Graduate Degree Programs
**Biomedical Engineering Master of Science**

**Director:** Prabir K. Patra  
Engineering Technology Building  
Telephone (203) 576-4165  
Fax: (203) 576-4750  
Email: ppatra@bridgeport.edu

Master of Science degree in Biomedical Engineering (BME) is intended to prepare individuals with a strong scientific and technical background for entry into Biomedical Engineering field at an advanced level and for further study leading to doctorate. Admission to the interdisciplinary BME program requires an undergraduate background that includes elementary coursework in biomedical engineering, biotechnology, biology, clinical science, pharmaceutical science and also includes any branch of science and engineering that permeates through the Fundamentals and advanced courses in engineering and the life sciences. The program offers innovative educational strategy that integrates biological sciences and engineering, and applies engineering tools, methods and practices to solve problems in biology and medicine. Graduates of our programs are expected to be highly-skilled biomedical engineers, and scientists who understand the ethical, social and economic implications of their work. The following fundamental course work has been identified to benefit the students most if they have them in their undergraduate degrees.

- Biomedical Engineering and Engineering  
- Tissue Engineering  
- Bioelectronics  
- Tissue Culture  
- Physiology

Applicants with superior academic credentials but lacking the required background can be admitted subject to their taking the necessary preparatory courses. Applicants are expected to have an average B or better in their undergraduate course work. Department offers the unique opportunity to its graduate students the education and research on how to integrate several engineering discipline principles in biomedical engineering.

The Department also offers, as an integral part of the Biomedical Engineering Masters Degree, the opportunity to specialize in several concentration areas.

1. Computer communication and networking in biomedical engineering  
2. Biorobotics and automation  
3. Biomedical Materials and Engineering  
4. Bioelectronics  
5. Biotechnology  
6. Biomedical signal and Image Processing  
7. Wireless and mobile communication pertaining to Biomedical Engineering  
8. Bioinformatics  
9. Tissue Engineering

In addition the department also offers the opportunity to acquire dual graduate degree with electrical engineering (dual MS degree in BME/ELEG). Candidates for the dual Masters Degree programs are typically required to complete a total of 49 credit hours to satisfy the requirement of two Masters Degrees. This implies 15 credit hours in addition to the 34 credits required for the MS degree in Biomedical Engineering.

**Learning Outcomes**

Consistent with the university’s vision, and with the missions of the School of Engineering and the Biomedical Engineering Program, the educational objectives for the Master of Science in Biomedical Engineering program were established as follows:

- Graduates of the BME program will have a sound integrated knowledge of science and engineering fundamentals with respect to the biomedical issues.
- Graduates will be proficient in the use of modern techniques, tools, procedures, and information sources which are useful in the definition and solution of problems in biomedical engineering.
- Graduates will have the ability to apply their scientific knowledge and engineering tools and techniques to design useful and economically feasible novel materials, devices, systems and processes which address problems relevant to the fields of biomedical engineering.
- Graduates will have the breadth and depth of knowledge, and a commitment to continued learning, necessary to understand the economic, social, ethical, and aesthetic aspects of their profession and their work, and to effectively communicate the results of their work.

**Course Requirements**

**REQUIRED COURSES**

**A. A total of 34 semester hours is required. The core curriculum consists of 16 credits and includes:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMEG 565</td>
<td>Biomedical Materials and Engineering</td>
</tr>
<tr>
<td>BMEG 412</td>
<td>Bioelectronics</td>
</tr>
<tr>
<td>BMEG 440</td>
<td>Ergonomic Factors in Design</td>
</tr>
<tr>
<td>BMEG 451</td>
<td>Introduction to BioMEMS</td>
</tr>
<tr>
<td>BMEG 452</td>
<td>Biomedical Imaging</td>
</tr>
<tr>
<td>BMEG 505</td>
<td>Biomechanics</td>
</tr>
<tr>
<td>BMEG 506</td>
<td>Transport Phenomena in Biological Systems</td>
</tr>
<tr>
<td>BMEG 507</td>
<td>Algorithm in Bioinformatics</td>
</tr>
<tr>
<td>BMEG 508</td>
<td>Biomechanics</td>
</tr>
<tr>
<td>BMEG 511</td>
<td>Design and development of Biomedical Instrument</td>
</tr>
<tr>
<td>BMEG 520</td>
<td>Physiology</td>
</tr>
<tr>
<td>BMEG 530</td>
<td>Instrumentation and Laboratory Experience</td>
</tr>
<tr>
<td>BMEG 531</td>
<td>Robotics in Bioengineering</td>
</tr>
<tr>
<td>BMEG 533</td>
<td>Communication Engineering in Biomedical Systems</td>
</tr>
<tr>
<td>BMEG 534</td>
<td>Electrochemistry in Biological Systems</td>
</tr>
<tr>
<td>BMEG 540</td>
<td>Advanced Cellular and Molecular Biology</td>
</tr>
<tr>
<td>BMEG 541</td>
<td>Foundations of Biotechnology and Bio-entrepreneurship</td>
</tr>
<tr>
<td>BMEG 546</td>
<td>Biosignal Processing</td>
</tr>
<tr>
<td>BMEG 560</td>
<td>Advanced Tissue Engineering</td>
</tr>
<tr>
<td>BMEG 569</td>
<td>Advanced Biomedical Materials and Engineering</td>
</tr>
<tr>
<td>BMEG 571</td>
<td>Ethical Issues in Biomedical Research</td>
</tr>
</tbody>
</table>

**B. The remaining 18 credits are elective courses.**

The elective courses may be chosen from the list of BME concentration areas or chosen in consultation with the graduate advisor. The course descriptions are in the Graduate Studies Division section of the Catalog.

**C. A team based research project of 6 credits is compulsory and the course number for that is BMEG 620 as mentioned under core courses**

**CORE COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMEG 410</td>
<td>Biosensors</td>
</tr>
<tr>
<td>BMEG 412</td>
<td>Introduction to Bioelectronics</td>
</tr>
<tr>
<td>BMEG 440</td>
<td>Ergonomic Factors in Design</td>
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</tr>
</tbody>
</table>
Business Administration  Master of Business Administration Degree

Program Director: Arthur McAdams
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Email: mba@bridgeport.edu

The Master of Business Administration (M.B.A.) is a valuable education for managers and executives, or those aspiring to become managers in any field of endeavor, whether in a business, technical, medical or other enterprise. Although students with work experience will find maximum benefit from the M.B.A., no previous work experience is required. The curriculum is designed to recognize and accommodate substantial diversity in preparation and experience as well as the different goals and career expectations of students.

Students with a recent four-year bachelor’s degree and strong academic record from an accredited business college may be able to complete the M.B.A. with as few as 30 credits of advanced study – all courses successfully completed earn three credits. Students with undergraduate preparation in a non-business field may be required to complete up to an additional 24 credits of core business courses as a foundation for the advanced courses. The M.B.A. program is 54 credits consisting of 24 core credit hours and 30 advanced credit hours.

School of Business Mission
The School of Business advances the practice of business through the education of students and the scholarly and professional contributions of the Faculty. Through high quality innovative teaching, the School enhances critical thinking in its students, provides discipline knowledge through theoretical and applied learning and develops skills that are necessary for success in business. Students drawn from local, regional and international communities learn in a supportive environment that facilitates understanding of business in a dynamic global environment.

Program Characteristics
The graduate program in business administration provides early to mid-career professionals with broad-based knowledge necessary for effective leadership in domestic and global markets. The program provides a strong foundation in accounting, economics, finance, marketing, management information systems, business statistics, management, business research, law and ethics upon which students can build a concentration in a focused area of business. Graduates are equipped with a high-level understanding of the inter-relationship of different business processes and the interaction of the business entity in the competitive environment.

The program is based on principles which apply to the global business environment of which the domestic market is a key element. With students from many countries in attendance, the University of Bridgeport provides a global education from the first day of class.

Curriculum: Core, Major, and Capstone
There are three central components of the Curriculum. First you will develop the Core Knowledge and Skills. These eight courses may be waived if you have a sufficient undergraduate business background. Second you will choose a Major in which you will immerse yourself to develop the specialized knowledge and skills needed for a specific career. Third you will engage in Capstone experiences in courses that enable you to further integrate your business knowledge and apply your business skills.

The Core Courses: Acquiring the Foundation for Success
The M.B.A. program provides breadth of knowledge and skills across the business disciplines through its core curriculum which consists of 24 (eight courses) of the 54 credits required for the degree. Core courses may be waived if a student has recently completed similar courses with high marks and successfully completing a challenge examination, allowing the completion of the M.B.A. with 30 credits (10 courses).

The study of economics, accounting, marketing, finance, management, business law and ethics, statistics, and information technology enables students to understand the major types of business activities and is the foundation for the M.B.A. concentration. To complete the foundation for the concentration and capstone courses a Business Research course is required.

Learning Outcomes
LEARNING OBJECTIVES
The first overall learning objective for the graduate programs in the School of Business is for students to understand and apply concepts and skills across the basic business disciplines that enable them to be successful in a dynamic global environment. The second objective is for students to develop the competencies that facilitate student success in business.

ASSESSMENT
The understanding of knowledge and skills is evaluated with exams and the application of theories to applied situations presented in cases and projects. Students and the program as a whole will be evaluated and benchmarked with the use of standardized program tests across the basic business disciplines. Student knowledge and skills will be tested at the beginning and end of their MBA studies with program specific tests. These exams will enable the School to evaluate the value added by the overall program as well as within specific programs. Students will work in teams on various projects and cases across their business courses. Students will be evaluated by other students and by their professors regarding multiple competencies and will receive cumulative evaluations across courses.

Choosing a Major
Because many careers require specialized and in-depth knowledge and skills in specific business areas, the program provides students with the opportunity to complete 18 credits (six courses) of in-depth study in an area of their choice. Students may choose from twelve concentrations:
- Accounting
- Finance
- General Business
- Global Financial Services
- International Business
- Management
- Marketing
- Specialized Business
The Capstone Experience

The Capstone experience provides the final integration of student learning across the business disciplines and application of concepts learned to practical and competitive situations. The three integration and application Capstone courses include a business Strategy course, a computerized Business Simulation and Planning course and an Internship or applied Thesis course.

The Strategy course integrates the knowledge and skills from previous coursework and provides additional training in strategic thinking and business planning. The computerized Business Simulation course provides the context to run a simulated business and to compete against other student teams.

The Internship course is intended for students with less than two-years of managerial experience. As an alternative to the Internship and for students who have two years or more of managerial experience, an applied Thesis course is offered in which a student may pursue a topic related to their current business or to a business they would like to pursue.

Curriculum and Program Requirements

SUMMARY OF REQUIREMENTS (CREDITS)
Core Courses (May Be Waived) 24
Required Course 3
Major Courses 18
Capstone Requirements 9
Total 54

M.B.A. Core, Required and Capstone Requirements

Core Requirements (Credits)
Advanced study in business administration requires that students have a working knowledge of the concepts and applications of accounting, economics, quantitative analysis, management and information systems. Each of the study areas help to develop skills for analysis, decision making and communicating:

ACCT 600 Financial Accounting 3
ECON 600 Economics 3
ITKM 600 Information Systems and Technology 3
STAT 600 Statistics and Quantitative Analysis 3

Also required is a solid comprehension of the concepts, processes and institutions for financing and managing the organization and creating and marketing goods and services. The tools of analysis found in these courses broaden student knowledge and ability for management decision-making:

FIN 600 Financial Management 3
MGMT 600 Leadership and Management 3
BLAW 600 Legal Environment of Business and Ethics 3
MKT 600 Marketing 3

Total 24

Waivers
Students whose recent coursework includes grades of “B” or higher in similar courses may waive any or all of the core courses by successfully completing challenge examination(s) not later than the end of their first semester of study. If all core courses are waived a student can complete the M.B.A. program with 30 credits.

Required Course (Credits)
In addition to the courses needed to satisfy core requirements, students are required to complete:

MKTG 610 Business Research 3

Total 3

Capstone Requirements (Credits)
These courses are taken toward or at the end of a student’s program of study.

BUCP 597 Integration and Application - Strategy
(formerly MGMT 597 and MGMT 797) 3
BUCP 581 Integration and Application - Business Simulation and Planning
(formerly MGMT 581 and MGMT 781) 3

And

BUCP 598 Integration and Application - Thesis
(formerly MGMT 598 and MGMT 798) 3

or

BUCP 599 Integration and Application - Internship
(formerly MGMT 599 and MGMT 799) 9

Total 9

In addition, students may take up to two, 1-credit internship courses to provide additional work experience specific to their course of study. Internships are integrally related to a student’s course of study as they provide the opportunity to apply concepts and skills gained in their MBA courses and to learn additional business concepts and skills.

BUCP 599 Integration and Application - Internship
(formerly MGMT 599 and MGMT 799) 1

M.B.A Majors

An M.B.A. student may select from 12 majors to meet his/her career goals.

Each major provides a specialized set of courses described in detail below.

- Accounting
- Finance
- General Business
- Global Financial Services
- International Business
- Management
- Marketing
- Specialized Business

*All majors with the exception of Global Financial Services (see below) require the student to complete 18 credits of required and elective course(s).

Program Credit Requirements

Credit requirements without waivers 54 Credits
Credit requirements with all core courses waived 30 Credits

Course Policy and Scheduling

Normally, courses are taken in the following sequence: core and required courses, required concentration courses, elective concentration courses, and capstone courses. Please note that all courses are three credit courses unless otherwise designated. Prerequisites are specified in the course descriptions (see section: Graduate Course of Study).

Sample Program

FLEXIBILITY

Schedules are flexible and depend on the number of courses taken in a semester. A student can take as many as five courses in a semester and as few as one course. The M.B.A. program must be completed within five years of initial enrollment.
Business Administration  Master of Business Administration Degree

SEQUENCING OF COURSES

Generally, core courses are taken before the major courses. Major courses are taken with the final core courses or after the core courses are completed and usually before the capstone courses. Capstone courses are usually completed at the end of the program.

Example of Schedule with 3 Courses in Each Semester

First Semester
- ACCT 600  Financial Accounting  3
- ECON 600  Economics  3
- STAT 600  Statistics and Quantitative Analysis  3

Second Semester
- FIN 600  Financial Management  3
- BLAW 600  Legal Environment of Business and Ethics  3
- MKTG 610  Business Research  3

Third Semester
- MKT 600  Marketing  3
- ITKM 600  Information Systems and Technology  3
- MGMT 600  Leadership and Management  3

Fourth Semester
- Major Requirement  3
- Major Requirement or Elective  3
- Major Requirement or Elective  3

Fifth Semester
- Major Requirement or Elective  3
- Major Requirement or Elective  3
- Major Elective  3

Sixth Semester
- BUCP 597  Integration and Application – Strategy  3
- BUCP 581  Integration and Application – Business Simulation and Planning  3
- BUCP 599  Integration and Application or – Thesis (3 credits) or
- BUCP 598  Integration and Application – Internship or
- Upper Level Elective approved by Program Director or Dean (3)

M.B.A. Admissions Requirements

ADMISSION TO THE SCHOOL OF BUSINESS

The M.B.A. is designed to provide students with the knowledge and skills necessary to achieve high levels of achievement in their chosen career, community, and the greater society. Toward this end, a variety of criteria are used to assist faculty in determining the ability of applicants to succeed in the M.B.A. program.

All applicants should submit to the Office of Graduate Admissions:
1. An application to the M.B.A. program (www.bridgeport.edu)
2. Transcripts of all previous colleges attended
3. Graduate Management Admissions Test (GMAT) score
4. A personal statement of purpose in enrolling in the program
5. Copy of Resume
6. Two letters of Reference

WHERE TO APPLY
Send all application materials to: Office of Graduate Admissions
126 Park Avenue
University of Bridgeport
Bridgeport, CT 06604

Or submit online at: www.bridgeport.edu.

APPLICATION DEADLINES
Applications and supporting documentation should normally be submitted at least two months before the desired starting date and for part-time students at least one month.

STUDENTS WITH A THREE-YEAR UNDERGRADUATE DEGREE
A number of countries award a bachelor’s degree with only three years of study. A student with a 3-year undergraduate degree will be required to take additional coursework. The combination of courses will be determined by the M.B.A. advisor (Assistant Dean). Each student’s background will be matched with courses that will prepare them for their studies in the business graduate programs.

GRADUATE MANAGEMENT ADMISSIONS TEST (GMAT)
The Graduate Management Admissions Test is designed to measure aptitude for graduate study in business administration. The Test measures verbal, mathematical, and analytical writing skills. The GMAT is not a test for knowledge in specific business subjects. The test is given on a regular basis in the United States and at many international locations. For more information and/or to register for the test, visit the following website: http://www.mba.com/mba/thegmat.

TEST OF ENGLISH AS A FOREIGN LANGUAGE (TOEFL)
Applicants whose native language is other than English must submit scores from the Test of English as a Foreign Language. Additional accepted standardized English language exam scores are listed at www.bridgeport.edu/admissions/international/applying/requirements/englishlang.aspx. Accepted student scoring less than 550 (PBT)/79 (IBT) will be re-tested upon arrival at the University and may be required to complete a portion of the University of Bridgeport Intensive English Language Program. For more information and/or to register for the test, visit the following website: http://www.ets.org/bin/getprogram.cgi?test=toefl.

Grading, Academic Standards, and Graduation Requirements

GRADING
Passing grades for graduate study range from “A” to “C”. Any work earning a grade below “C” will be assigned the grade of “F”. Incomplete work – grade of “I” – must be completed within one calendar year of the completion of the course or will be changed to “F”. A student receiving the grade of “F” should attempt to repeat immediately the course in which the grade was received. In computing the CGPA the grade from the first repeat of a course replaces the original grade. Grades from transfer or waiver credit and from non-M.B.A. courses taken after the beginning of the program are excluded from CGPA calculations.

ACADEMIC STANDARDS
Students are expected to maintain a minimum Cumulative Grade Point Average (CGPA) of 3.0. A student whose CGPA falls below 3.0 or who earns a grade below “C” in any course will be placed on academic probation. S/he
may be separated from the program unless the minimum CGPA of 3.0 is achieved within the next 9 credit hours or if s/he earns a grade below “C” in any succeeding semester.

REQUIREMENTS FOR GRADUATION
To qualify for the award of the degree of Master of Business Administration, a student must fulfill the following minimum requirements:
1. Admitted to candidacy for the degree in the School of Business
2. Satisfactorily complete all academic requirements with a cumulative grade point average grade of “B” (CGPA = 3.0) or better.
3. File an application for the award of the degree at the Records Office on or before the date published in the University Calendar.
4. Complete all academic requirements within five (5) years from the date of first registration, unless a petition for extension is granted. Extensions are granted only for compelling reasons.

M.B.A. Accounting Major
The M.B.A. in Accounting delivers the knowledge and skills necessary to measure, analyze, interpret, and communicate economic data. Students acquire a solid foundation of accounting principles, real-world tools and aptitude in order to succeed and excel in accounting and business careers. As the “language of business” accounting prepares students for a wide variety of careers.

Accounting Major Learning Outcomes
LEARNING OBJECTIVES
Students learn the knowledge and skills that enable them to measure, analyze, interpret, and communicate economic data. Students acquire the broad-based business knowledge that enables them to integrate accounting practices to achieve strategic goals.

ASSESSMENT
Students are evaluated with exams and homework assignments. Students will be evaluated and benchmarked with a standardized accounting test. Students’ accounting knowledge and skills will be tested with a program specific exam when they begin and finish their accounting program.

M.B.A. Finance Major
With the M.B.A. in Finance students acquire the knowledge of financial concepts and analytical skills needed for a career in finance. Students are exposed to topics such as financial management, international finance issues, and investments. Cases are analyzed to develop problem solving skills regarding real-world problems. Technical skills are emphasized that enable students to utilize the many statistical and modeling approaches to finance.

Money Major
LEARNING OBJECTIVES
Students learn financial concepts that provide the basis for careers in finance. Students develop the technical and analytical skills needed to pursue a variety of careers in the finance industry.

ASSESSMENT
Financial concepts and technical and analytical skills are evaluated with exams, assignments, papers, cases, and projects. Students will be evaluated and benchmarked with a standardized finance test. Students’ financial knowledge and skills will be tested when they begin and finish the Finance program with a program specific exam.

Finance Major Requirements
REQUIRED COURSES (CREDITS)
FIN 610 Intermediate Finance 3
FIN 620 Investment Analysis 3
FIN 625 Financial Derivatives and Risk Management 3
FIN 650 Cases in Finance 3
Total 12

MAJOR ELECTIVE (CREDITS)
Select one course from:
FIN 702 Advanced Financial Management and Policy 3
FIN 721 Management of Financial Institutions 3
FIN 725 International Financial Management 3
FIN 730 Financial Analysis and Modeling 3
ECON 710 Managerial Economics 3
Total 6

M.B.A. General Business Major
The M.B.A. in General Business is built on the understanding that many students seek a broad understanding of business theory and practice and that such knowledge enables them to lead and manage business organizations in a variety of fields. The program pursues the traditional structure of a M.B.A. by providing knowledge across the business disciplines. This combination of courses prepares a student for maximum career adaptation.

General Business Major Learning Outcomes
LEARNING OBJECTIVES
Students will have a broad understanding of business theory and practices. Students will be prepared to lead and manage business organizations in a variety of fields.

ASSESSMENT
Students and the program as a whole will be evaluated and benchmarked with a standardized test that covers the major business disciplines. In addition, students’ business knowledge and skills will be tested when they begin and finish their General Business program with a program specific exam. Alumni will be asked to complete follow-up questionnaires regarding their business careers.
General Business Major Requirements

REQUIRED COURSES (CREDITS)
Select one course from each discipline (five courses total).

- ACCT 620 Managerial and Cost Accounting 3
- FIN 625 Financial Derivatives and Risk Management 3
- FIN 640 Money and Banking 3
- FIN 644 Global Financial Services 3
- FIN 650 Cases in Finance 3

Total 15

MAJOR ELECTIVE (CREDITS)
Select one additional course (three credits) from any business discipline with faculty advisor approval and approval of the Assistant Dean.

M.B.A. Global Financial Services Major

The M.B.A. in Global Financial Services prepares students for management positions in the changing world of financial services. Through a variety of courses the program provides knowledge and skills related to basic accounting, finance and regulatory theory and practice. With the offering of courses related to specific financial services industries students will gain an understanding of the financial services industries and how they are related to each other.

Global Financial Services Major Learning Outcomes

LEARNING OBJECTIVES
Students learn knowledge and skills related to basic accounting, finance and regulatory theory and practice. Students will understand all of the financial services industries and how they are related to each other.

ASSESSMENT
Student learning is evaluated with exams, assignments and cases. Students’ financial knowledge and skills will be tested when they begin and finish the Finance program with a program specific exam.

International Business Major Requirements

REQUIRED COURSES (CREDITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>FIN 610</td>
<td>3</td>
</tr>
<tr>
<td>FIN 725</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 650</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
</tr>
</tbody>
</table>

MAJOR ELECTIVE (CREDITS)

Select three courses from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 750 Foundations of Doing Business in China</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 751 Foundations of Doing Business in India</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 779 International Issues</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 706 International Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 751 Product Management, Innovation and Commercialization</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
</tr>
</tbody>
</table>
M.B.A. Management Major

The M.B.A. in Management delivers the knowledge and skills that prepare students for leadership and to understand management competencies that are required to plan, build, and run a successful and ethical enterprise. The program enables the student to build and manage teams to solve business problems. The program also emphasizes employee motivation and the overall management of people and organizational systems.

Management Major Learning Outcomes

LEARNING OBJECTIVES
Students learn the knowledge and skills that prepare them to plan, build, and run a successful business enterprise. Students also learn how to lead and work effectively with people within an organization.

ASSESSMENT
Students will be evaluated and benchmarked with a standardized management specific test. Students' management knowledge and skills will be tested when they begin and finish their Management program with a program specific exam.

Management Major Requirements

REQUIRED COURSES (CREDITS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>MGMT 610</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 611</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 632</td>
<td>Global Program and Project management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 680</td>
<td>Foundations of Business Process and Operations management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

MAJOR ELECTIVE (CREDITS)

Select two courses from:

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 652</td>
<td>Small Business and Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 712</td>
<td>Organizational Development</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 722</td>
<td>Conflict and Negotiation</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 723</td>
<td>Leadership, Teams and Managing Change</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 734</td>
<td>Strategic Sourcing and Vendor Management</td>
<td>3</td>
</tr>
</tbody>
</table>

M.B.A. Marketing Major

The M.B.A. in Marketing delivers the knowledge and skills that prepare students for marketing careers and specifically the competencies that are required to create, promote, distribute, price and manage products, services and ideas to customers in a satisfying exchange relationship.

Marketing Major Learning Outcomes

LEARNING OBJECTIVES
Students are prepared for marketing careers and specifically learn the knowledge and skills that are required to create, promote, distribute, price and manage products, services and ideas to customers in a satisfying exchange relationship. Students develop an understanding of human behavior related to marketing activity.

ASSESSMENT
Students will be evaluated and benchmarked with a standardized marketing test. Students' marketing knowledge and skills will be tested when they begin and finish the Marketing program with a program specific exam.

Marketing Major Requirements

REQUIRED COURSES (CREDITS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 612</td>
<td>Customer Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 776</td>
<td>Strategy and Advanced Marketing Concepts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

Specialized Business Major Requirements

NO REQUIRED COURSES (CREDITS)

MAJOR ELECTIVE (CREDITS)

Select six courses (18 credits) from any business discipline with faculty advisor approval and Assistant Dean approval.

Specialized Business Major Learning Outcomes

LEARNING OBJECTIVES
Students will learn the knowledge and skills related to the core disciplines. Students will acquire specific knowledge and skills for specific career goals.

ASSESSMENT
Students will be evaluated and benchmarked with a standardized test of the general M.B.A. program. Students' business knowledge and skills will be tested when they begin and finish their Specialized Business Program with an exam specific to their plan of study. Alumni surveys will follow student careers to evaluate the effectiveness of the Specialized Program in advancing their business careers.
Computer Engineering  Master of Science Degree

Chair: Ausif Mahmood  
Engineering Technology Building  
Telephone: (203) 576-4145  
Fax: (203) 576-4765  
Email: mahmood@bridgeport.edu

The Master’s Degree in Computer Engineering is a course of study intended to prepare individuals whose undergraduate background is in computer or electrical engineering for advanced professional work in the field and for further study leading to the doctorate. Emphasis is placed on current state-of-the-art applications including parallel computing, image processing, VLSI design, sensing, robotics, mobile computing, automation and the like. Admission to the program requires an undergraduate degree in engineering, and includes the following fundamental coursework:

- Programming Languages and Techniques
- Data Structures
- Digital Design
- Digital Design Lab
- Computer Organization
- Microprocessors
- Probability and Statistics

Applicants with superior academic credentials but lacking the required background can be admitted subject to their taking the necessary preparatory courses. Applicants are expected to have an average of B or better in their undergraduate coursework.

The Department also offers, as an integral part of the Computer Engineering Masters Degree, the opportunity to specialize in several concentration areas.

Computer Engineering Concentration areas:

1. Advanced Applications and Systems Programming
2. Bio-Medical Engineering
3. CAD/CAM
4. Computer and Information Security
5. Computer Communications and Networking
6. E-Commerce
7. Microelectronics and Computer Architecture
8. Modern Data Base Systems
9. Robotics and Automation
10. Signal and Image Processing
11. Software Engineering
12. Very Large Scale Integration (VLSI)
13. Wireless and Mobile Communications

Please refer to the Graduate Studies Division Catalog pages for course details of the concentration areas.

In addition, the department also offers the opportunity to acquire dual graduate degrees along with the M.S. degree in Computer Engineering. Candidates for these dual Masters degree programs are typically required to complete a total of 48 credit hours to satisfy the requirements of two Masters degrees. This implies 15 credit hours in addition to the 33 hours required for the M.S. degree in Computer Engineering.

Please refer to the Graduate Studies Division catalogue pages for detailed information on Dual Graduate Degree programs.

Furthermore, customized study plans to allow receiving the Computer Engineering M.S. degree while pursuing either the Ph.D. degree in Computer Science and Engineering or the Ed.D. degree in Education are available. Doctoral students in these two programs should consult their respective doctoral advisors to work on their individualized plans. Further details on the dual M.S. in Computer Engineering degree programs are available in the catalog section on the Graduate Studies Division.

Program Objectives

Our Computer Science Students will:

- Apply foundational scientific concepts and sound engineering principles efficiently and effectively.
- Be well-educated, highly valued, and successful engineers and scientists.
- Significantly contribute to technical interdisciplinary team projects.
- Professionally communicate technical solutions and results.
- Continue to pursue lifelong multidisciplinary learning as professional engineers and scientists.

Learning Outcomes

Our Computer Engineering Students will:

1. Demonstrate an in depth and comprehensive understanding of Computer Engineering.
2. Have an enhanced ability to learn, on their own, technical details for which they are responsible.
3. Have an enhanced ability to apply the knowledge learned to solve technical problems that arise in research they conduct or supervise.
4. Have an enhanced ability to study an issue, identify and evaluate alternative actions, propose an optimal course of action.
5. Have an enhanced ability to prepare technical point papers, brief their seniors, and defend their conclusions.

Course Requirements

Required courses

A. A total of 34 semester hours is required. The core curriculum consists of 15 credits and includes:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 501</td>
<td>Object Oriented Programming using C++</td>
</tr>
<tr>
<td>CPEG 410</td>
<td>Introduction to Computer Architecture</td>
</tr>
<tr>
<td>CPEG 572</td>
<td>Data and Computer Communication</td>
</tr>
<tr>
<td>CPEG 480</td>
<td>Introduction to VLSI Design</td>
</tr>
<tr>
<td>or CPEG 447</td>
<td>Logic Synthesis Using FPGAs</td>
</tr>
<tr>
<td>ELEG 443</td>
<td>Applied Digital Signal Processing</td>
</tr>
</tbody>
</table>

B. The remaining 18 credits are elective courses.

The elective courses may be chosen from the list of Computer Engineering concentration areas or chosen in consultation with the graduate advisor. Also, students are required to take ENGR 400 (Engineering Colloquium).

The course requirements of the concentration areas are described in the Graduate Studies Division section of the catalog.

C. Students must do a Masters Project (3 credit hours) or Thesis (6 credit hours) as part of the 18 elective credit hours.

The concentration areas can be applied to satisfy the requirements of second Masters degree programs of study.
Computer Science Master of Science Degree

Chair: Ausif Mahmood
Engineering Technology Building
Telephone: (203) 576-4145
Fax: (203) 576-4765
Email: mahmood@bridgeport.edu

The Master's Degree in Computer Science is intended to prepare individuals with a strong mathematical, scientific, or technical background for entry into the computer science field at an advanced level and for further study leading to the doctorate. Admission to the program requires an undergraduate background that includes elementary physics, calculus sequence, linear algebra, and the following fundamental coursework in computer science:

• Programming Languages and Technique
• Data Structures
• Digital Design
• Discrete Structures
• Computer Organization
• Probability and Statistics

Applicants with superior academic credentials but lacking the required background can be admitted subject to their taking the necessary preparatory courses. Applicants are expected to have an average of B or better in their undergraduate coursework.

The Department also offers, as an integral part of the Computer Science Masters Degree, the opportunity to specialize in several concentration areas.

Computer Science Concentration Areas:
1. Advanced Applications and Systems Programming
2. Bio-Medical Engineering
3. CAD/CAM
4. Computer and Information Security
5. Computer Communications and Networking
6. E-Commerce
7. Microelectronics and Computer Architecture
8. Modern Data Base Systems
9. Robotics and Automation
10. Signal and Image Processing
11. Software Engineering
12. Very Large Scale Integration (VLSI)
13. Wireless and Mobile Communications

Please refer to the Graduate Studies Division Catalog pages for course details of the concentration areas.

In addition, the department also offers the opportunity to acquire dual graduate degrees along with the M.S. degree in Computer Science. Candidates for these dual Masters degree programs are typically required to complete a total of 48 credit hours to satisfy the requirements of two Masters degrees. This implies 15 credit hours in addition to the 33 hours required for the M.S. degree in Computer Science.

Please refer to the Graduate Studies Division catalogue pages for detailed information on Dual Graduate Degree programs.

Furthermore, customized study plans to allow receiving the Computer Science M.S. degree while pursuing either the Ph.D. degree in Computer Science and Engineering or the Ed.D. degree in Education are available. Doctoral students in these two programs should consult their respective doctoral advisors to work on their individualized plans. Further details on the dual M.S. in Computer Science degree programs are available in the catalog section on the Graduate Studies Division.

Course Requirements

REQUIRED COURSES

A. A TOTAL OF 33 SEMESTER HOURS IS REQUIRED. THE CORE CURRICULUM CONSISTS OF 15 CREDITS AND INCLUDES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 400</td>
<td>Object Oriented Programming</td>
</tr>
<tr>
<td></td>
<td>Using C++</td>
</tr>
<tr>
<td>CPSC 450</td>
<td>Data Base Design</td>
</tr>
<tr>
<td>CPSC 502</td>
<td>Analysis of Algorithms</td>
</tr>
<tr>
<td>CPSC 503</td>
<td>Operating Systems</td>
</tr>
<tr>
<td>CPEG 471</td>
<td>Data and Computer Communication</td>
</tr>
</tbody>
</table>

B. THE REMAINING 18 CREDITS ARE ELECTIVE COURSES.

The elective courses may be chosen from the list of Computer Science concentration areas or chosen in consultation with the graduate advisor.

The course requirements of the concentration areas are described in the Graduate Studies Division section of the catalog.

C. STUDENTS MUST DO A MASTERS PROJECT (3 CREDIT HOURS) OR THESIS (6 CREDIT HOURS) AS PART OF THE 18 ELECTIVE CREDITS HOURS.

Since July 2004, the Department of Computer Science and Engineering has been offering the full M.S. degree program in Computer Science through distance learning. For more information please contact the department or visit: http://www.bridgeport.edu/uh/dlearning/

The concentration areas can be applied to satisfy the requirements of dual Masters degree programs of study.

Program Objectives

Our Computer Science Students will:

• Apply foundational scientific concepts and sound engineering principles efficiently and effectively.
• Be well-educated, highly valued, and successful engineers and scientists.
• Significantly contribute to technical interdisciplinary team projects.
• Professionally communicate technical solutions and results.
• Continue to pursue lifelong multidisciplinary learning as professional engineers and scientists.

Learning Outcomes

Our Computer Engineering Students will:

1. Demonstrate an in depth and comprehensive understanding of Computer Science.
2. Have an enhanced ability to learn, on their own, technical details for which they are responsible.
3. Have an enhanced ability to apply the knowledge learned to solve technical problems that arise in research they conduct or supervise.
4. Have an enhanced ability to study an issue, identify and evaluate alternative actions, propose an optimal course of action.
5. Have an enhanced ability to prepare technical point papers, brief their seniors, and defend their conclusions.
Counseling  Master of Science Degree

Director: Sara Connolly
Charles A. Dana Hall, Room 163
Phone: (203) 576-4183
Fax: (203) 576-4051
Email: sconnoll@bridgeport.edu

Secretary (information and application material): Angela DiMario
Charles A. Dana Hall
Phone: (203) 576-4271
Fax: (203) 576-4051
Email: adimario@bridgeport.edu

Faculty: A. Buller, S. Connolly, L. Leedom

Admissions Requirements
The University has a rolling admissions policy. To be fully admitted applicants must have a bachelor's degree from an accredited college or university with a minimum GPA of 2.75. Applicants are expected to have at least 9 credits of psychology coursework (graduate or undergraduate) such as Personality Theories, Abnormal Psychology, or Clinical Psychology. They must also successfully complete the supplemental application portfolio which includes personal references, a writing assignment, and an official transcript.

PROGRAM PREREQUISITES
Bachelor's degree, or its equivalent, from an accredited university or recognized international institution

Undergraduate cumulative grade point average of 2.75 or higher
Nine credits in undergraduate psychology coursework with a grade of B or higher; three of the nine credits may be in an area closely related to psychology

It is recommended that clinical mental health counseling applicants have three undergraduate credits in either abnormal psychology or psychopathology

REQUIRED MATERIALS
University of Bridgeport graduate application
$50 application fee (non-refundable)
Checks or money orders should be made payable to the University of Bridgeport
Official transcripts from every school attended
International transcripts must include an official course-by-course evaluation of all academic work from an accredited academic evaluating service

Two recommendation letters
Letters must be signed and come from employers, professors or professional associates

Clinical mental health counseling applicants must obtain at least one recommendation letter from someone who can attest to field experience

PERSONAL STATEMENT
In 250-500 words, detail your interest in the counseling program, your relevant academic and personal experience, and describe your professional plans

Resume
Interview

Once all required materials are received, you will be contacted to meet with the review committee

DEADLINES
Completed application and all supporting documents must be received by:
May 1 for priority consideration, August 1 (final deadline) for the fall semester
October 1 for priority consideration, December 15 (final deadline) for the spring semester

It is highly recommended that you meet our priority deadline as program space is limited. If admitted, priority candidates receive preferred course registration.

In addition to the general admissions requirements listed above, admission decisions for the Clinical Mental Health Counseling concentration will give careful consideration to indicators of candidate life experience and maturity (e.g., successful work experience in a human service field). A personal interview is also required.

Applicants who hold a bachelor's degree from an accredited college or university but do not meet one or more of the above criteria may be admitted provisionally. Those without the recommended background in Psychology will be required to take additional psychology-related coursework as part of their degree program. Those admitted on provisional status may be fully admitted once they have completed 12 credits of coursework with a grade point average of 3.0 or higher.

Although students may enter the program in any term, it is advised to begin in the fall. Students who begin in the spring or summer may have limited course options.

Programs
The Division of Counseling offers a Master of Science degree in Counseling with concentrations in Clinical Mental Health Counseling, Human Services, and College Student Personnel. In addition to the master's degree, a Certificate of Advanced Study (CAS) is offered for those who wish to take specialized courses beyond the masters and/or complete licensure requirements. Students who apply to one program and wish to transfer to another must apply to change programs.

Upon entry into a program, students plan an individualized plan of studies with their advisor in which graduate transfer credit of no more than six credits may be included. While students can take courses at their own pace, all of the counseling degree programs require a minimum of two years to complete. There is a set sequence of courses for each concentration and some courses have prerequisites. Courses are offered once a year, typically in the evening or on weekends. In addition, there is a seven year time limit for completion of all degree requirements.

Typically students take two or three courses each term. Many students have full or part-time employment. Although it is possible to take all course work in the late afternoon, evening, or on weekends, some additional time during the day may be required to meet course expectations. This is especially true for internship placement.

Professional Licensure
Students interested in licensure should consult the state in which they wish to practice for specific requirements. The State of Connecticut requires 60 credit master's degree. Specific areas of coursework are also required. In addition, candidates for licensure must complete supervised clinical experiences and obtain a qualifying score on a standardized examination. Students who wish to pursue licensure should select the Clinical Mental Health Counseling concentration.

Certificate of Advanced Study
For individuals who hold a master's degree in Counseling or a closely related field but lack
one or more of the requirements for licensure as a professional counselor, the Division of Counseling and Human Resources offers a specialized program of study leading to a Certificate of Advanced Study (CAS) in Clinical Mental Health Counseling. The requirements of this program are individualized to the needs and goals of each student and consist of 30 credits.

**Practicum**

The practicum is designed to allow students to develop their counseling skills in a closely supervised setting. The course instructor, student’s advisor, and site supervisor determine appropriate practicum activities. Activities could include observing/shadowing, attending staff meetings, tutoring, advising, interviewing professional staff members, studying materials and procedure manuals, and other support functions.

**Internship**

Following the practicum and prerequisite courses, students will pursue an internship. The goal of the internship is to further develop and refine the skills established during practicum. You are eligible for the internship as measured by: Internship, Participation in professional associations, C570, C568

- Demonstrate knowledge, awareness and skills requisite for counseling persons from different cultural contexts and of different levels of ability

**Learning Outcomes**

Graduates in Clinical Mental Health Counseling will:

- Evidence understanding of the role of a counselor; including ethical practice, counselor behaviors and professional associations

**Counseling** Master of Science Degree

As measured by: Internship, Participation in professional associations, C570, C568

- Demonstrate knowledge, awareness and skills requisite for counseling persons from different cultural contexts and of different levels of ability

**Learning Outcomes**

Graduates in Clinical Mental Health Counseling will:

- Evidence understanding of the role of a counselor; including ethical practice, counselor behaviors and professional associations

As measured by: Internship, Participation in professional associations, C570, C568

- Demonstrate knowledge, awareness and skills requisite for counseling persons from different cultural contexts and of different levels of ability

As measured by: C512, C545, Internship, CPCE

- Apply counseling theories, techniques and intervention to practice; in individual and group settings

As measured by: C505, C570, Internship, C512, C540

- Demonstrate knowledge of the ethical use of appraisal instruments

As measured by: C582, CPCE

- Demonstrate an ability to diagnose mental health status

As measured by: C515, Internship

- Demonstrate an ability to review counseling research and integrate its contribution to specific areas of knowledge

As measured by: C535, CPCE

- Demonstrate knowledge of, and skills in Cognitive Behavioral Therapy

As measured by: C505, C570, Internship

Graduates in College Student Personnel will:

- Demonstrate knowledge, awareness and skills requisite for working with students from different cultural contexts and of different levels of ability

As measured by: C545, Internship

- Demonstrate an ability to review field related research and integrate its contribution to specific areas of knowledge

As measured by: C536

- Apply knowledge of counseling theories and developmental theory as well as best practices in Student Affairs and student

As measured by: Internship, C512, C555, Cumulative Exam

- Evidence understanding of role of the Student Affairs professional; including ethical behavior and professional affiliation

As measured by: Internship, Masters Project

- Demonstrated an ability to assess needs of different groups within a particular college environment, develop appropriate program, implement and assess program

As measured by: C527, Cumulative Exam

- Demonstrate knowledge of current issues in higher education and the purpose and function of student affairs practice in higher education

As measured by: C503, C520, Cumulative Exam

- Demonstrate an ability to integrate the knowledge and awareness gained to individual courses

As measured by: Cumulative Exam

Graduates in Human Services will:

- Evidence understanding of the role of a counseling professional; including ethical practice, behaviors and professional associations

As measured by: Internship, C568, professional associations

- Demonstrate knowledge, awareness and skills requisite for working with persons from different cultural contexts and of different levels of ability in a counseling setting

As measured by: C510, C545, Internship

- Apply counseling theories, techniques and intervention to practice; in individual and group settings

As measured by: C505, C540, Internship

- Demonstrate knowledge, awareness and skills requisite for working with students from different cultural contexts and of different levels of ability in a counseling setting

As measured by: C532, C625, C620

- Demonstrate an ability to review field related research and integrate its contribution to specific areas of knowledge

As measured by: C536

- Apply knowledge of counseling theories and developmental theory as well as best practices in Student Affairs and student

As measured by: Internship, C512, C555, Cumulative Exam

- Evidence understanding of role of the Student Affairs professional; including ethical behavior and professional affiliation

As measured by: Internship, Masters Project

- Demonstrated an ability to assess needs of different groups within a particular college environment, develop appropriate program, implement and assess program

As measured by: C527, Cumulative Exam

- Demonstrate knowledge of current issues in higher education and the purpose and function of student affairs practice in higher education

As measured by: C503, C520, Cumulative Exam

- Demonstrate an ability to integrate the knowledge and awareness gained to individual courses

As measured by: Cumulative Exam

Graduates in Human Services will:

- Evidence understanding of the role of a counseling professional; including ethical practice, behaviors and professional associations

As measured by: Internship, C568, professional associations

- Demonstrate knowledge, awareness and skills requisite for working with persons from different cultural contexts and of different levels of ability in a counseling setting

As measured by: C510, C545, Internship

- Apply counseling theories, techniques and intervention to practice; in individual and group settings

As measured by: C505, C540, Internship

- Demonstrate knowledge, awareness and skills requisite for working with students from different cultural contexts and of different levels of ability in a counseling setting

As measured by: C532, C625, C620

- Demonstrate an ability to review field related research and integrate its contribution to specific areas of knowledge

As measured by: C536

- Apply knowledge of counseling theories and developmental theory as well as best practices in Student Affairs and student

As measured by: Internship, C512, C555, Cumulative Exam

- Evidence understanding of role of the Student Affairs professional; including ethical behavior and professional affiliation

As measured by: Internship, Masters Project

- Demonstrated an ability to assess needs of different groups within a particular college environment, develop appropriate program, implement and assess program

As measured by: C527, Cumulative Exam

- Demonstrate knowledge of current issues in higher education and the purpose and function of student affairs practice in higher education

As measured by: C503, C520, Cumulative Exam

- Demonstrate an ability to integrate the knowledge and awareness gained to individual courses

As measured by: Cumulative Exam
Counseling Master of Science Degree

Summary of Requirements
Masters students in the Division of Counseling are required to complete the following courses:

**CONCENTRATION IN CLINICAL MENTAL HEALTH COUNSELING (CMHC)**

The concentration in Clinical Mental Health Counseling is designed to prepare students for work as mental health counselors and requires advanced coursework in clinical skills, psychopathology, appraisal procedures, addiction, and psychotherapeutic techniques.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coun505</td>
<td>Helping Relationships</td>
<td>4</td>
</tr>
<tr>
<td>Coun508</td>
<td>Counselor as Professional</td>
<td>3</td>
</tr>
<tr>
<td>Coun545</td>
<td>Social &amp; Cultural Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Coun540</td>
<td>Group Process Application &amp; Theory</td>
<td>4</td>
</tr>
<tr>
<td>Coun610</td>
<td>Career &amp; Lifestyle Development</td>
<td>3</td>
</tr>
<tr>
<td>Coun512</td>
<td>Theories of Counseling</td>
<td>3</td>
</tr>
<tr>
<td>Coun570</td>
<td>Strategies &amp; Techniques of Counseling</td>
<td>4</td>
</tr>
<tr>
<td>Coun582</td>
<td>Appraisal Processes for Counselors</td>
<td>3</td>
</tr>
<tr>
<td>Coun595</td>
<td>Addiction &amp; Treatment</td>
<td>3</td>
</tr>
<tr>
<td>Coun535</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>Coun552</td>
<td>Human Growth &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>Coun600</td>
<td>Clinical Mental Health Counseling Internship 1</td>
<td>4</td>
</tr>
<tr>
<td>Coun605</td>
<td>Clinical Mental Health Counseling Internship 2</td>
<td>4</td>
</tr>
<tr>
<td>Coun585</td>
<td>Trauma &amp; Crisis Intervention</td>
<td>3</td>
</tr>
<tr>
<td>Coun537</td>
<td>Psychopharmacology</td>
<td>3</td>
</tr>
<tr>
<td>Coun502</td>
<td>Orientation</td>
<td>1</td>
</tr>
<tr>
<td>Coun515</td>
<td>Clinical Skills for Counselors</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective (Practicum)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

**CONCENTRATION IN COLLEGE STUDENT PERSONNEL (CSP)**

The concentration in College Student Personnel is designed to prepare students for counseling careers in higher education. It requires advanced coursework in career and lifestyle development, organization and administration of higher education, and college student development.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 503</td>
<td>Orientation in Student Affairs</td>
<td>1</td>
</tr>
<tr>
<td>COUN 505</td>
<td>Helping Relationships</td>
<td>4</td>
</tr>
<tr>
<td>COUN 512</td>
<td>Counseling Theories</td>
<td>3</td>
</tr>
<tr>
<td>COUN 520</td>
<td>Introduction to Student Affairs</td>
<td>3</td>
</tr>
<tr>
<td>COUN 527</td>
<td>Student Affairs Administration</td>
<td>3</td>
</tr>
<tr>
<td>COUN 536</td>
<td>Assessment in Student Affairs</td>
<td>3</td>
</tr>
<tr>
<td>COUN 540</td>
<td>Group Process</td>
<td>4</td>
</tr>
<tr>
<td>COUN 545</td>
<td>Social &amp; Cultural Foundations</td>
<td>3</td>
</tr>
<tr>
<td>COUN 552</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>COUN 555</td>
<td>Student Development Theory</td>
<td>3</td>
</tr>
<tr>
<td>COUN 562</td>
<td>Today's College Student</td>
<td>3</td>
</tr>
<tr>
<td>COUN 601</td>
<td>CSP Internship 1</td>
<td>3</td>
</tr>
<tr>
<td>COUN 606</td>
<td>CSP Internship 2</td>
<td>3</td>
</tr>
<tr>
<td>COUN 610</td>
<td>Career and Lifestyle</td>
<td>3</td>
</tr>
<tr>
<td>COUN 615</td>
<td>Ethical &amp; Legal Issues in Higher Ed</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 45

**CONCENTRATION IN HUMAN SERVICES (HUSV)**

The concentration in Human Services is designed for students who aspire to positions of leadership in human service agencies. In addition to courses that develop clinical skills, it requires coursework in administration and supervision. This degree does not lead to state licensure.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 505</td>
<td>Helping Relationships</td>
<td>4</td>
</tr>
<tr>
<td>COUN 508</td>
<td>Counseling Theories</td>
<td>3</td>
</tr>
<tr>
<td>COUN 532</td>
<td>History of Systems of HS</td>
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<td>COUN 535</td>
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<td>COUN 545</td>
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<td>COUN 552</td>
<td>Human Development</td>
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<td>COUN 568</td>
<td>Counselor as Professional</td>
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<tr>
<td>COUN 602</td>
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<td>COUN 620</td>
<td>Leadership/Contemporary Workforce</td>
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<td>COUN 625</td>
<td>Organization/Admin for MHS</td>
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<tr>
<td>COUN 590</td>
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</table>

**Total** 44-45
Design Management  Master of Professional Studies Degree

Chair: Alex W. White
Arnold Bernhard Center
Telephone: (203) 576-4036
Fax: (203) 576-4042
alwhite@bridgeport.edu

Design is quickly moving to the center many organizations’ core strategy. Such companies achieve a significant competitive advantage through the implementation of effective design thinking. New demands are being placed on designers, and new skills are needed to fully integrate into the business landscape of the 21st century.

Design Management is more than the study of business and design; it is a fundamental belief within an organization that design can improve productivity, create more innovative products, lower operational costs and create a more sustainable work environment. The field of Design Management encompasses every discipline of design, including graphic and communication; industrial design and engineering; architecture and interior; and fashion and textile design.

The MPS Design Management program at Shintaro Akatsu School of Design (SASD) emphasizes the following five core aspects of design and business:

LEADERSHIP
Design Managers lead teams of designers, which requires a specific set of skills to develop the leadership style that’s right for the individual and the team. Additionally, Design Managers are often asked to champion ideas throughout an organization. Both of these types of leadership skills are emphasized in this program, resulting in graduates with strong leadership skills.

STRATEGY
Design and strategy are deeply connected. Design Managers who graduate from this program will be able to develop concepts that support and promote the core strategy of their organization, and articulate that strategy in a clear and persuasive way.

MARKETING
Understanding the principles of marketing is critical to effective Design Management. Promotion, product design, package design, and the design of the physical plant often all fall under the responsibility of the Design Manager. Upon completing the courses in this program, students will have working knowledge of these issues.

OPERATIONS
Through interactive simulations and case study research, Design Management students gain a deep understanding of the operational procedures within an organization. The courses in this program help students identify, understand, and influence efficient operational practices.

FINANCE
Students will be able to read and comprehend financial statements such as annual reports, cash flow statements, and balance sheets to more effectively integrate design proposals with business functions within their organization.

LEGAL
Design Managers are often faced with the protection of intellectual property. The MPS DM program gives students a working knowledge for dealing with design issues of trademarks, copyrights, and patents. These core skills will give Design Managers who graduate from SASD the tools they need to solve the most pressing design issues of our time, from matters of sustainability to social responsibility and profitability.

Admissions Requirements
Applicants must possess an undergraduate degree in graphic, industrial, interior, or fashion design, architecture or related design or business fields from an accredited college or university with at least a 2.7/4.0 GPA. Applicants should have a well-rounded education, as gained through general education courses.

Admissions will consider writing, speaking, and analytical skills, as demonstrated through college-level coursework or professional experience, although professional experience is not a prerequisite for admission. Applicants must submit a personal essay and two letters of recommendation. An interview is not required, but is recommended.

A portfolio is not required, but is an advantage in the admissions process.

Evidence of internship, volunteer, or prior employment in design management, marketing, business or a studio settings will be viewed favorably.

Please visit Graduate Admissions for detailed information.

http://www.bridgeport.edu/admissions.

International Admissions
http://www.bridgeport.edu/admissions/international/applying/requirements/graduate.aspx

Curriculum

First Semester

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<tr>
<th>Course Code</th>
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<td>DSNMG 400</td>
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<td>DSNMG 410</td>
<td>Design Management I</td>
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<td>MKTG 600</td>
<td>Marketing Concepts (Marketing)</td>
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<tr>
<td>MGMT 600</td>
<td>Leadership &amp; Management (Management)</td>
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Second Semester

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<td>DSNMG 410</td>
<td>Design Management II</td>
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<td>BLAW 600</td>
<td>Legal Environment of Business and Ethics (Law)</td>
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<tr>
<td>DSNMG 599</td>
<td>Special Projects</td>
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<td>DSNMG 598</td>
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Third Semester

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<td>DSNMG 511</td>
<td>Design Management III</td>
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<tr>
<td>ACCT 600</td>
<td>Financial Accounting (Finance)</td>
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<tr>
<td>ITKM 600</td>
<td>Information Systems &amp; Technology</td>
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Fourth Semester

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<td>Collaborative Design Studio IV</td>
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<td>DSNMG 511</td>
<td>Thesis/Design Management IV</td>
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<tr>
<td>MGMT 652</td>
<td>Small Business &amp; Entrepreneurship (Strategy)</td>
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or

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<tbody>
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<td>DSNMG 590X</td>
<td>New Product Commercialization</td>
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<tr>
<td>DSNMG 598</td>
<td>Internship or Coop (Elective*)</td>
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*Alternate coursework is an additional graduate-level business course and requires permission of the academic advisor.
East Asian and Pacific Rim Studies *Master of Arts Degree*

Dean: Dr. Thomas J. Ward
Carlson Hall 235
Telephone: (203) 576-4966
Fax: (203) 576-4967
Email: ubcpia@bridgeport.edu

The Masters of Arts in East Asian and Pacific Rim Studies is designed for those anticipating a future career as a civil servant, a business professional or those planning to teach and research topics related to the Pacific Rim. The Pacific Rim includes the United States, China, Canada, Russia, Japan, the Koreas, Chile, the ASEAN countries and all other members of the Asia Pacific Economic Cooperation (APEC). The curriculum is designed to equip students with the necessary foundations in language, religion, political economy, culture and history that would allow students to have the bases needed to function effectively as a professional in the Pacific Rim. The program is interdisciplinary in nature. It requires a working knowledge of at least English and one East Asian language or Russian. The program emphasizes the development of skills in social science research methods, in political economy and an understanding of the religions, cultures and the major historical developments of the region. In addition to the core courses, students in the program will also develop expertise in one of four areas: Business, Global Communications, Diplomacy or Development.

**Learning Objectives**

The program has the following learning Objectives:

- Introducing and comparing extant models of socioeconomic development with a special focus on those development models that have been used successfully in the Pacific Rim;
- Introducing the Sociopolitical Implications of the religions that are common in the Pacific region;
- Introducing and comparing models of trade;
- Equipping students with the quantitative and qualitative research skills needed to undertake effective planning, analysis and implementation of projects;
- Identifying and fostering an appreciation of the prerequisites for successful governance and amicable trade practices within developing countries;
- Development of skills in negotiation and in conflict resolution;
- Development of practical skills in problem solving and in project management through an internship in the Pacific Rim. US students will be expected to do their internship in Northeast or Southeast Asia and students from Asia will be encouraged to pursue an internship in Latin America or in a country other than their own in East Asia;
- Development of a at least a level 2 competency of an East Asian language (normally Chinese (Mandarin), Korean or Japanese or Russian.

The Masters Degree offers four potential tracks and students should choose from one of the following:

**CONFLICT ANALYSIS AND RESOLUTION TRACK (CULTURE, PEACE AND DEVELOPMENT)**
For those interested in conflict management.

**INTERNATIONAL POLITICAL ECONOMY AND DEVELOPMENT TRACK**
For those interested in development and its challenges.

**GLOBAL MANAGEMENT TRACK**
For those interested in working in the commercial domain.

**GLOBAL COMMUNICATION**
For those interested in working in the field of public diplomacy or media relations.

**Course of Study**
Sample Curriculum Sequence:
Curriculum: East Asian and Pacific Rim Studies Program requires a minimum of 36 credit hours

**SEMESTER I**
(For All Tracks)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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**SEMESTER II**

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<td>EAPRS 542</td>
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**Concentration A: Negotiations and Diplomacy**
Choose One

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<td>GLDP 580</td>
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**Concentration B: International Political Economy and Development**
Choose One

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<td>Or One Course in Concentration A, C or D if the student has not yet completed this requirement.</td>
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**Concentration C: Global Management Track**
Choose One

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**Concentration D: Global Communication Track**
Choose One

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**SEMESTER III**

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**SEMESTER IV**

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<td>GLDP 580</td>
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<td>One Course in one Concentration B, C or D</td>
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For those interested in working in the field of public diplomacy or media relations.
East Asian and Pacific Rim Studies Master of Arts Degree

Concentration B: International Political Economy and Development
Choose Three
GIDP 560 Sustainable Development 3
EAPRS 525 Models of Good Governance in the Asia-Pacific Region 3
EAPRS 563 Business and Diplomacy—East Asia vs. the West 3
One Course in Concentration A, C or D if student has not yet completed this requirement 3

Concentration C: Global Management Track
Choose Three
MGMT 530 Leadership, Teams & Managing Change 3
MGMT 539 International Issues 3
MKTG 560 Global Market Management* 3
One Course in Concentration A, B or D if the student has not yet completed this requirement 3

Concentration D: Global Communication Track
Choose Three
EAPRS 537 Global Communication and Mass Media 3
GMCS 543 Communication and National Development 3
GMCS 557 Political Communication and Governance 3
One Course in Concentration A, B or C if not yet completed 3

SEMESTER V
EAPRS 598 Tutorial 3
EAPRS 599 Thesis 3

ENGLISH LANGUAGE REQUIREMENT
For applicants whose native language is not English, a minimum score of 213 (computer) or 550 (paper) on the TOEFL (Test of English as a Foreign Language) is required. Exception to these requirements will be considered on a case-by-case basis in consultation with the Director of the University’s English Language Institute and following completion of an oral and written English exam that is administered by the English Language Institute. Students with demonstrated difficulty communicating in English may be required to take an advanced ELI course even if they have earned between 213/550 and 250/600 TOEFL scores.

MINIMUM GRADE POINT AVERAGE REQUIREMENT
Candidates for the Masters of Arts in East Asian and Pacific Rim Studies are required to maintain a minimum semester grade point average of 3.0 to remain in good academic standing. The Master of Arts in East Asian and Pacific Rim Studies may only be conferred upon a student who has the minimum required average of a 3.0 at the conclusion of the student’s studies. To receive credit for the completion of one of the tracks, a minimum of a “B” must be received in each course within the concentration. Students failing to maintain minimum academic standards will be placed on academic probation at the end of the first semester in which they do not maintain a semester or overall GPA of at least 3.0 or earn a C- or lower grade in any class. If the student fails to raise his overall GPA above a 3.0 by the end of the semester following being placed on academic probation, fails again to earn at least a 3.0 semester GPA or again earns a C- or lower grade in any class, she or he will be separated from the EAPRS program.

A student separated from the program may apply for readmission to the program following a minimum of one semester of not participating in the program. The student may only do this once.
**Education Master of Science Degree**

*Dean:* Allen P. Cook  
Carlson Hall, Room 109  
Telephone: (203) 576-4192  
Fax: (203) 576-4200  
Email: acook@bridgeport.edu

This degree program provides advanced study in education for persons interested in careers broadly related to education, or for persons seeking certification in the State of Connecticut to teach on the elementary, middle or secondary levels.

**Intern Program**

*Intern Director:* Joyce A. Cook  
Carlson Hall, Room 111  
Telephone: (203) 576-4193  
Fax: (203) 576-4200  
Email: joycecc@bridgeport.edu

The School of Education provides an internship option for the following students: (1) those seeking a Master’s degree or 6th Year Certificate of Advanced Studies and teacher certification; (2) those already certified and seeking a Master’s degree or Sixth Year Certificate of Advanced Studies, or (3) those seeking a Master’s degree only for work in nonpublic American schools, schools in another country, or in other educational settings. This internship is designed to integrate field experience with graduate course work. During the internship students earn thirty-three tuition remission credits.

**Master’s Degree Program**

Master of Science in Education  
(Connecticut Teacher Certification)

This program provides educators with the opportunities for in-depth study of techniques and materials appropriate to contemporary classrooms within a structured framework of field concentration and professional development. All programs must be planned on an individual basis with an advisor from the department. Emphasis is placed on selected areas of concentration and professional course work for the development of individual competencies.

Individuals seeking Connecticut certification must take courses required for their license in a Master’s Planned Program of Study. This program consists of foundation courses, professional courses, field experiences, and student teaching.

The following certification tracks are available: Elementary Education; Middle Grades; Secondary Academic Subjects: Biology, Physics, General Science, Chemistry, Earth Science, English, Mathematics, History and Social Studies, Remedial Reading and Remedial Language Arts, and Music.

**Teacher Preparation Programs**

Candidates who seek certification to teach in Connecticut must follow a Planned Program of Study that results in a Master’s Degree and a recommendation by the State Certification Officer at the University for an initial educator certificate in the State of Connecticut.

**Admissions into the Master’s Degree (Certification Track Programs)**

Students seeking certification must apply to the program of their choice and must meet the following requirements PRIOR to admission:

1. A Bachelor’s Degree in a subject major (not professional education) from an accredited institution with thirty-nine credits in general education including course work in English, Mathematics, Natural Science, Social Studies, and World Language or Fine Arts (Grades of D or F are NOT accepted for this category).
2. Passing scores on the PRAXIS I exams in Reading, Writing, and Mathematics or an official Essential Skills Test waiver based on required passing scores on the SAT, ACT, or La Prueba de Aptitud Academica.
3. Undergraduate GPA of at least B-.
4. A well-written essay, at least 350 words, describing the candidate’s reasons for enrolling in the program and experience relevant to teaching and demonstrating the appropriate dispositions for becoming a teacher.
5. Two letters of recommendation from persons able to testify to the candidate’s suitability as a prospective teacher and potential for graduate-level work.

Students seeking admission to the certification-track programs are expected to possess basic technology proficiencies, such as word processing, sending and receiving e-mail messages, and using the Internet.

All candidates for Connecticut State Certification must meet the following additional requirements prior to recommendation for certification:

1. Completion of all required course work
2. Survey course in U.S. History
3. PRAXIS I (or waiver) and PRAXIS II examinations, as well as any additional state mandated assessments for specific certification areas
4. Demonstration of all state-required program competencies
5. Demonstration of the knowledge, skills, and dispositions for teaching in the program area, including successful completion of all performance assessments specific to the certification program.

**Program Goals**

The Teacher Preparation Program Goals coincide with the six domain goals of the *Connecticut Common Core of Teaching* (2010). The Teacher Preparation program at the University of Bridgeport seeks to develop teachers who can accomplish all of the following:

- Understand and apply essential skills, central concepts, and tools of inquiry in their subject matter or field.
- Promote student engagement, independence, and interdependence in learning by facilitating a positive learning community.
- Plan instruction in order to engage students in rigorous and relevant learning and to promote their curiosity about the world at large.
Education Master of Science Degree

- Implement instruction in order to engage students in rigorous and relevant learning and to promote their curiosity about the world at large.
- Use multiple measures to analyze student performance and to inform subsequent planning and instruction.
- Maximize support for student learning by developing and demonstrating professionalism, collaboration with others, and leadership.

**Elementary Education, K-6, Certification Track Program**

*Chair: Margaret Lally Queenan  
Email: mqueenan@bridgeport.edu*

**Planned Program of Study**

**PRE-PROFESSIONAL REQUIREMENTS**

- **COURSEWORK**
  - **FOUNDATIONS OF EDUCATION** – 3 credits *(required)*
    - EDUC 502 Philosophical Foundations of Modern Education 3
    - or EDUC 503 Differentiated Instruction: Building on Student Diversity 3
  - **HUMAN GROWTH AND DEVELOPMENT** – 3 credits *(required)*
    - EDUC 509 Psychological Foundations in Education 3
  - **SPECIAL EDUCATION** – 3 credits *(required)*
    - EDUC 564 Education of the Exceptional Student 3

- **ADDITIONAL PROGRAM REQUIREMENTS**

  **CURRICULUM AND METHODS OF TEACHING**

  - **METHODS AND MATERIALS** – 6 credits *(required)*
    - (Two of the following)
      - EDUC 441C Methods and Materials in Teaching Mathematics 2
      - or EDUC 442C Methods and Materials in Teaching Social Studies 2
      - and EDUC 443C Methods and Materials in Teaching Science 2
  - **LITERACY** – 9 credits *(required)*
    - EDUC 440C Methods and Materials in Teaching Language Arts 3
    - EDUC 573 Early Literacy Instruction 3
    - and EDUC 574 Developmental Reading in the Elementary School 3
  - **TECHNOLOGY IN EDUCATION** – 2 credits *(required)*
    - EDUC 592 Technology Literacy for Educators 2
    - or EDUC 594 New Technologies for Learning 2

- **STATUTORY REQUIREMENTS** – 1 credit *(required)*
  - EDUC 511 Statutory Requirements in Education 1

- **FIELD EXPERIENCE/STUDENT TEACHING** – 3 credits plus Student Teaching
  - EDUC 450 Field Experience 6
  - or EDUC 515C Internship — First Semester 3
  - and EDUC 516C Internship — Second Semester 3
  - and EDUC 348C Directed/Supervised Student Teaching 6

- **PRAXIS II Examinations** *(required)*
  - Connecticut Foundations of Reading Test *(required)*

- **ADDITIONAL GRADUATE COURSES AND ELECTIVES**

  Additional Graduate Coursework *(Required if noted)*
  - **MATHEMATICS** *(Adviser approval is needed for this course.)*
    - EDUC 599 College Math for Teachers 2
  - **LITERACY AND ENGLISH LANGUAGE LEARNING**
    - EDUC 563C Children’s Literature 3
    - EDUC 570 Instruction for the English Language Learner 1
  - **UNITED STATES HISTORY**
    - HIST 300 U.S. History for Teachers 3

- **FINAL DEGREE REQUIREMENTS**

  (Choose one; certification-track students must take PRAXIS II and Connecticut Foundations of Reading Test.)
  - **EXAMINATIONS** *(required for certification)*
    - **PRAXIS II**
      - Connecticut Foundations of Reading Test 3
    - EDUC 566 Contemporary Educational Problems II 3
    - EDUC 595 Thesis Research 3

- **Total Number of Credits**
  - MS.Ed. Total Minimum: 33 credits
  - (not including 6 credits for student teaching)

**Middle Grades, 4-8, Certification Track Program**

*Chair: Joyce A. Cook  
Email: joyce@cbridgeport.edu*

**Planned Program of Study**

**PRE-PROFESSIONAL REQUIREMENTS**

- **COURSEWORK**
  - **FOUNDATIONS OF EDUCATION** – 3 credits *(required)*
    - EDUC 502 Philosophical Foundations of Modern Education 3
  - **ADDITIONAL PROGRAM REQUIREMENTS**

  **STATUTORY REQUIREMENTS** – 1 credit *(required)*
  - EDUC 511 Statutory Requirements in Education 1

  **HUMAN GROWTH AND DEVELOPMENT** – 3 credits *(required)*
  - EDUC 509 Human Growth and Development 3

  **FIELD EXPERIENCE/STUDENT TEACHING** – 6 credits *(required)*
  - EDUC 515C Internship — First Semester 3
  - and EDUC 516C Internship — Second Semester 3
  - and EDUC 348C Directed/Supervised Student Teaching 6

  **ADDITIONAL GRADUATE COURSES AND ELECTIVES**

  **EDUC 576**
  - Reading and Writing in the Content Areas 3

- **EDUC 575M**
  - Reading and Writing in the Content Areas 3

- **EDUC 576**
  - Developmental Reading in Middle Grades Classrooms 3

- **TECHNOLOGY IN EDUCATION** – 2 credits *(required)*
  - EDUC 592 Technology Literacy for Educators 2
  - or EDUC 594 New Technologies for Learning 2

- **FIELD EXPERIENCE/STUDENT TEACHING** – 6 credits plus Student Teaching
  - EDUC 450 Field Experience 6
  - or EDUC 515C Internship — First Semester 3
  - and EDUC 516C Internship — Second Semester 3
  - and EDUC 348C Directed/Supervised Student Teaching 6
Education Master of Science Degree

PROFESSIONAL EDUCATIONAL REQUIREMENTS

CURRICULUM AND METHODS OF TEACHING

Methods and Materials—Secondary Level – 3 credits (required)
(Students must take the Methods and Materials course specific to the certification area).

EDUC 440J Methods and Materials in Teaching Language Arts 3
or EDUC 441J Methods and Materials in Teaching Mathematics 3
or EDUC 442J Methods and Materials in Teaching Social Studies 3
or EDUC 443J Methods and Materials in Teaching Science 3

CONTENT LITERACY & LITERATURE – 3 credits (required)
EDUC 575J Reading and Writing in the Content Areas 3
(Secondary English Education Program Students – 3 credits (required))
EdUC 536J Adolescent Literature 3

TECHNOLOGY IN EDUCATION – 2 credits (required)
EDUC 592 Technology Literacy for Educators 2
or EDUC 594 New Technologies for Learning 2

STATUTORY REQUIREMENTS – 1 credit (required)
EDUC 511 Statutory Requirements in Education 1

FIELD EXPERIENCE/STUDENT TEACHING – 6 credits plus Student Teaching
EDUC 450 Field Experience 6
or EDUC 515J Internship 3
and EDUC 516J Internship 3
EDUC 392 Directed/Supervised Student Teaching 6
PRAXIS II

ADDITIONAL PROGRAM REQUIREMENTS

Additional Coursework Required if Noted
EDUC 500 Research and Report Writing 3
EDUC 570 Instruction for the English Language Learner 3
HIST 300 U.S. History for Teachers 3

FINAL DEGREE REQUIREMENT

EXAMINATIONS (required for certification)
PRAXIS II

OTHER REQUIREMENTS FOR STATE OF CONNECTICUT CERTIFICATION

Additional Coursework for Certification or Endorsement (required if noted)

Specific Subject Area Requirements for Secondary Certification

Each student must have the appropriate undergraduate coursework for the certification area. Students are advised to check with their academic advisor for all undergraduate and graduate certification requirements.

BIOLoGY, CHEMISTRY, EARTH SCIENCE, GENERAL SCIENCE, OR PHYSICS
Chair: Nelson Ngoh
Email: ngoh@bridgeport.edu

REQUIREMENTS
Undergraduate major in certification area or 30 credits plus nine credits in related subject(s) in certification area
EDUC 443J Methods/Materials, Teaching Science 3
Students need to complete all requirements on their Planned Programs of Study and pass all performance assessments.

ENGLISH
Chair: Patricia Mulcahy-Ernt
Email: mulcahyerp@bridgeport.edu

REQUIREMENTS
English major or 30 credits plus nine credits in related subject(s)
EDUC 440J Methods/Materials, Teaching Language Arts 3
EDUC 536J Adolescent Literature 3
EDMM 600L Teaching Writing in Classrooms 1
Students need to complete all requirements on their Planned Programs of Study and pass all performance assessments.

MATHEMATICS
Chair: Allen P. Cook
Email: acpcook@bridgeport.edu

REQUIREMENTS
Mathematics major or 30 credits plus nine credits in related subject(s)
EDUC 441J Methods/Materials, Teaching Mathematics 3
Students need to complete all requirements on their Planned Programs of Study and pass all performance assessments.

Secondary Academic Subjects Certification Track Program

Planned Program of Study

PRE-PROFESSIONAL REQUIREMENTS COURSEWORK

EDUC 502 Philosophical Foundations of Modern Education 3
or EDUC 503 Differentiated Instruction: Building on Student Diversity 3

HUMAN GROWTH AND DEVELOPMENT – 3 credits (required)
EDUC 509 Psychological Foundations in Education 3

SPECIAL EDUCATION – 3 credits (required)
EDUC 564 Education of the Exceptional Student 3

EDMM 600B Advanced Numerical Analysis (Cross list - Math 14) 3
EDMM 600B Mathematical Modeling: Iterative Functions and Fractals (Cross list - Math 480) 3

ELECTIVES IN LITERACY AND ENGLISH LANGUAGE LEARNING:
EDUC 536M Adolescent Literature—Middle Level 3
EDUC 570 Instruction for the English Language Learner 3
Other Electives 1-6

FINAL DEGREE REQUIREMENT

(Choose one of the following:)

EXAMINATIONS (required for certification)
PRAXIS II

EDUC 566 Contemporary Educational Problems II 3
or EDUC 595 Thesis Research 3

Total Number of Credits
MS Ed. Total Minimum: 33 credits
(not including 6 credits of student teaching)

OTHER REQUIREMENTS FOR STATE OF CONNECTICUT CERTIFICATION

SURVEY COURSE OF UNITED STATES HISTORY – 3 credits (required)
Additional Coursework for Certification or Endorsement (required if noted)
PRAXIS I (or waiver) and PRAXIS II Examinations (required for certification)

Email: acook@bridgeport.edu
Chair: Patricia Mulcahy-Ernt
Email: mulcahyerp@bridgeport.edu

General Science
Chair: Allen P. Cook
Email: acpcook@bridgeport.edu

Mathematics
Chair: Nelson Ngoh
Email: ngoh@bridgeport.edu

Other
Chair: Nelson Ngoh
Email: ngoh@bridgeport.edu

English
Chair: Nelson Ngoh
Email: ngoh@bridgeport.edu

Science
Chair: Nelson Ngoh
Email: ngoh@bridgeport.edu

Social Studies
Chair: Nelson Ngoh
Email: ngoh@bridgeport.edu

Total Number of Credits
MS Ed. Total Minimum: 33 credits
(not including 6 credits of student teaching)
MATH CONTENT – 12 credits (required)
MATH 401 Advanced Analysis for Scientists (EDMM 600B) 3
MATH 402 Advanced Analysis II (EDMM 600B) 3
MATH 407 Intro to Modern Analysis (EDMM 600B) 3
MATH 414 Numerical Analysis (EDMM 600B) 3
or MATH 399 Topics - College Math for Teachers (EDMM 600B) - Survey Praxis II Math 3
MATH 415 Advanced Numerical Analysis (EDMM 600B) 3
MATH 480 Topics - Math Modeling (EDMM 600B) - Math Analysis III 3

HISTORY AND SOCIAL STUDIES

REQUIREMENTS
History major plus 18 credits in other social sciences; or major in Anthropology, Sociology, Political Science, Geology, Economics, plus 18 credits in history
EDUC 442J Methods/Materials, Teaching Social Studies 3
Students need to complete all requirements on their Planned Programs of Study and pass all performance assessments.

Music Education, K-12, Certification Track
Chair: Jeffrey Johnson
Email: jjohnson@bridgeport.edu

Planned Program of Study

FOUNDATIONS OF EDUCATION REQUIREMENTS

COURSEWORK

FOUNDATIONS OF EDUCATION – 3 credits (required)
EDUC 502 Philosophical Foundations of Modern Education 3
or EDUC 503 Differentiated Instruction: Building on Student Diversity 3
HUMAN GROWTH AND DEVELOPMENT – 3 credits (required)
EDUC 509 Psychological Foundations in Education 3
or EDUC 560M Human Growth and Development* 3
**These course requirements may be met by taking an appropriate undergraduate course with a grade of at least a “B,” taken within the past five years.

SPECIAL EDUCATION – 3 credits (required)
EDUC 564 Education of the Exceptional Student 3

PROFESSIONAL EDUCATION REQUIREMENTS

CURRICULUM AND METHODS OF TEACHING

METHODS AND MATERIALS – 6 credits (required)
MSED 343 Music in Elementary Schools 3
MSED 380 Music in Secondary Schools 3
CONTENT LITERACY – 3 credits (required)
EDUC 575M Reading and Writing in the Content Areas 3
TECHNOLOGY IN EDUCATION – 2 credits (required)
EDUC 592 Technology Literacy for Educators 2
or EDUC 594 New Technologies for Learning 2

FIELD EXPERIENCE/STUDENT TEACHING – 6 credits plus Student Teaching
EDUC 450 Field Experience 6
or EDUC 515M Internship 3
and EDUC 516M Internship 3
and MSE 390 Directed/Supervised Student Teaching, Music 6

ADDITIONAL PROGRAM REQUIREMENTS

STATUTORY REQUIREMENTS – 1 credit (required)
EDUC 511 Statistical Requirements 1
ADDITIONAL COURSEWORK (Required if Noted)
EDUC 500 Research and Report Writing 3
EDUC 570 Instruction for the English Language Learner 3
Other Electives 1-9

FINAL DEGREE REQUIREMENT

EXAMINATIONS (required for certification)
PRAXIS II
EDUC 566 Contemporary Educational Problems II 3
EDUC 595 Thesis Research 3

TOTAL NUMBER OF CREDITS
MS Ed. Total Minimum: 33 credits
(not including 6 credits of student teaching)

OTHER REQUIREMENTS FOR STATE OF CONNECTICUT CERTIFICATION
Survey Course of United States History – 3 credits (required)
Additional Coursework for Certification or Endorsement (required if noted)

Certification Track Program in Remedial Reading and Remedial Language Arts
Chair: Patricia Mulcahy-Errt
Email: mulcahyp@bridgeport.edu

This 33 credit graduate course of study provides extensive course work and experiences in working with students in the field of literacy and language arts, leading to the initial educator certification in Remedial Reading and Remedial Language Arts for grades 1-12. This concentration focuses on working with students in a variety of instructional settings for the purpose of teaching literacy processes, for evaluating students in reading and language arts, and for developing and evaluating literacy programs. Students learn to create appropriate literacy instruction for learners experiencing difficulty in reading and language arts. Upon completion of the coursework, field experiences, and appropriate performance assessments, students may apply for the Connecticut initial educator certificate in Remedial Reading/Remedial Language Arts, 1-12.

ADMISSIONS CRITERIA

1. A valid Connecticut teaching certificate (or proof of eligibility);
2. At least two letters of recommendation from persons able to testify to your suitability as a prospective teacher and your potential for graduate-level work;
3. An essay demonstrating a command of the English language and setting out the reasons for wanting to enroll in the program and emphasizing experience relevant to teaching;
4. A successful team interview with faculty;
5. Completion of at least 30 school months of successful classroom teaching experience.
6. Connecticut’s essential skills testing requirements: passing scores in the PRAXIS I exams in Reading, Writing, and Mathematics or an official essential skills test waiver currently meeting this requirement.
# Planned Program of Study

## PREREQUISITE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Children's or Adolescent Literature</td>
<td>3</td>
</tr>
<tr>
<td>Special Education</td>
<td>3</td>
</tr>
</tbody>
</table>

## PROFESSIONAL EDUCATION REQUIREMENTS

### READING AND LANGUAGE ARTS – 8 credits (required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 440C Methods and Materials in Teaching Language Arts</td>
<td>3</td>
</tr>
<tr>
<td>or EDUC 440M/J Methods and Materials in Teaching Language Arts</td>
<td>3</td>
</tr>
<tr>
<td>and EDUC 574 Developmental Reading in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>and EDUC 575 Reading and Writing in the Content Area</td>
<td>3</td>
</tr>
</tbody>
</table>

### DIAGNOSIS AND REMEDIATION OF READING AND LANGUAGE ARTS DIFFICULTIES – 3 credits (required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 571 Diagnosis and Intervention of Reading and Language Arts Difficulties</td>
<td>3</td>
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</tbody>
</table>

### TESTS AND MEASUREMENTS – 3 credits (required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDUC 558 Evaluation of Instructional Outcomes</td>
<td>3</td>
</tr>
</tbody>
</table>

### CLINICAL PRACTICES IN READING AND LANGUAGE ARTS – 7 credits (required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDUC 596 Field Experience in Reading and Language Arts</td>
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</tr>
<tr>
<td>EDUC 597 Practicum in Reading and Language Arts</td>
<td>6</td>
</tr>
</tbody>
</table>

## ADDITIONAL PROGRAM REQUIREMENTS

### TECHNOLOGY IN EDUCATION – 2 credits (required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDUC 592 Technology Literacy for Educators</td>
<td>2</td>
</tr>
<tr>
<td>or EDUC 594 New Technologies for Learning</td>
<td>2</td>
</tr>
</tbody>
</table>

### SECOND LANGUAGE LEARNING AND ACQUISITION – 1 credits (required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 570 Instruction for the English Language Learner</td>
<td>1</td>
</tr>
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</table>

### ADDITIONAL GRADUATE COURSEWORK (required if noted)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 500 Research and Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 515 Internship</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 516 Internship</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 570 Instruction for the English Language Learner</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 573 Early Literacy Instruction</td>
<td>1</td>
</tr>
</tbody>
</table>

## FINAL DEGREE REQUIREMENT

(Choose one of the following):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 566 Contemporary Educational Problems II</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 568 Studies in Literacy Research</td>
<td>1</td>
</tr>
<tr>
<td>or EDUC 595 Thesis Research</td>
<td>2-6</td>
</tr>
</tbody>
</table>

### ADDITIONAL COURSEWORK FOR CERTIFICATION (required if noted)

Total Number of Credits

- M.S. Total Minimum: 33 credits

Students need to complete all requirements on their Planned Programs of Study and pass all performance assessments.
Chair: Norma Atkinson
Carlson Hall, Room 108
Telephone: (203) 576-4028
Fax: (203-576-4200
Email: natkinso@bridgeport.edu

This degree program provides advanced study for certified teachers and for persons interested in careers related to school-age students.

Teacher Leadership
(33 SEMESTER HOURS)

This program is designed for students who are certified teachers or who wish to pursue a Master’s degree or 6th year Certificate of Advanced Studies in education with greater flexibility than a program leading to certification.

Teacher Leadership is an alternative approach to graduate study which combines a basic core with selected courses. In the needs analysis and assessment core, students analyze their own school experiences and determine competencies they wish to achieve. In the final core requirement students demonstrate those competencies in a clinical and a research setting.

The wide variety of learning topics provides flexibility through which students may gain competencies.

Summary of Requirements

<table>
<thead>
<tr>
<th>PROGRAM REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDMM 500 Analysis, Assessment &amp; Planning Core 3</td>
</tr>
<tr>
<td>EDUC 566 Contemporary Educational Problems II 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSE TOPICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses are offered in the following topics, with several courses available under each topic. For courses offered each semester, consult the course schedule.</td>
</tr>
<tr>
<td>(Choose among the following)</td>
</tr>
<tr>
<td>EDMM 600A Reading 1</td>
</tr>
<tr>
<td>EDMM 600B Mathematics 1</td>
</tr>
<tr>
<td>EDMM 600C Social Studies 1</td>
</tr>
<tr>
<td>EDMM 600D Science 1</td>
</tr>
<tr>
<td>EDMM 600E Exceptional Children, Gifted Students 1</td>
</tr>
<tr>
<td>EDMM 600F Art 1-3 SDS 599G, Foreign Languages 1</td>
</tr>
<tr>
<td>EDMM 600H Home Economics 1</td>
</tr>
<tr>
<td>EDMM 600J Industrial Arts, Vocational Education 1</td>
</tr>
<tr>
<td>EDMM 600K Curriculum Studies 3</td>
</tr>
<tr>
<td>EDMM 600L Language Arts 1</td>
</tr>
<tr>
<td>EDMM 600M Music 1</td>
</tr>
<tr>
<td>EDMM 600N Physical Education 1</td>
</tr>
<tr>
<td>EDMM 600P Drama 1</td>
</tr>
<tr>
<td>EDMM 600Q Early Childhood Education 1</td>
</tr>
<tr>
<td>EDMM 600R Guidance and Human Development 1</td>
</tr>
<tr>
<td>EDMM 600S Technology Literacy for Educators 1</td>
</tr>
<tr>
<td>EDMM 600T Adult Educ. and Parent Educ. 1</td>
</tr>
<tr>
<td>EDMM 600U Leadership, Admin., and Supervision 3</td>
</tr>
<tr>
<td>EDMM 600V Classroom Mngm and Teaching Skills 1</td>
</tr>
<tr>
<td>EDMM 600W Educational Law and Legal Issues 3</td>
</tr>
<tr>
<td>EDMM 600X Testing and Evaluation 3</td>
</tr>
<tr>
<td>EDMM 600Z Foundations of Education 1</td>
</tr>
</tbody>
</table>

| TOTAL | 33 |

Several programmatic arrangements are available through Teacher Leadership from the School of Education office.
Education Sixth Year Certificate of Advanced Study (CAS) Remedial Reading and Remedial Language Arts

Chair: Patricia Mulcahy-Ernt
Carlson Hall, Room 118
Telephone: (203) 576-4201
Fax: (203) 576-4202
Email: mulcahp@bridgeport.edu

Program Goals
The program goals in literacy are adapted from the international Reading Association Standards for reading Professionals - Revised 2010. The goals in Literacy for the Remedial Reading and Remedial Language Arts Program and for the Reading and Language Arts consultant Program are as follows.

• Reading professionals understand the theoretical and evidence-based foundations of reading and writing processes and instruction.
• Reading professionals use instructional approaches, materials, and an integrated, comprehensive, balanced curriculum to support learning in reading and writing.
• Reading professionals use a variety of assessment tools and practices to plan and evaluate effective reading and writing instruction.
• Reading professionals create and engage their students in literacy practices that develop awareness, understanding, respect, and a valuing of differences in our society.
• Reading professionals create a literate environment that fosters reading and writing by integrating foundational knowledge, instructional practices, approaches and methods, curriculum materials, and the appropriate use of assessments.
• Reading professionals recognize the importance of, demonstrate, and facilitate professional learning and leadership as a career-long effort and responsibility.

This program is designed for certified teachers who elect graduate-level preparation in reading and language arts. This program leads to an initial educator certificate in Remedial Reading and Remedial Language Arts, grades 1-12. Applicants must have completed a Master’s degree, must have a valid teaching certificate (or be eligible for certification) in elementary, middle, or secondary education, must show that they have passed the Connecticut essential skills testing requirement, and must have completed at least three years of classroom teaching experience. Upon completion of the Planned Program with appropriate coursework, field experiences, and performance assessments, a student may apply for the Connecticut initial educator certificate in Remedial Reading and Remedial Language Arts.

In this program students gain extensive preparation in learning to teach students in reading and language arts; to work with learners experiencing difficulty in reading, writing, and literacy-related processes; to assess literacy development; and to develop and evaluate programs that improve literacy processes.

An individual with a pre-existing regionally accredited Master’s degree may use the 6th Year CAS degree program to achieve teacher certification. Please see the description of the Master’s Teacher Preparation program on p. 183.

PREREQUISITE REQUIREMENTS*
(9 credits)
EDUCATIONAL PSYCHOLOGY – 3 credits (required)
EDUC 509 Psychological Foundations in Education 3

CHILDREN’S OR ADOLESCENT LITERATURE – 3 credits (required)
EDUC 536C Children’s Literature 3
or EDUC 536J Adolescent Literature 3

SPECIAL EDUCATION – 3 credits (required)
EDUC 564 Education of the Exceptional Student 3

PROFESSIONAL EDUCATION REQUIREMENTS**

READING AND LANGUAGE ARTS - 9 credits (required)
EDUC 440C Methods and Materials in Teaching Language Arts 3
or EDUC 440M Methods and Materials in Teaching Language Arts 3
and EDUC 574 Developmental Reading in the Elementary School 3
and EDUC 575M Reading and Writing in the Content Areas 3

DIAGNOSIS AND REMEDIATION OF READING AND LANGUAGE ARTS DIFFICULTIES – 3 credits (required)
EDUC 571 Diagnosis and Intervention of Reading and Language Arts Difficulties 3

TESTS AND MEASUREMENTS – 3 credits (required)
EDUC 558 Evaluation of Instructional Outcomes 3

CLINICAL FIELD EXPERIENCES – 7 credits (required)
EDUC 596 Field Experience in Reading and Language Arts 1
EDUC 597 Practicum in Reading and Language Arts 6

ADDITIONAL PROGRAM REQUIREMENTS
(4-12 credits)

TECHNOLOGY IN EDUCATION (required as noted)
EDUC 592 Technology Literacy for Educators 2
or EDUC 594 New Technologies for Learning 2

SECOND LANGUAGE LEARNING AND ACQUISITION (required as noted)
EDUC 570 Instruction for the English Language Learner 1

SECOND LANGUAGE LEARNING AND ACQUISITION (required as noted)
EDUC 570 Instruction for the English Language Learner 1

ADDITIONAL GRADUATE COURSEWORK (required as noted)
EDUC 573 Early Literacy 3

FINAL DEGREE REQUIREMENT
(Choose one of the following)

INDEPENDENT STUDY
EDUC 668 Literacy Research Project 1
EDUC 669 Sixth Year Project 1-3

THESIS RESEARCH
EDUC 695 Advanced Thesis Research — Sixth Year 2-6

Credits for Certification
Students need to complete all requirements on their Planned Programs of study. Students seeking to complete the Sixth Year Degree must complete an additional 9 credits, inclusive of the Final Degree Requirement.

Total Number of Credits:
Sixth Year degree Total Minimum: 30 Credits

*With prior written adviser approval these courses may be met by taking undergraduate courses with a grade of a “B” or higher.
**These courses are required for the Sixth Year Certificate Program in Remedial Reading and Remedial Language Arts.
The Reading and Language Arts Consultant Certification Program is a Sixth Year degree program designed to prepare educators for leadership positions in elementary, middle, and secondary schools. The program prepares the student for the roles of a curriculum and instructional leader, including the following: organizing, supervising, and enhancing literacy programs; coordinating the instruction and assessment of students in reading and language arts; guiding, improving, and enriching reading and language arts instruction in all content areas; and collaborating with teachers, administrators, parents, and other literacy leaders.

Applicants must have completed a Master’s degree, must have a valid teaching certificate (or be eligible for Connecticut certification) in elementary, middle, or secondary education; must have completed a minimum of thirty months of successful classroom teaching experience; and must have completed all state required tests including the Connecticut Foundations of Reading Test. Upon the completion of the Planned Program with appropriate coursework, field experiences, performance assessments, and the demonstration of required certification competencies, a student may apply for the Reading and Language Arts initial educator endorsement.

An individual with a pre-existing regionally accredited Master’s degree may use the 6th Year CAS degree program to achieve teacher certification. Please see the description of the Master’s Teacher Preparation program on p. 183).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDUC 509</td>
<td>Psychological Foundations in Education</td>
<td>3</td>
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<tr>
<td>EDUC 536C</td>
<td>Children’s Literacy</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 566</td>
<td>Education of the Exceptional Student</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 588</td>
<td>Evaluation of Instructional Outcomes</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 440C</td>
<td>Methods in Teaching Language Arts</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 440M/J</td>
<td>Methods in Teaching Language Arts</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 570</td>
<td>Instruction for the English Language Learner</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 571</td>
<td>Diagnosis and Intervent of Reading and Language Arts Difficulties</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 596</td>
<td>Field Experience in Reading and Language Arts</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 597</td>
<td>Practicum in Reading and Language Arts</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credits: 16

**FINAL DEGREE REQUIREMENT**

(Choose one of the following):
- EDUC 669 Sixth Year Project 3
- EDUC 695 Advanced Thesis Research–Sixth Year 3

**ADDITIONAL COURSEWORK FOR CERTIFICATION**

(required if Noted)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>EDUC 608</td>
<td>Literacy Research Project</td>
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</tr>
<tr>
<td>EDUC 669</td>
<td>Sixth Year Project</td>
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</tr>
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</table>

Total Number of Credits

Sixth Year Total Minimum: 30 credits
Education Sixth Year Certificate of Advanced Study (CAS)

Chair: Norma Atkinson
Carlson Hall, Room 108
Telephone: (203) 576-4028
Fax: (203) 576-4200
Email: natkinso@bridgeport.edu

This program is for teachers who wish to obtain an additional graduate degree beyond the Master’s degree. The format of the program facilitates an innovative and flexible approach which can respond to the most current trends in education and will further the skills and competence of the student.

The student may concentrate in either elementary, middle, or secondary education.

An individual with a pre-existing regionally accredited Master’s degree may use the 6th Year CAS degree program to achieve teacher certification. Please see the description of the Master’s Teacher Preparation program on p. 183).

Summary of Requirements

PROGRAM REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDM 500</td>
<td>Analysis, Assessment and Planning Core</td>
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<tr>
<td>EDUC 669</td>
<td>Sixth Year Project</td>
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<tr>
<td>or EDUC 695</td>
<td>Advanced Thesis Research</td>
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COURSES

ELEMENTARY EDUCATION

<table>
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<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ 598</td>
<td>Clinical Assessment</td>
<td>2</td>
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<tr>
<td>Choose Elementary Courses</td>
<td></td>
<td></td>
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<tr>
<td>Choose Secondary Courses</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDM 600A</td>
<td>Reading</td>
<td>1</td>
</tr>
<tr>
<td>EDM 600B</td>
<td>Mathematics</td>
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</tr>
<tr>
<td>EDM 600C</td>
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<tr>
<td>EDM 600D</td>
<td>Science</td>
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</tr>
<tr>
<td>EDM 600E</td>
<td>Exceptional Children, Gifted Students</td>
<td>1</td>
</tr>
<tr>
<td>EDM 600F</td>
<td>Art 1-3 SLS 599G, Foreign Languages</td>
<td>1</td>
</tr>
<tr>
<td>EDM 600H</td>
<td>Home Economics</td>
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<tr>
<td>EDM 600J</td>
<td>Industrial Arts, Vocational Education</td>
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<td>Early Childhood Education</td>
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<tr>
<td>EDM 600T</td>
<td>Adult Education and Parent Education</td>
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<tr>
<td>EDM 600U</td>
<td>Leadership, Administration, and Superv.</td>
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<tr>
<td>EDM 600V</td>
<td>Classroom Manage. &amp; Teaching Skills</td>
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<td>EDM 600W</td>
<td>Educational Law and Legal Issues</td>
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<td>EDM 600X</td>
<td>Testing and Evaluation</td>
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<td>EDM 600Z</td>
<td>Foundations of Education</td>
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</tr>
<tr>
<td></td>
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<td>29</td>
</tr>
</tbody>
</table>

Several programmatic arrangements are available through ModMAP from the School of Education and Human Resources Office.

TOTAL SEMESTER HOURS 30
Educational Leadership  Sixth Year Professional Diploma

Chair and Director: Ethan Margolis
Carlson Hall
Telephone: (203) 576-4218
Fax: (203) 576-4200

Program Goals

The Educational Leadership Program Goals are adapted from Connecticut State Department of Education’s common Core of Leading (2010). The Educational Leadership program at the University of Bridgeport seeks to develop leaders who can accomplish all of the following:

• Develop a shared vision for student learning that creates meaning for the people in the organization and infuses purpose into the strategies and standards for actions linked to that vision.

• Promote an instructional program, built on high expectations for all learners and conducive to student learning and professional growth, thereby developing a school culture of success for all learners.

• Establish positive learning environments by developing trust and credibility through meaningful relationships.

• Establish a culture that is open and inclusive, through modeling and expecting ethical and moral behaviors from all.

A student who holds a Master’s degree from an accredited college or university may apply to in the Sixth Year program. The Professional Diploma program consists of thirty semester hours.

The Sixth Year Program, leading to the professional Diploma in Educational Leadership, is designed to meet requirements leading to administrator and supervisor certification (092). This Connecticut State Certification enables a candidate to apply for the following positions: Principal, Assistant Principal, Director of Instruction, Assistant Superintendent, and Deputy Superintendent. With the exception of Reading and Language arts, this certification would also include subject area consultant and curriculum coordinator.

An individual with a pre-existing regionally accredited Master’s degree may use the 6th Year CAS degree program to achieve teacher certification. Please see the description of the Master’s Teacher Preparation program on p. 183).

Intermediate Administrator (092 Certification)

Certification Track

Summary of Requirements

(30 SEMESTER HOURS)

CERTIFICATION REQUIRES COURSES IN EACH OF THE FIVE AREAS, AND A TOTAL OF 24 CREDITS BEYOND THE MASTER’S

REQUIRED CORE

I. PSYCHOLOGICAL/PEDAGOGICAL
*EDLD 621 Evaluation of School Effectiveness

II. CURRICULUM/PROGRAM MONITORING
*EDLD 551 Curriculum Development

III. SCHOOL ADMINISTRATION
EDLD 613 Leadership
EDLD 618 School Finance (required)
EDLD 619 School Law (required)

IV. PERSONNEL EVALUATION/SUPERVISION
EDLD 652 Supervision: Evaluation/Development

V. CONTEMPORARY EDUCATIONAL PROBLEMS/POLICY MAKING
EDLD 601 Contemporary Problems in Education

Notes:

• Administrative Internship ED. 681A (3 credits) required
• CAT Examination – required for 092 certification
• EDUC 564 Education of the Exceptional Student (This requirement will be waived if the candidate holds special education certification). Must be completed for certification.
• Certification (092) = 24 credits
• 6th Year professional Diploma = 30 credits

SUGGESTED ELECTIVES

EDLD 682A Special Topics in the Management of Educational Institutions 3
EDLD 603 Computer Uses in Educational Management 3
EDLD 680A Topics in Educational Leadership 3
EDLD 682 Special Topics in Educ. Mgmt. 3

Electives offered by other topics or colleges, and related to the field of Educational Management, may be selected under advisement.

Total Semester Hours 30
Educational Leadership Doctor of Education Degree

Program Director: Thomas Christ Carlson Hall
Telephone: (203) 576-4215
Fax: (203) 576-4200
Email: tchrist@bridgeport.edu

The Doctoral Program in Educational Leadership, offered by the University of Bridgeport, is the first of its kind in Connecticut (1980). It is designed to improve the effectiveness of experienced administrators by integrating the study and practice of sound educational and management principles. Successful completion of the program leads to the Doctor of Education degree (Ed.D.)

As an advanced degree program focusing on the renewal of practicing administrators, the Doctoral Program addresses the needs of such personnel in terms of both the content of the curriculum and program organization. It is offered on a part-time basis at the University of Bridgeport campus. Courses and seminars are scheduled around the job demands of the working professional.

Summary of Requirements (62 SEMESTER HOURS)

1. Three years formal study

YEAR ONE AND YEAR TWO
FALL - 8 semester hours
SPRING - 8 semester hours
SUMMER - 6 semester hours

YEAR THREE
FALL - 6 semester hours
SPRING - 6 semester hours
SUMMER - 6 semester hours

The following courses are offered on a rotating basis. Each course carries six semester hours.

EDLD 803 Higher Education Administration (K-12)
EDLD 804 Constitutional Legal and Political Issues Confronting Educational Leaders
EDLD 806 *Quantitative Analysis & Evaluation Strategies
EDLD 807 Management of Educational Institutions
EDLD 808 Human Relations, Communication and Decisionmaking
EDLD 810 Computer Application in Educational Leadership

*Quantitative Analysis and Evaluation Strategies is required

2. Residency
Twenty-five days for each of first three years

EDLD 800D Interdisciplinary Continuing Doctoral Seminars

During the first three years of the program, seminars meet on four Saturdays during the academic year and for two full weeks each summer. These seminars provide opportunities for students to work with scholars and leaders from a variety of disciplines to broaden perspectives on educational leadership and to develop an intellectual style for dealing with educational problems. The seminars are planned with student input.

3. EDLD 845
Dissertation Preparation Seminars

During the third year of the program, students participate in seminars during the fall, spring and summer sessions which focus on the selection and development of a dissertation proposal. Students are ordinarily expected to complete the major portion of their work on the dissertation proposal prior to the conclusion of the formal part of the program.

4. Comprehensive Examination
The major thrust of the comprehensive examination is to test the student’s ability to utilize knowledge and skills gained through formal instructional activities in addressing the solution of educational problems. The examination is based upon the student’s program of study. It is scheduled following completion of all course and seminar work, and prior to submission of the formal dissertation proposal.

5. Dissertation (MINIMUM - ONE YEAR)

The individual dissertation represents the student’s major effort during the program. It will focus on a significant problem in Educational Leadership which addresses a local, regional or national need, and relates to the personal needs and interests of the student. Ideas for dissertations will ordinarily emerge from the courses, the continuing seminars, personal contact with the faculty, on-the-job experience or requests for assistance from schools, school systems, or professional organizations. The student is expected to take at least one calendar year to complete the dissertation. During this year, the student is considered as having a half-time course load.

Each student has a three-member dissertation committee.

Note: Completion of Doctoral Degree
The degree must be completed within seven years of the date from which the student started coursework in the doctoral program. In exceptional cases, the department may recommend that the Dean grant an extension of this limit.
Chair: Lawrence Hmurcik  
Engineering Technology Building  
Telephone: (203) 576-4678  
Fax: (203) 576-4105  
Email: hmurcik@bridgeport.edu

This Program is designed to increase the student’s knowledge and competence in basic areas necessary for Modern Electrical Engineering, while affording sufficient freedom to allow an in-depth study of such areas as Communications, Control Systems, Electronics and Digital Processing.

The Department also offers, as an integral part of the Electrical Engineering Masters Degree, the opportunity to specialize in several Concentration Areas.

Electrical Engineering Concentration Areas:
1. Bio-Medical Engineering
2. Computer Communications and Networking
3. Environmental and Energy Management
5. Robotics and Automation
6. Security (IT Security, Biometrics, etc.)
7. Signal and Image Processing
8. Very Large Scale Integration (VLSI)
9. Wireless and Mobile Communications

Please refer to the Graduate Studies Division Catalog pages for course details of the concentration areas.

In addition, the department also offers the opportunity to acquire dual graduate degrees along with the M.S. degree in Electrical Engineering. Candidates for these dual Masters degree programs are typically required to complete a total of 48 credit hours to satisfy the requirements of two Masters degrees. This implies 18 credit hours in addition to the 30 hours required for the M.S. degree in Electrical Engineering.

Please refer to the Graduate Studies Division catalogue pages for detailed information on Dual Graduate Degree programs.

Furthermore, customized study plans to allow receiving the Electrical Engineering M.S. degree while pursuing either the Ph.D. degree in Computer Science and Engineering or the Ed.D. degree in Education are available. Doctoral students in these two programs should consult their respective doctoral advisors to work on their individualized plans. Further details on the dual M.S. in Electrical Engineering degree programs are available in the catalog section on Graduate Studies Division.

Admission Requirements
Students must have a Bachelor of Science in Electrical Engineering or a related field. In both cases, the department may require make-up of background deficiencies.

Course Requirements
A. A total of 30 semester hours is required in an approved program of study. Some students in this program enter with an undergraduate record lower than desired. These students are told in their admission letter that they must take 33 or 36 or 39 credits for their MS in E.E program.

B. The Master’s thesis is optional. If undertaken, it counts as 6 semester hours and must be conducted under the supervision of an EE Department faculty member. If the Master’s thesis is not taken, then EE-597 must be taken for 3 credits.

C. 400 or 500 level courses in Electrical Engineering, Computer Engineering and Computer Science are acceptable, with advisor approval, to count for the course requirements of the MS in E.E program.

D. It is recognized that not all students will have the necessary depth of study in their preparatory program for the MSEE. Consequently, the Department may permit a maximum of two undergraduate electives to be taken for graduate credit.

E. A total of one course in Mechanical Engineering or Technology Management is allowed to be taken toward the Master of Science in electrical Engineering.

The elective courses may be chosen from the list of Electrical Engineering concentration areas or chosen in consultation with the graduate advisor.

Learning Outcomes
Students in the M.S. Electrical Engineering Program will be able to 1) demonstrate the ability to use techniques, skills and modern engineering tools necessary for engineering practice; 2) demonstrate the ability to plan and conduct laboratory experiments and interpret and report results; 3) demonstrate the ability to identify and apply concepts of engineering economics and project planning; 4) demonstrate knowledge of contemporary global and societal issues and their relationship; and 5) exercise strong oral and written communication skills including those needed for technical writing.
Global Development and Peace  Master of Arts Degree

Chair: Dr. Dave Benjamin
Carlson Hall 235
Telephone: (203) 576-4966
Fax: (203) 576-4967
Email: dbenjamin@bridgeport.edu

The Master of Arts in Global Development and Peace is designed for individuals who intend to pursue careers in international public service through intergovernmental organizations, government agencies, and non-governmental organizations. Graduates of the Master of Arts in Global Development and Peace will also be prepared for the careers in the private sector, especially to work in banks, insurance companies, corporations, and management firms that have branch offices, holdings, partnerships, and/or clients in developing countries.

All courses are 3 credits.

This graduate degree is designed to allow future civil servants and business professionals interested in global development and human security to develop an understanding of:

• Extant models of socioeconomic development
• Prerequisites for good governance in developing countries
• The impact of religion and culture on intra- and interstate relations.

Students in the program will also develop competence in:

• Quantitative and qualitative research and analysis.
• Negotiation and conflict resolution.
• Project management and related problem-solving skills

They are also expected to develop or demonstrate a Foreign Service Level 2 (limited working proficiency) of at least one world language beside English.

**Masters of Arts Core Requirements**

The program is developed as a 36 credit graduate course of study that requires four semesters of study including a overseas internship. It requires the student to have completed some foundational coursework in political economy and have a working knowledge of at least one world language. Students may apply without the prerequisites, but they will need to demonstrate competency in these areas prior to completion of their degree. Undergraduate students in the College of Public and International Affairs who complete 12 semester hours of the program in addition to all the requirements for their undergraduate degree may receive a Graduate Certificate in Global Development & Peace provided they receive no grade lower than a B in the 12 graduate credits that they complete. These 12 semester hours must be in excess of the required 120 semester hours for graduation with the Bachelor's degree.

The curriculum of the Master's degree is designed so that students will develop competency in the following areas:

• Qualitative and Quantitative Research Methods and Their Applications to Development.
• International Political Economy and the Major Theories of Development.
• An Appreciation of the Role played by Religion and Culture in Development
• Conflict Analysis and Resolution
• Diplomacy and Negotiation

The Masters offers three potential tracks and students should choose from one of the following:

**CONFLICT ANALYSIS AND RESOLUTION TRACK**
For those interested in conflict management

**INTERNATIONAL POLITICAL ECONOMY AND DEVELOPMENT TRACK**
For those interested in development and its challenges

**GLOBAL MANAGEMENT TRACK**
For those interested in working in the commercial domain, especially in emerging and developing economies.

---

**Course of Study**

Sample Curriculum Sequence:

**Semester I**
Core (9 semester hours)

GLDP 511  Issues in Economic Development  3
GLDP 522  International Conflict and Negotiation  3
GLDP 528  Sociopolitical Implications of the World's Religions  3
Or GLDP  Globalization  3

*Note: All first semester GLDP students take these same core courses.

**Semester II**
Core for All Students

GLDP 501  Research Methods  3

**Specialization Track A Conflict Analysis and Resolution**
Choose Two:

GLDP 535x  Peace Psychology  3
GLDP 581  Advanced Diplomacy  3
GLDP 524  Political and Economic Integration  3

**Specialization Track B International Political Economy & Development**
Choose Two:

GLDP 523  Corruption  3
GLDP 540  Culture and Development or Globalization  3
GLDP 563  International Human Rights  3

**Specialization Track C Global Media and Communication**
Choose Two:

GMC 511  Communication Theory  3
GMC 529  Advanced Intercultural Communication  3
GMC 543  Communication and National Development  3
GMC 555  News Media & International Journalism  3
GMC 562  Media Communication Law and Legal Issues  3

or

**Specialization Track D Global Management**
Choose Two:

GB 525  Corruption  3
GB 523  Global Program and Project Management  3
GB 530  Leadership, Teams & Managing Change  3
GLDP 528  Political and Economic Integration  3

**Semester III**
For all Tracks

GLDP 591  Internship  3

**Semester IV**

**Specialization Track A Conflict Analysis and Resolution**
Choose 2 plus one course in another Track B, C, or D

GLDP 560  Sustainable Development  3
GMC 543  Communication and National Development  3
GMC 563  International Human Rights  3
GMC 529  Advanced Intercultural Communication  3

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Global Development and Peace  Master of Arts Degree

Specialization Track B International Political Economy and Development
Choose 2 plus one course in Track A, C, or D

GLDP 540 Culture and Development
GLDP 560 Sustainable Development
MGMT 532 Global Program and Project Management
GSB 539 International Issues

Specialization Track C Global Communication
Choose two plus one course in Track A, B or D

GMCS 555 News Media & International Journalism
GMSC 562 Media Communication Law and Legal Issues
GLDP 529 Advanced Intercultural Communication

Specialization Track D Global Management
Choose two plus one course in Track B, C, or D

FIN 500 International Trade and Finance
FIN 630 International Financial Management
FIN 743 Technical Analysis & Trading
GLDP 561 Sustainable Development
MGMT 779 International Issues
MGMT 632 Global Program and Project Management

Semester V

GLDP 598 Tutorial
GLDP 599 Thesis

Total Semester hours for Semesters I-V 36

ENGLISH LANGUAGE REQUIREMENT
For applicants whose native language is not English, a minimum score of 213 (computer) or 550 (paper) on the TOEFL (Test of English as a Foreign Language) is required. Exception to these requirements will be considered on a case-by-case basis in consultation with the Director of the University’s English Language Institute and following completion of an oral and written English exam that is administered by the English Language Institute. Students with demonstrated difficulty communicating in English may be required to take an advanced ELI course even if they have earned between 213/550 and 250/600 TOEFL scores.

MINIMUM GRADE POINT AVERAGE REQUIREMENT
Candidates for the Masters of Arts in Global Development & Peace are required to maintain a minimum semester grade point average of 3.0 to remain in good academic standing. The Master of Arts in Global Development may only be conferred upon a student who has the minimum required average of 3.0 at the conclusion of the student’s studies. To receive credit for the completion of one of the tracks, a minimum of a “B” must be received in each course within the concentration. Students failing to maintain minimum academic standards will be placed on academic probation at the end of the first semester in which they do not maintain a semester or overall GPA of at least 3.0 or earn a C- or lower grade in any class. If the student fails to raise his overall GPA above a 3.0 by the end of the semester following being placed on academic probation, fails again to earn at least a 3.0 semester GPA or again earns a C- or lower grade in any class, she or he will be separated from the GLDP program. A student separated from the program may apply for readmission to the program following a minimum of one semester of not participating in the program.

Learning Outcomes
The Master of Arts in Global Development & Peace has the following learning outcomes:

1. Students will be able to explain and compare the major extant models for socioeconomic development.
2. Students will demonstrate that they have acquired the the quantitative and qualitative research skills needed to undertake effective planning, analysis and implementation of projects related to socioeconomic development or conflict resolution.
3. Students will demonstrate an understanding of the institutional prerequisites for good governance in developing countries.
4. Students will demonstrate an appreciation of the impact that religion and culture can have on socioeconomic development.
5. Students will demonstrate the basic skills needed for effective communication and negotiation.
6. Students will demonstrate skills needed in problem solving and in project management through an overseas internship.

7. Students will demonstrate a working knowledge of a second language in addition to English.

* Note for all academic programs in the College of Public and International Affairs, a portfolio is collected to track progress in programmatic outcomes.
Global Media and Communication Studies  Master of Arts Degree

Chair: Dr. Yanmin Yu
Carlson Hall 232
Telephone: (203) 576-4966
Fax: (203) 576-4967
Email: yanmin@bridgeport.edu

The Master of Arts in Global Media and Communication Studies is designed to prepare students to become communication specialists who can respond to the information revolution and the globalization of media. The program conveys the importance of media experts that possess intercultural sensitivity and an ability to transcend borders and interpret the communications of other cultures. The program’s Global Communications Track introduces and supports its students to develop the skills needed for careers in as spokespersons, cross-cultural communications specialists for governmental, nongovernmental public diplomacy and for work with transnational corporations. Its New Media Track prepares students as webmasters and content managers for industry and for the work in the public sector.

The Master of Arts in Global Media and Communication Studies is a two-year program. It requires the completion of 36 semester hours of class work, including an internship, tutorial and thesis (space). Students who enter the program are expected to have completed at least one year of college foreign language study or pass a language proficiency exam. Students who have not studied a foreign language must do such study in order to graduate. Domestic students must do the internship in a country where the foreign language that they have studied is spoken and it may be done over two summers if necessary. Non-US students who speak another global language besides English may do their internship either locally or overseas.

Masters of Arts Core Requirements

The Master of Arts in Global Media and Communication Studies is a 36 semester hour graduate course of study that requires four to five semesters, including an overseas internship.

The curriculum of the Master of Arts in Global Media and Communication Studies is designed so that students develop and demonstrate competency in the following areas:

- Demonstrate an understanding of the roles and functions of traditional and new media
- Demonstrate an ability to function as an effective communicator, writer, and spokesperson
- Demonstrate an understanding of the different media systems in the world and patterns of communication
- Demonstrate abilities and skills to communicate across cultures and nations
- Demonstrate an ability to use media and communication skills to address conflicts and misunderstandings
- Demonstrate an understanding of the legal and ethical issues in media communication
- Demonstrate abilities and skills in gathering, writing, and reporting news in foreign countries
- Develop abilities to create effective media content
- Demonstrate abilities to assess, use, and interpret information
- Develop basic knowledge of at least one world language other than English.

The Master of Arts in Global Media and Communication Studies offers two potential tracks and students choose one based on interests and skills:

GLOBAL COMMUNICATION TRACK

Students who elect this concentration will normally pursue a career in public diplomacy either (strike either) as a communications specialist either with a government, a government agency, an intergovernmental agency or a non-governmental agency or with a transnational corporation.

NEW MEDIA TRACK

Students choosing this track will normally work as webmasters, web designers or specialists for government-related agencies or in the corporate world.

Course of Study
Sample Curriculum Sequence:

SEMESTER I

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>GMCS 511</td>
<td>Communication Theories</td>
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<td>GMCS 535</td>
<td>International Advertising and Public Relations</td>
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<td>News Media and International Journalism</td>
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<td>GMCS 557</td>
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*One additional course outside the Global Communication Track

SEMESTER II

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<tr>
<td>GMCS 537</td>
<td>Global Communication and Mass Media</td>
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<td>GMCS 535</td>
<td>International Advertising and Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 543</td>
<td>Communication and National Development</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 555</td>
<td>News Media and International Journalism</td>
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<tr>
<td>GMCS 557</td>
<td>Political Communication and Public Diplomacy</td>
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</tr>
<tr>
<td>GLDP 522</td>
<td>International Conflict and Negotiation</td>
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<td>MKTG 550</td>
<td>Global Market Management</td>
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*One additional course outside the New Media Communication Track

NEW ME TRACK

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<tr>
<td>GMCS 555</td>
<td>Media Business and Management</td>
<td>3</td>
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<tr>
<td>GMCS 552</td>
<td>Advanced Web Publishing and Design</td>
<td>3</td>
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<tr>
<td>GMCS 572</td>
<td>Advanced Multimedia</td>
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<td>GMCS 529</td>
<td>Advanced Design Management</td>
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</tr>
<tr>
<td>GMCS 537</td>
<td>Global Communication and Mass Media</td>
<td>3</td>
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</tbody>
</table>

*One additional course outside the Global Communication Track
Global Media and Communication Studies  Master of Arts Degree

**SEMESTER III**
GMCS 591  Internship  3

**SEMESTER IV**
GMCS 590  Media Communication Law  3

Global Communication Track (Choose Two of Following)  6
GMCS 535  International Advertising and Public Relations  
GMCS 543  Communication and National Development  
GMCS 555  New Media and International Journalism  
GMCS 557  Political Communication and Public Diplomacy  
GLDP 522  International Conflict and Negotiation  
MKTG 550  Global Market Management  
*One additional course outside the Global Communication Track

New Media Communication Track (Choose Two of the Following)  6
GMCS 543  Communication and National Development  
GMCS 555  Media Business and Management  
GMCS 552  Advanced Web Publishing and Design  
GMCS 572  Advanced Multimedia  
Collaborative Design Studio I  
Collaborative Design Studio II  
Design Management I  
Design Management II  
*One additional course outside the New Media Communication Track

**SEMESTER V**
GMCS 598  Tutorial  3  
GMCS 599  Internship  3

**ENGLISH LANGUAGE REQUIREMENT**
For applicants whose native language is not English, a minimum score of 213 (computer) or 550 (paper) on the TOEFL (Test of English as a Foreign Language) is required. Exception to these requirements will be considered on a case-by-case basis in consultation with the Director of the University’s English Language Institute and following completion of an oral and written English exam that is administered by the English Language Institute. Students with demonstrated difficulty communicating in English may be required to take an advanced ELI course even if they have earned between 213/550 and 250/600 TOEFL scores.

**MINIMUM GRADE POINT AVERAGE REQUIREMENT**
Candidates for the Masters of Arts in Global Media and Communication Studies are required to maintain a minimum semester grade point average of 3.0 to remain in good academic standing. The Master’s degree may only be conferred upon a student who has the minimum required average of a 3.0 at the conclusion of the student’s studies. To receive credit for the completion of one of the tracks, a minimum of a “B” must be received in each course within the concentration.

Students failing to maintain minimum academic standards will be placed on academic probation at the end of the first semester in which they do not maintain a semester or overall GPA of at least 3.0 or earn a C- or lower grade in any class. If the student fails to raise his overall GPA above a 3.0 by the end of the semester following being placed on academic probation, fails again to earn at least a 3.0 semester GPA or again earns a C- or lower grade in any class, she or he will be separated from the GLDP program.

A student separated from the program may apply for readmission to the program following a minimum of one semester of not participating in the program.

**Curriculum**

**Core Curriculum (Required for both Program Tracks):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>GLDP/GMCS 501</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 529</td>
<td>Advanced Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 511</td>
<td>Communication Theories</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 537</td>
<td>Global Communication and Mass Media</td>
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<tr>
<td>GMCS 590</td>
<td>Communication Law and Legal Issues</td>
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</tr>
<tr>
<td>GMCS 591</td>
<td>Internship</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 598</td>
<td>Tutorial</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 599</td>
<td>Thesis or Project Demonstrating Excellence (PDE)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

**Required Courses for Track Options (Take GMCS 543 and two additional courses)**

Requirements for Track A: Global Communication Track:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMCS 518</td>
<td>Traditional Media and New Media</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 552</td>
<td>Advanced Publishing and Design II</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 572</td>
<td>Advanced Digital Video Creation II</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 546</td>
<td>Social Media, Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>GMCS/GLDP 543</td>
<td>Communication and National Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**Requirements for Track B: New Media Communication Track:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMCS 518</td>
<td>Advanced Publishing and Design II</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 552</td>
<td>Advanced Digital Video Creation II</td>
<td>3</td>
</tr>
<tr>
<td>GMCS 546</td>
<td>Social Media, Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>GMCS/GLDP 543</td>
<td>Communication and National Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Free elective 3

**Total Semester Hours** 36

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208
Mechanical Engineering Master of Science Degree

Chair: Jani Pallis
Engineering Technology Building
Telephone: (203) 576-4579
Fax: (203) 576-4750
Email: jpalis@bridgeport.edu

This degree program provides advanced study in traditional and contemporary Mechanical Engineering fields. The traditional concentration areas permits the student to increase his/her knowledge and competence in basic skills necessary to Mechanical Engineering while affording sufficient freedom to provide in-depth study in such areas as solid mechanics, structural dynamics, fluid mechanics, heat transfer, mechanical design and computational methods. The Design Management concentration area prepares the student to succeed in the current Design/Engineering industry and business. Studies include CAD/CAE/CAM, Ergonomics, Design and Innovation, and Intellectual Property and Technology. The Manufacturing Management concentration area provides advanced study in Manufacturing to individuals who are interested in the Manufacturing field. This permits students to have up-to-date knowledge, hands-on experience and strong competence in world-class manufacturing environments. Course work emphasizes global corporate and business practices, and Manufacturing Shop Floor environments.

Learning Outcomes

Students will 1) demonstrate the ability to design or analyze a system, component or process to meet desired needs within realistic, contemporary constraints such as health and safety, ethics, performance, sustainability and economics; 2) develop specialized advanced skills in mechanical engineering fields including fluid mechanics, heat transfer, material science, dynamics, vibrations, numerical methods, design and manufacturing; 3) demonstrate the ability to create, adapt, transfer and integrate existing and emerging technologies into new products, processes and services; 4) develop decision making, risk assessment and problem solving skills considering both economic and other constraints; and 5) develop both technical and management oral presentation and written communication skills.

Admission Requirements

The Master of Science degree in Mechanical Engineering is intended to prepare individuals with a strong mathematical, scientific, or technical background for entry into the Mechanical Engineering field at an advanced level and for further study leading to the doctorate. Admission to the program requires a Bachelor’s degree in Mechanical Engineering or a related engineering and/or design curriculum and make up of any deficiencies in previous training. Furthermore, an undergraduate background that includes elementary physics and calculus sequences, and linear algebra is required. The Design Management concentration area also requires a substantial proficiency in design to be demonstrated via previous design training or work experience. The Manufacturing Management concentration area requires an engineering/business background with substantial industrial experience. Applicants are expected to have an average of B or better in their undergraduate coursework.

In addition, the department also offers the opportunity to acquire dual graduate degrees along with the M.S. degree in Mechanical Engineering. Candidates for these dual Masters degree programs are typically required to complete a total of 48 credit hours to satisfy the requirements of two Masters degrees. This implies 18 credit hours in addition to the 30 hours required for the M.S. degree in Mechanical Engineering.

Please refer to the Graduate Studies Division catalogue pages for detailed information on Dual Graduate Degree programs. Furthermore, customized study plans to allow receiving the Mechanical Engineering M.S. degree while pursuing either the Ph.D. degree in Computer Science and Engineering or the Ed.D. degree in Education are available. Doctoral students in these two programs should consult their respective doctoral advisors to work on their individualized plans. Further details on the dual M.S. in Mechanical Engineering degree programs are available in the catalog section on the Graduate Studies Division.

COURSE REQUIREMENTS

Programs of Study will ordinarily consist of a minimum of 30 semester hours and include at least 12 semester hours from one of the following concentration areas:

TRADITIONAL CONCENTRATION AREA:

- MEEG 410 Advanced Fluid Dynamics 3
- MEEG 452 Advanced Vibration 3
- MEEG 453 Finite Element Methods 3
- MEEG 454 Advanced Dynamics 3
- MEEG 463 Advanced Heat Transfer 3
- MATH 401 Advanced Analysis 3

DESIGN MANAGEMENT CONCENTRATION AREA:

(Take 3 credits from Traditional Core Courses)

- MEEG 421 Computer Aided Engineering/Design 3
- MEEG 422 Advanced CAE/CAD Projects 3
- MEEG 423 CAM & NC Machining 3
- MEEG 430 Design & Innovation 3
- MEEG 440 Ergonomics 3
- MEEG 490 Intellectual Property & Technology 3

MANUFACTURING MANAGEMENT CONCENTRATION AREA:

(Take 3 credits from Traditional Core Courses)

- MEEG 407 Materials & Methods in Manufacturing 3
- MEEG 423 CAM & NC Machining 3
- MEEG 571 Innovations & Product Development 3
- MEEG 572 Production Technology & Techniques 3
- MEEG 573 Supply Chain Management 3
- MEEG 574 Principles of Logistics 3
- MEEG 575 Manufacturing Strategy 3

Students must elect one of the following to satisfy state licensure requirements:

- Thesis MEEG 598 (6 semester hours)
- Masters Project MEEG 597 (3 semester hours)

The elective courses may be chosen from the list of Mechanical Engineering concentration areas or chosen in consultation with the graduate advisor.
Technology Management Master of Science Degree

Associate Dean for Business Development and Outreach: Gad Selig
Schools of Business and Engineering
Mandeville Hall – Room 302
230 Park Avenue
Telephone: (203) 576-4870
Email: gadselig@bridgeport.edu

The Master’s Program in Technology Management (TM) is designed to prepare you for the fast-moving global economy where the ability to manage advances in management, engineering, science and technology is critical to innovation, competition and success. We develop leaders adept at managing technology-dependent organizations, emerging technology-based entrepreneurial businesses, technology change and innovation, and skills in establishing and maintaining superior competitive advantages for their organizations.

The Master’s program is an innovation interdisciplinary graduate program that enables you to seamlessly and easily integrate courses and concentrations offered by various departments and schools at UB. Our graduates have obtained positions in engineering, technology, management and other professional careers in a wide spectrum of industries and organizations. As an integral part of the M.S. in TM, we give you the opportunity to specialize in a number of exciting concentrations after you complete specific core courses. Thus preparing you for select highly sought after industry certifications.

The MS in Technology Management program is accredited by the International Association for Management of Technology (IAMOT). Our school has a strong internship program which allows students to work for outside companies while completing their degree. We also have on-campus jobs both within and outside the TM department.

Learning Outcomes

The UB Technology Management Program is specifically designed to develop skills and competencies such as:

1. Identifying and evaluating the impact of relevant changing technology and managing those changes.
2. Designing programs to identify, develop and implement innovative technological based solutions.
3. Managing the effective planning and execution of those technology based initiatives and the integration of their results into the mainstream of an enterprises’ strategy, processes and operations.
4. The application of technology to create wealth.
5. Leadership, the creation and sustenance of high-performance global teams and enabling innovation.

The Department offers, as an integral part of the Technology Management Masters Degree, the opportunity to specialize in a number of concentrations, which are inter-disciplinary and available through various departments to provide more educational and career choices and flexibility for the students:

- Global Program and Project Management
- Manufacturing Management
- Supply, Logistics and Service Management
- Quality Management & Continuous Improvement
- Bio-Technology Management
- Information Technology & Analytics Management
- New Product Development, Management & Commercialization

Course Requirements

A. A total of 34 semester hours is required in an approved program of study for the M.S. in Technology Management.

B. Completion of the following core courses (18 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCMG 400</td>
<td>Marketing, Entrepreneurship and Innovation Issues &amp; Practices in Management</td>
</tr>
<tr>
<td>TCMG 495</td>
<td>Technical Writing in Communications and Research in Engr &amp; Tech Mgmt</td>
</tr>
<tr>
<td>TCMG 524</td>
<td>Statistical Quality Control Techniques</td>
</tr>
<tr>
<td>or MGMT 555</td>
<td></td>
</tr>
<tr>
<td>or MGMT 632</td>
<td></td>
</tr>
<tr>
<td>or MGMT 723</td>
<td></td>
</tr>
<tr>
<td>MGMT 523</td>
<td>Global Program &amp; Project Management</td>
</tr>
<tr>
<td>or MGMT 723</td>
<td>Leadersh, Teams and Managing Change</td>
</tr>
<tr>
<td>TCMG 525</td>
<td>Finance and Accounting for Managers</td>
</tr>
</tbody>
</table>

C. Completion of TCMG 595 Capstone or TCMG 597 Master’s Project or TCMG 598 Master’s Thesis (3 credit hours):

- TCMG 595 is a Capstone/Project course designed to integrate concepts taught throughout the program and requires the development of a Business Plan as one of the course requirements.
- Students may alternate complete a thesis or master’s project.

D. Completion of ENGR 400 (1 credit)

E. Elective Courses (12 credit hours)

Students must take four elective courses (12 credit hours). These electives may be selected from any of the concentration areas listed above, in consultation with the program academic advisor. A list and description of the courses available in each concentration is available in the catalog section on course descriptions.

The concentration areas can be applied to satisfy the requirements of dual Masters degree programs of study.

Other Technology Management project courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCMG 500</td>
<td>Graduate Co-op/Internship in Technology Management (1-3 credit hours)</td>
</tr>
<tr>
<td>TCMG 597</td>
<td>Master’s Project (3 credit hours)</td>
</tr>
<tr>
<td>TCMG 597C</td>
<td>Masters Project Extension (1 credit hour)</td>
</tr>
<tr>
<td>TCMG 598</td>
<td>Thesis in Technology Management (3-6 credit hours)</td>
</tr>
<tr>
<td>TCMG 599</td>
<td>Independent Study in Technology Management (3 credit hours)</td>
</tr>
</tbody>
</table>

As a pre-requisite for the program, all students are expected to have a demonstrated familiarity with statistical analysis. Any remedial course taken to meet this requirement will not be considered as an elective. Students are also expected to demonstrate basic computing skills.

Since July 2004, the Department of Technology Management has been offering these courses for the M.S. degree program in Technology Management through distance learning. For more information please contact the department or visit: http://www.bridgeport.edu/ub/dlearning/
Computer Science and Engineering Ph.D. Program

Learning Outcomes

The graduate from the Ph.D. program in the School of Engineering will: 1) use advanced mathematical proof methodologies in computer science and engineering; 2) demonstrate a strong and in depth background in hardware and software issues in computer science; 3) posses a strong background in implementing software systems and/or hardware systems; 4) posses a strong background in designing diverse and integrated software/hardware systems solutions; and 5) critically analyze problems and thoroughly evaluate potential benefits of alternative solution in designing software and/or hardware systems.

Program Requirements

A. Academic Requirements:

1. Completion of the formal requirements for an MSc. degree in computer science or computer engineering, including a thesis.
2. An additional eight (3-credit) courses, or 24 credit hours, in the discipline, including no more than two independent studies.
3. A two-semester teaching practice requirement (3 credit hours each), for which students are to register with no fees. The students will be expected to teach lower undergraduate level classes, and/or assist professors as teaching assistants (i.e., perform a significant teaching role), thus giving Ph.D. graduates experience for an academic teaching career.
4. At least 15 semester hours of dissertation research, culminating in a dissertation proposal defense and dissertation defense.
5. Comprehensive examination: written and oral (proposal defense).
6. Publication of at least two journal papers, or one journal and two refereed conference papers, within the course of the Ph.D. topic research. These publications are not required to be single authored by the student and they might be co-authored with members of the dissertation committee.

B. Time and Load Guidelines:

Both full and part-time students are encouraged to apply for the Ph.D. degree, which should be completed within a maximum of seven calendar years. A Ph.D. student (part-time or full-time) is expected to devote the necessary time to courses and research in order to make satisfactory progress toward the degree. Satisfactory progress includes active personal participation in the research and teaching environment of the School of Engineering. The student advisor and dissertation committee should advise the student as to her/his progress in the program. Full time students are required to register for at least 9 credit hours each semester while part-time students are required to register for at least 6 credit hours per academic year (spring and fall semesters).

C. Course Work:

A Ph.D. candidate must complete at least 24 credit hours of course work, not including the dissertation, beyond the MSc. degree. Upper level undergraduate remedial courses cannot be used to fulfill the course work requirement.

D. Course Grade Point Average:

A Ph.D. student is expected to maintain a G.P.A. of 3.0 or more. If the G.P.A. falls below 3.0, the student is automatically placed on probation. (Note: the grades in the transferred courses would not be used in the calculation of G.P.A.). Continued probationary status for two semesters may lead to dismissal of the candidate from the program. No grade less than C is acceptable towards the course work requirement.

E. Seminar Requirement:

A Ph.D. student is expected to present her/his research findings in public seminars. S/he is also expected to interact and participate in professional discussions and meetings such as conferences and workshops. In order to fulfill these requirements, a Ph.D. student is expected to present one seminar after the written comprehensive examination and before the dissertation defense. The seminar of his/her research topic for the dissertation serves as the oral (proposal defense) part of the comprehensive exam. The Ph.D.
When a student passes the comprehensive examination and fulfills all other requirements, s/he will be admitted to Ph.D. candidacy. This serves as another important milestone in the progress towards the Ph.D. degree.

I. Dissertation:
The student is expected to work on the accepted topic and come up with original results. S/he has to report the results in the form of a Ph.D. dissertation. The student is encouraged to document the intermediate results in the form of technical reports. S/he is also encouraged to publish these results as they are discovered, in the international professional literature, i.e., refereed conference proceedings and journals. Proof of good work is the acceptance of the results by reputed journals. Intermediate results can also be discussed in departmental seminars. The completed dissertation must be distributed to the dissertation committee members at least two weeks before the dissertation defense. The committee will read it and certify that the dissertation is a work of substantial merit and that it can be defended. It is the responsibility of the student that the final draft of the dissertation addresses all legitimate concerns of the committee members.

J. Dissertation Defense Examination:
After having secured approval from the dissertation committee members regarding the worthiness of the dissertation, a student will proceed with a request for the dissertation defense examination. The chairman of the dissertation committee will chair the examination. The student will schedule a convenient time for a public defense. It is the responsibility of the student to find a time that is suitable to all the members of the dissertation committee, at least 2 weeks prior to the defense. At the end of the defense, the decision of the dissertation committee will be pass or fail. It is the responsibility of the dissertation advisor to see that the comments and the criticism of the audience are addressed adequately in the final version of the dissertation. Based on the recommendation of the dissertation committee, the Ph.D. coordinator, and the Departmental Chairman, the Dean of the School of Engineering will recommend the Ph.D. degree subject to the satisfaction of all other formal requirements.

CONCENTRATION AREAS
The following is a list of Research / Concentration Areas under the Ph.D. Program.

1. Computer architecture and VLSI and FPGA
2. Design, modeling and simulation of embedded and integrated systems
3. Electromechanical systems prototyping and optimization
4. Robotics, automation, machine perception and sensing
5. Software engineering, Web development and computational sciences
6. Systems and computer security and biometrics
7. Wireless and mobile computing and networking
8. Information Technology Globalization Track

SUMMARY OF MILESTONES
A summary of steps, not necessarily ordered, through which a student will proceed is as follows:

1. Admission to the Ph.D. program of computer science and engineering on a ‘provisional status’, if needed.
2. Completing prerequisites and finish the master degree, if needed.
3. Getting the status restored to ‘regular Ph.D. student’, if needed.
4. Completing the course work requirement for the Ph.D.
5. Passing the written comprehensive examination.
6. Admission to ‘Candidacy’.
7. Selection of a dissertation advisor.
8. Writing a dissertation proposal.
9. Completion of the seminar requirement and working on the proposed research topic.
11. Approval of the dissertation by the dissertation committee.
12. Successful completion of the dissertation defense.
13. Submission of dissertation to the School of Engineering.