT industry certification credential. Having that industry credential increases the likelihood that our students will land an entry level job in the IT Networking and Information Security field. IT industry credentials that are well-known industry wide this program will prepare our students include the following; Comp TIA A+, Comp TIA Network+, Comp TIA Security+, Cisco CCENT, Cisco CCNA, Cisco Wireless, and RedHat Linux CSA/CE certifications.

The first semester courses in this certificate program build a solid foundation in PC Hardware and Software, entry level networking, Python Programming, and Operating Systems and Systems Administration activities. The second semester goes much deeper in the areas of Cisco networking, both for small business networks as well as enterprise class networks, strategies, and processes. Students will also gain detailed knowledge in Information Security., security threats, mitigation strategies, and "Best Practices" for Information Security practitioners, Additionally, Linux technologies are in wide use in industry, and two courses in the program provide a deep understanding of Linux systems configuration, administration, troubleshooting, networking and Linux Security.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

- CIT-182 PC Hardware & Software Credits: 3
- CIT-162 CISCO Networking I Credits: 3 \*
- CSC-125 Python Programming Credits: 3

• CIT-268 Operating Systems Credits: 3

**Total Credits: 12** 

### **Semester 1 Advising Note**

- Part-time students should take CIT-162 CISCO Networking I first because it is a pre-or co-requisite for many classes in this certificate.
- CIT-182 is the equivalent to Cisco's IT Essentials, preparing students for the CompTIA A+ certification;
- CIT-162 is the equivalent to Cisco's CCNA Course 1;
- CIT-268 prepares students for Red Hat Certified System Administrator certification exam

#### Semester 2

- CIT-167 CISCO Networking II Credits: 3
- CIT-262 Wireless Technology Credits: 3
- CIT-267 CISCO Networking III Credits: 3
- CIT-270 Linux Administration/Lab Credits: 4
- CIT-279 Cisco Network Security Credits: 3

Total Credits: 16

### **Semester 2 Advising Note**

- CIT-167 is the equivalent to Cisco's CCNA Course 2;
- CIT-262 prepares students for the Certified Wireless Network Administrator (CWNA) or equivalent certification;
- CIT-279 prepares students for CompTIA Network+ certification exam;
- CIT-267 is the equivalent to Cisco's CCNA Course 3;
- CIT-270 prepares students for the Red Hat Certified Engineer (RHCE) exam
- Students are prepared to take Cisco Certified Network Administrator (CCNA) exam upon completion of CIT-162, CIT-167, and CIT-267.

### Upon Completion of This Certificate Graduates Will Be Able To:

- Use inquiry to identify technical issues and implement solutions.
- Communicate with audiences of all levels of technical ability.
- Collaborate with diverse teams in high-tech environments.
- Understand career trajectory for Networking and Security and know how to access additional training or education to further their careers.
- Prepare for industry-recognized credentialing exams
- Troubleshoot, repair, update, and build a complete PC computer system
- Build, analyze, troubleshoot, computer networks
- Create, test, analyze, debug, and successfully develop Python programs to solve problems in Networking and Information Security
- Build, install, and provide system administration duties for both desktop and server class computers
- Demonstrate deep understanding of Cisco network technology and systems.including wireless systems

Demonstrate a deep understanding of Information Security threats, countermeasures, mitigation strategies, and "Best Practices" for Information Security threats, countermeasures, mitigation strategies, and "Best Practices" for Information Security threats, countermeasures, mitigation strategies, and "Best Practices" for Information Security threats.

#### Career Outlook

The Networking and Security Certificate prepares students with knowledge and skills required for entry and associate level network operations positions. Earning industry recognized credentials by successfully completing credentialing exams will make students stronger candidates for a broad range of network operations positions including Network and Computer Systems Administrators, Computer Network Support Specialists, and Information Security Engineers. In 2021, the U.S. Department of Labor reported the following median wages for positions in the Greater Boston Area for the following positions: Computer Network Support Specialist (\$89,870), Information Security Engineers (\$99,640), and Network and Computer Systems Administrator (\$100,670).

# **Object Oriented Computer Programming and Design Certificate**

This certificate prepares students with in-depth knowledge of object oriented programming and design. Within two semesters of entering the program, students are expected to demonstrate acceptable keyboarding proficiency.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

CSC-120 Intro to Comp Sci & Object Oriented Prog Credits: 4 \*

Total Credits: 4

### **Semester 1 Advising Note**

Based on Accuplacer results for Math, student may need to take MAT-194 or MAT-197.

#### Semester 2

- CSC-237 C++ Programming Credits: 4 \*
- CSC-239 JAVA Programming Credits: 4 \*

**Total Credits: 8** 

### **Semester 2 Advising Note**

Based on Accuplacer results for Math, student may need to take MAT-197.

- CSC-284 Advanced C++/OOP Credits: 3 \*
- CSC-242 Data Structures Credits: 3 \*
   Department strongly recommends students complete CSC-239 with a B- or better.
- CSC-285 Advanced Java Programming Credits: 3 \*
- CSC-244 Android Development With Kotlin Credits: 3 \*
- CSC-287 Survey New Popular OOPL for Programmers Credits: 3 \*
   May need department chair approval if taking at the same time as CSC-285 and CSC-284.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Design, implement, and maintain software solutions for realistic problems by applying principles of object oriented programming.
- Write sophisticated and efficient code using the latest object oriented programming languages such as C++ and Java.
- Work in both Unix and Windows environments.

#### Career Outlook

Graduates of this certificate qualify as entry-level programmers who can analyze complex problems and design, implement, and run viable solutions using any of the most common object oriented languages.

### **Paralegal Studies Certificate**

This program introduces students to paralegal practice and procedures. Students develop paralegal skills and knowledge that enables them to assist lawyers in conducting research and in preparing legal documents. The program is intended for students with an associate or bachelor's degree.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Admission Requirements

- Degree Proof of a completed Associate's or Bachelor's degree
- Letter Submission of a Letter of Interest
- Resume Submission of a Professional Resume
- **References** Three (3) Letters of Reference

## **Admission Requirements Advising Note**

- Student may enroll full-time or part-time
- As a prerequisite for a clinical placement or internship this program requires that all students must undergo a Criminal
  Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more
  information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Officer at 617228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

- PLG-101 Introduction to Law Credits: 3 \*
- Elective- Concentration Elective Credits: 3

Paralegal Option Electives:

PLG-201 Family Law, PLG-203 Real Estate Law, CRJ-103 Criminal Law, PLG-204 Wills, Estates and Trusts, PLG-105 Practical Legal Writing, PLG-299 Paralegal Internship

• Elective- Concentration Elective Credits: 3

Paralegal Option Electives:

PLG-201 Family Law, PLG-203 Real Estate Law, CRJ-103 Criminal Law, PLG-204 Wills, Estates and Trusts, PLG-105 Practical Legal Writing, PLG-299 Paralegal Internship

• Elective- Concentration Elective Credits: 3

Paralegal Option Electives:

PLG-201 Family Law, PLG-203 Real Estate Law, CRJ-103 Criminal Law, PLG-204 Wills, Estates and Trusts, PLG-105 Practical Legal Writing, PLG-299 Paralegal Internship

Total Credits: 12

## **Semester 1 Advising Note**

Program chair approval may be required to register for elective courses as well as PLG-103 and PLG-202.

#### Semester 2

- PLG-102 Legal Research & Writing Credits: 3
- PLG-103 Litigation Credits: 3 \*
- PLG-104 Legal Ethics Credits: 3
- PLG-202 Business Organizations Credits: 3
- Elective- Concentration Elective Credits: 3

Paralegal Option Electives:

PLG-201 Family Law, PLG-203 Real Estate Law, CRJ-103 Criminal Law, PLG-204 Wills, Estates and Trusts, PLG-105 Practical Legal Writing, PLG-299 Paralegal Internship

Total Credits: 15

### **Semester 2 Advising Note**

- Program chair approval may be required to register for elective courses as well as PLG-103 and PLG-202.
- Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Understand the legal process and the nature of law practice
- Construct and evaluate logical arguments in support of specific positions.
- Conduct effective legal research and oversee legal projects.

### Career Outlook

Paralegals typically find jobs with law firms, corporations, government offices, non-profit entities, banks, health care organizations, bio-tech companies and financial institutions. Areas of specialization include litigation, corporate law, criminal law, regulatory compliance, intellectual property, bankruptcy, labor law, immigration, family law, and real estate.

The number of jobs in the paralegal field is expected to grow much faster than average through 2016, and the position of paralegal is consistently ranked among the best jobs in America. Boston is home to one of the top legal markets in the United States and BHCC's main campus is minutes away from many courthouses, law schools, law firms, and government offices.

### **Unauthorized Practice Of Law Statement**

A Legal Studies graduate may work as a paralegal only under the supervision of an attorney and is not authorized to engage in the practice of law. The ABA (American Bar Association) defines a paralegal or legal assistant as "a person, qualified by education, training or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible.

### **Paramedic Certificate**

The Paramedic is a health care professional who cares for those injured or suddenly taken ill in the pre-hospital setting. BHCC's Paramedic Studies Program is a sixteen month program that includes classroom, in hospital clinical rotations and a field internship. The program prepares the student to be eligible to sit for the National Registry of Emergency Medical Technician Paramedic Certification examinations.

## **Paramedic Studies Program**

Located at the Bunker Hill Community College's Chelsea Campus, the 16 month Paramedic Studies Program provides instruction in advanced emergency medical skills.

The program, which follows the National Standard EMT Paramedic Curriculum, meets and/or exceeds the requirements set forth by the Commonwealth of Massachusetts Office of Emergency Medical Services.

BHCC's experienced instructors utilize state-of-the art equipment, including a self-contained ambulance simulator and manikins. BHCC is committed to preparing graduates with the knowledge, skills and professional attributes associated with entry-level paramedic positions. The program has been approved by the Massachusetts Office of Emergency Medical Services (OEMS), and is accredited by the Committee on the Accreditation of Educational Programs for the Emergency Medical Services (CoAEMSP), Program #600796, a subsidiary of the Commission on Accreditation of Allied Health Education Programs (CAAHEP), a non-profit, non-governmental agency, who reviews and accredits over 2000 educational programs in nineteen (19) health science occupations. CAAHEP issues accreditation to Paramedic education programs, based on the review and upon its recommendation from the CoAEMSP.

### **Admission**

The Paramedic Certificate and Associate Degree in Paramedic Studies is a selective admissions program.

Please contact Jesse Briggs, MPAS, NRP, I/C, PA-C, Department Chair, Department of Emergency Medical Studies, Chelsea Campus, 70 Everett Avenue Room 344, Chelsea, MA 02150, 617-336-5131, jb240217@bhcc.edu regarding application and entrance requirements. All potential candidates for admission to the program must apply through the college. The Paramedic Studies Certificate program is sixteen months and awards forty-six credits. An Associate Degree in Paramedic Studies is available upon completion of an additional five courses.

Candidates for the Paramedic program must have achieved their EMT certification prior to application, maintain EMT certification throughout the program, submit all required health records/utilizations prior to the start of the program, attend an information session and submit to a CORI/SORI check.

## **Program Notes**

Minimum Grades: A grade of B- (80%) or higher must be earned and maintained for the term of the program. Pre/corequisites: College Writing; ENG-111 & Human Biology/Lab, BIO-108.

## **Scope of Practice**

The Paramedic is a highly trained individual who provides both in hospital and out of hospital: Patient assessment, Advanced Airway Management, Vascular access, EKG Interpretation and Treatment, Emergency Pharmacology, and Management of Medical and Trauma Emergencies.

### **Tuition & Fees**

Tuition cost is \$9,062 for the Certificate and \$12,017 for the Associate Degree. Students are responsible for the purchase of texts, equipment, uniforms, certification and exam fees.

### GI Bill®

Bunker Hill Community College is an approved institution for veterans' education benefits. For specific information on how the GI Bill® works, and to apply for benefits please visit the United States Department of Veterans Affairs GI Bill® Site at gibill.va.gov.

## **Program Goals and Objectives**

- Provide individuals with a career preparation associated with Entry-Level and Advanced Practitioner Paramedic care
  competencies with consideration of the needs and expectations of the program's communities of interest.
- Provide a curriculum that leads to eligibility for the national credentialing process, entry into the Massachusetts licensure process, and employment in paramedicine
- Promote the development of those intellectual skills that foster critical thinking and problem solving that are necessary for life-long learning
- Provide the development of life-long professional attitudes and values
- Understand and manage self, to function effectively in social and professional environments and to make reasonable judgments on understanding the diversity of the world community
- Locate, understand, evaluate, synthesize, information and data in a technological and data driven society.

The Paramedic Studies Certificate program is sixteen months and awards forty-six credits and sixty one credits for an Associate Degree in Paramedic Studies.

## **Nationwide Employment Opportunities**

National Registry certification allows an individual reciprocity in most of the United States.

### **Career Opportunities**

The United States Bureau of Labor Statistics reports that the number of jobs in 2012 was 239,100. The job growth from 2012-2022 is projected to grow by 23% (faster than the national average of 11%) Projected Employment Change of new Paramedics from 2012-2022 is expected to be 55,300.

## **Job Opportunities**

Municipalities, Fire Departments, private ambulance companies, hospitals and clinics.

## **Salary Outlook**

According to the Journal of Emergency Medical Services (JEMS), the national average salary is \$42,618.00 per year (2018).

### **Related Job Titles**

EMT-Paramedic, Paramedic.

### **National Registry of Emergency Medical Technicians**

Year	Number of Students	Percentage Passed
2018	As of July 2019	N/A
	First Attempt Written	89%
	First Attempt Practical 8	100%

<sup>\*</sup> Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Admission Requirements

- Diploma High School diploma or GED
- Session Attend mandatory information session
- License Submit a copy of valid driver's license or obtain prior to the start of classes
- EMT Submit copy of valid EMT card or obtain prior to the start of classes
- CPR Possess a current American Heart Association, Basic Life Support Health Care Provider Card
- ENG-111 College Writing I Credits: 3
- BIO-108 Human Biology/Lab Credits: 4

**Total Credits: 7** 

## **Admission Requirements Advising Note**

- Submit letter of completion of one year experience as an EMT on company letterhead
- Submit copy of EMT and CPR card
- The more non-core courses taken before applying to the program, the higher your score on the admissions rubric.
- Ten panel drug testing and medical clearances required.
- As a prerequisite for a clinical placement this program requires that all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more information regarding the College's CORI/SORI check process, please contact the College CORI/SORI Offcer at 617-228-2193 or visit https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

#### Semester 1 Fall

- EMS-205 Principles of Paramedicine I Credits: 10 \*
- EMS-214 Paramedic Clinical Rotation I Credits: 3 \*

**Total Credits: 13** 

### Semester 2 Spring

- EMS-206 Principles of Paramedicine II Credits: 10 \*
- EMS-215 Paramedic Clinical Rotation II Credits: 3 \*

**Total Credits: 13** 

## **Semester 2 Spring Advising Note**

• Successful completion of ESM-205 and EMS-214 with a grade of B- or better.

#### Semester 3 Summer

- EMS-207 Principles of Paramedicine III Credits: 4 \*
- EMS-216 Paramedic Clinical Rotation III Credits: 1 \*

**Total Credits: 5** 

## **Semester 3 Summer Advising Note**

Successful completion of EMS-206 and EMS-215 with a grade of B- or better.

#### Semester 4 Summer

- EMS-208 Principles of Paramedicine IV Credits: 4 \*
- EMS-217 Paramedic Clinical Rotation IV Credits: 1 \*

## **Semester 4 Summer Advising Note**

Successful completion of EMS-207 and EMS-216 with a grade of B- or better.

#### Semester 5 Fall

• EMS-218 Paramedic Field Internship Credits: 3 \*

**Total Credits: 3** 

## **Semester 5 Fall Advising Note**

- Successful completion of EMS-208 and EMS-217 with a grade of B- or better.
- Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- After successful completion of the program, the student will receive a Certificate of Completion enabling him or her to apply for and take the National Registry of Emergency Medical Technicians (NREMT) Paramedic written and practical examinations.
- Participants who successfully pass the NREMT certification examination may go onto practice with fire departments, private ambulance services, third service ambulance services, hospital emergency departments, and various clinical settings where advanced emergency care is required.

#### Career Outlook

The U.S. Bureau of Labor Statistics predicts that employment of emergency medical technicians (EMTs) and paramedics will grow nine percent between 2008 and 2018, which is about as fast as the average percentage for all occupations (www.BLS.gov). As our population ages and individuals face increased medical concerns, the likelihood of medical emergencies will increase; thus increasing the need for EMTs and paramedics. In addition emergency rooms are frequently overcrowded, which increases the amount of time that the EMTs and paramedics must spend with each patient. This is also likely to increase the number of potential positions. Job prospects are expected to be good since paid employees are needed to replace volunteers who have a high turnover rate.

### **Patient Care Technician Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Admission Requirements

- Diploma High School diploma or GED
- Session Attend Mandatory information session
- ENG-095 Writing Skills II Credits: 3

## **Admission Requirements Advising Note**

- This program is Offered for a Fall and Spring start at the Chelsea Campus Only.
- Medical and CORI clearances. Prior to clinical placement this program requires that all students undergo a Criminal
  Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. For more
  information, please contact the College CORI/SORI Officer at 617-228-2193 or visit
  https://www.bhcc.edu/studentcentral/academicrecords/coriandsorichecks/

### Semester 1

- AHE-110 Principles of Clinical Practice Credits: 3 \*
- AHE-111 Patient Care Skills Credits: 3 \*
- AHE-106 CNA Practicum Patient Care Credits: 1 \*
- AHE-104 Understd Hum Beh for Health Care Prof, Behavior for the Health Care Professional Credits: 3 \*
  or
- PSY-213 Human Growth and Development Credits: 3 \*
- NHP-180 Medical Terminology Credits: 3 \*

#### **Total Credits: 13**

#### Semester 2

- AHE-201 Advanced Clinical Skills Credits: 3 \*
- AHE-204 Patient Care Technician Credits: 3 \*
- AHE-209 Allied Health Practicum Seminar Credits: 1 \*
- CIT-110 Applications/Concepts Credits: 3 or
- OIM-102 Medical Computer Applications Credits: 3 \*
- Elective Credits: 3 \*

#### Total Credits: 13

## **Semester 2 Advising Note**

- Attend a resume writing workshop
- Participation in employer panel
- Review graduation requirements with Program Coordinator
- Submit graduation application on-line

### Upon Completion of This Concentration Graduates Will Be Able To:

- Perform direct patient care competently.
- Perform basic computer skills.

#### Career Outlook

Graduates of this program qualify for employment in hospitals, clinics, chronic care facilities, and the home environment as multi-skilled workers, patient care technicians, patient care associates, medical aides, certified nursing assistants, and home health aides. The program prepares students in Healthcare Provider CPR Certifications. Graduates are eligible to sit for certification exams for State Nurse Aide and Home Health Aide.

### **Pharmacy Technician Certificate**

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

### Admission Requirements

- **Diploma** Possess a High School Diploma or GED
- Session Attend a mandatory Information session
- ENG-095 Writing Skills II Credits: 3

**Total Credits: 3** 

#### Semester 1

- PMT-111 Pharmacy Practice for Pharmacy Technicians I Credits: 4 \*
- PMT-112 Pharmacy Practice for Pharmacy Technicians II Credits: 4 \*
- PMT-113 Pharmacy Practice for Pharmacy Technicians III Credits: 4 \*
- PMT-299 Pharmacy Practicum/Seminar Credits: 4 \*

Total Credits: 16

### **Semester 1 Advising Note**

- Pre-requisites: ENG-095 or placement.
- These courses are REQUIRED to be taken in this order.
- This certificate program is designed as a one-semester program and it generally cannot be taken on a part time basis.

### Upon Completion of This Concentration Graduates Will Be Able To:

- Upon completion of the certificate program and after attaining a 75% or better score on the Board of Pharmacy Qualification Exam, the student will be able to apply and be licensed as a Pharmacy Technician in Massachusetts.
- Graduates are prepared to apply and sit for the National Pharmacy Technician Certification Board (PTCB).
- Upon passing the National PTCB Exam graduates will be able to be registered as a Pharmacy Technician in Massachusetts.

#### Career Outlook

According to the Bureau of Labor and Statistics (BLS), employment of pharmacy technicians is expected to increase by 4 percent for the period 2019-2029.

### **Professional Human Services Work Certificate**

This certificate prepares students for direct service jobs in human services providing the delivery of services to participants in human service organizations.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- ENG-111 College Writing | Credits: 3 \*
- HSV-101 Intro Human Services W/Field Practice Credits: 3 \*
- PSY-101 Principles of Psychology Credits: 3 \*

**Total Credits: 9** 

## **Semester 1 Advising Note**

- CORI/SORI/fingerprints after acceptance to program, before practicum course can be completed are required of all students in program. Those with concerns about this requirement should see the College's CORI officer before beginning the program.
- ENG-111 is required at the beginning semester as degree program requires much reading and writing and student must be fully prepared for intense writing assignments in HSV courses.
- HSV-101 and PSY-101 must be completed in first semester to move onto other HSV courses in subsequent semesters.

#### Semester 2

- PSY-227 Abnormal Psychology Credits: 3
- PSY-215 Counseling Credits: 3 \*
- HSV-112 Addiction Credits: 3 \*

**Total Credits: 9** 

#### Semester 3

- HSV-214 Ethics in Human Services Credits: 3
- HSV-218 Case Management in Human Services Credits: 3
- Elective Career Elective Credits: 3

Career Elective Options:

PSY-233 Intro to Psychiatric Rehabilitation, HSV-215 Introduction to Substance Abuse Counseling, HSV-219 Current Issues for the Community Health Worker,

AHE-104 Understd Hum Beh for Health Care Prof, Behavior for the Health Care Professional

## **Semester 3 Advising Note**

- Career elective choices should fit students human service interests: PSY-233 Intro to Psychiatric Rehabilitation for those interested in working with developmentally disabled or in mental health care or HSV-215 Introduction to Substance Abuse Counseling. AHE-104 may be used as a career elective in this program, but is a freshmen seminar and should be taken in the first semester and is only allowed for those students still with freshman status and with little or no college experience; if student is transferring or has prior college experience, student should take PSY-233 or HSV-215.
- Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Use assessment practices to respond to the needs of participants and enhance these individuals in leading a life that involves self-empowerment, assertiveness, and strong decision-making skills.
- Communicate effectively and establish collaborative relationships to allow planning, implementation of support services, and interventions with participants, agency supports, and other community resources.
- Demonstrate knowledge of supports available, while understanding the challenges facing participants, assist in gaining resources for aid, advocate by overcoming challenges and providing supports through community and educational resources.
- Demonstrate skill in handling crisis prevention, intervention and resolution techniques to solve problems and keep detailed documentation of the process and outcome of each situation.
- Participate in the life of a human services agency, being familiar with the mission and "best" practices of human services organizations, demonstrating these skills in professional activities.

#### Career Outlook

Students completing the Professional Human Services Work Certificate Program qualify for generalist careers in social welfare, mental health, community development or other similar human service organizations in the community serving families and children, adolescents, elders or other specific populations in need of services through community programming.

# Criminal Offender Record Information and Sex Offender Registry Information Checks

As a prerequisite for a clinical placement in the Professional Human Services Work Certificate Program, all students must undergo a Criminal Offender Record Information (CORI) check and a Sex Offender Registry Information (SORI) check. These checks are required due to potential unsupervised contact with children, the disabled, or the elderly during a clinical experience. Students found to have certain criminal convictions or pending criminal actions will be presumed ineligible for clinical placement. 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 College CORI/SORI Officer at 617-228-2193.

### **Sport Management Certificate**

This certificate will introduce students to the principles and concepts of sport management operations. It will provide a foundation for students interested in this field. The discipline specific courses will provide students with an introduction to areas that are critical for success in the sport management industry.

Students will gain specific competencies in management, marketing, communications and operations as they relate to the sport and leisure industry. Students will have the foundation to continue their education whether it is to complete their A.S. degree or seek entry-level positions in the field.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- BUS-101 Introduction to Business Credits: 3 \*
- SPM-101 Principles of Sport Management Credits: 3 \*
- CIT-110 Applications/Concepts Credits: 3
- Elective Elective Credits: 3
   Elective Options:
   ACC-101 Principles of Accounting I, FIN-112 Personal Finance

Total Credits: 12

#### Semester 2

- SPM-211 Sport Facility and Event Management Credits: 3 \*
- BUS-201 Business Law I Credits: 3
- SPM-215 Sport Marketing and Promotion Credits: 3 \*
- MAN-107 Introduction to Entrepreneurship Credits: 3

Total Credits: 12

### **Semester 2 Advising Note**

• Apply for graduation

### Upon Completion of This Concentration Graduates Will Be Able To:

- Apply the foundational concepts of managerial, marketing and leadership skills to a sport management enterprise/environment.
- Understand the basic principles of sport management and apply research and theory to solve sport and event management issues.
- Integrate principles of management to organize people and resources to succeed in the sport management industry.

#### Career Outlook

This option prepares students to seek employment in many entry-level positions in the areas of health and fitness, sport and leisure, park and recreation and the professional sport industry including opportunities in the management of professional, college, secondary school and community sports.

### **Web Development Certificate**

This certificate program provides students with a sound basis for employment in the field of Web Development. The program trains students in the concepts and applications of leading-edge web delivery mechanisms. This certificate program would also be beneficial to professionals with degrees in other disciplines who are seeking new career options. In addition, the knowledge gained can be applied toward the pursuit of Webmaster Certification through a certification agency.

\* Milestone Courses should be taken in the order shown. This will help you stay on track and graduate on time.

#### Semester 1

- CMT-111 HTML5 Credits: 3 \*
- VMA-105 Digital Imaging With Photoshop Credits: 3

**Total Credits: 6** 

## **Semester 1 Advising Note**

 Due to course prerequisites and the order required courses are sequenced, it is not possible to complete this certificate program in two semesters.

#### Semester 2

- CMT-125 Cascading Style Sheets Credits: 3
- CMT-113 JavaScript Credits: 3 \*

Total Credits: 6

#### Semester 3

- CMT-117 XML Credits: 3
- CMT-225 jQuery Credits: 3 \*
- CMT-228 Web Design With Ajax Credits: 3
- CMT-241 PHP/MySQL Credits: 3

Total Credits: 12

#### Semester 4

CMT-250 Mobile Web Applications Credits: 3 \*

**Total Credits: 3** 

Upon Completion of This Concentration Graduates Will Be Able To:

- Design, implement, publish, and maintain websites in support of creating a web presence for businesses and organizations.
- Create animated, event driven multimedia content for web delivery.
- Construct, extract, transform, and present database resident content directly into a web delivery mechanism.
- Construct event driven action scripts within a web page to respond to user stimulations and provide dynamic results in a real time environment.

### Career Outlook

Graduates of this program will qualify as entry-level web developers and web development support personnel.