Graduate Degree Programs

Biomedical Engineering *Master of Science*

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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:

BMEG 565	Biomedical Materials and Engineering (3 credits)
BMEG 412	Bioelectronics (3 credits)
BMEG 580	Tissue Engineering (3 credits)
BMEG 620	Team based research (6 credits)
ENGR 400	Seminar (1 credit)

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

BMEG 410	Biosensors
BMEG 412	Introduction to Bioelectronics
BMEG 440	Ergonomic Factors in Design
BMEG 451	Introduction to BioMEMS
BMEG 452	Biomedical Imaging
BMEG 503	Biometrics
BMEG 506	Transport Phenomena in Biological Systems
BMEG 507	Algorithm in Bioinformatics
BMEG 508	Biomechanics
BMEG 511	Design and development of Biomedical Instrument
BMEG 520	Physiology
BMEG 530	Instrumentation and Laboratory Experience
BMEG 531	Robotics in Bioengineering
BMEG 533	Communication Engineering in Biomedical Systems
BMEG 534	Electrochemistry in Biological Systems
BMEG 540	Advanced Cellular and Molecular Biology
BMEG 541	Foundations of Biotechnology and Bio-enterpreneurship
BMEG 546	Biosignal Processing
BMEG 560	Advanced Tissue Engineering
BMEG 569	Advanced Biomedical Materials and Engineering
BMEG 571	Ethical Issues in Biomedical Research

Business Administration *Master of Business Administration Degree*

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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 communication:

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 797	Integration and Application - Strategy (formerly MGMT 597 and MGMT 797)	3
BUCP 781	Integration and Application - Business Simulation and Planning (formerly MGMT 581 and MGMT 781)	3
And		
BUCP 798	Integration and Application - Thesis (formerly MGMT 598 and MGMT 798)	3
or		
BUCP 799	Integration and Application - Internship (formerly MGMT 599 and MGMT 799)	
	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 799	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.

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 797	Integration and Application – Strategy	3
BUCP 781	Integration and Application – Business Simulation and Planning	3
And		
BUCP 799	Integration and Application – Thesis (3 credits) or	3
or		
BUCP 798	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 at tended
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 ADMISSION 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.

Accounting Major Requirements

REQUIRED COURSES (CREDITS)

ACCT 610	Intermediate Accounting	3
ACCT 620	Managerial and Cost Accounting	3
ACCT 625	Auditing	3
ACCT 630	Advanced Financial Accounting	3
ACCT 633	Personal Taxation	3
	Total	15

MAJOR ELECTIVE (CREDITS)

Select one course from:

ACCT 702	Business Entity Taxation	3
ACCT 704	Financial Reporting and Analysis	3
ACCT 706	International Accounting	3
	Total	3

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.

Finance Major Learning Outcomes

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 two 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	Accounting	3
FIN	Finance	3
ITKM	Information Technology and Knowledge management	3
MKTG	Money and Banking	3
MGMT	Global Financial Services	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.

Global Financial Services Major Requirements

REQUIRED COURSES (CREDITS)

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 or two course from:

FIN 760	Investment Banking	3
FIN 762	Insurance	3
FIN 764	Commercial Banking	3
FIN 760	Real Estate	3
FIN 760	Financial Planning	3
	Total	3 or 6

*A third elective may be selected as an alternative to MGMT 599 internship if the student has at least two years of management experience.

M.B.A. International Business Major

The M.B.A. in International Business is built on the understanding that business is increasingly international. The overall objective of the program is to prepare our graduates to lead and manage organizations in the global business environment and to understand the economic, cultural, legal and political issues associated with international business.

The program is designed to equip students with the specialized knowledge and industry insights that will help develop or help advance their management careers in an increasingly global marketplace. The M.B.A. in International Business curriculum provides students with the specialized and in-depth education necessary to successfully manage organizations in the global business environment of the 21st century. Students will be challenged to analyze the diverse environment in which international businesses function. Students are taught to develop strategic solutions to international business management problems and to provide leadership while building capacity in international businesses.

The University of Bridgeport's location offers accessibility to regional and world headquarters of numerous multinational corporations. The wealth of information available in public libraries, embassies, high commissions and various international organizations makes important contributions to the UB M.B.A. program of study in international business.

International Business Major Learning Outcomes

LEARNING OBJECTIVES

Students will specifically understand the economic, cultural, legal and political issues associated with international business. Students will be prepared to lead and manage organizations in the global business environment.

ASSESSMENT

Students' international business knowledge and skills will be tested when they begin and finish the International Business program with a program specific exam. Alumni will be asked to complete follow-up questionnaires regarding their careers in international business.

International Business Major Requirements

REQUIRED COURSES (CREDITS)

FIN 610	International Finance	3
FIN 725	International Financial Management	3
MKTG 650	Global market management	3
	Total	9

MAJOR ELECTIVE (CREDITS)

Select three course from:

MGMT 750	Foundations of Doing Business in China	3
MGMT 751	Foundations of Doing Business in India	3
MGMT 779	International Issues	3
ACCT 706	International Accounting	3
MKTG 751	Product Management, Innovation and Commercialization	3
	Total	9

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 manager 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)

MGMT 610	Organizational Behavior	3
MGMT 611	Human Resources Management	3
MGMT 632	Global Program and Project management	3
MGMT 650	Foundations of Business Process and Operations management	3
	Total	9

MAJOR ELECTIVE (CREDITS)

Select two courses from:

MGMT 652	Small Business and Entrepreneurship	3
MGMT 712	Organizational Development	3
MGMT 722	Conflict and Negotiation	3
MGMT 723	Leadership, Teams and Managing Change	3
MGMT 734	Strategic Soucing and Vendor Management	3
MGMT 740	Advanced Business Process and Operations Management	3
MGMT 742	Knowledge Workers and The New Economy	3
MGMT 744	Society and Technology	3
MGMT 771	Foundations of Service Management and Engineering	3
MGMT 751	Product management, Innovation and Commercialization	3
ECON 710	Managerial Economics	3
ITKM 749	Decision Support Systems	3
	Total	9

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)

MKTG 612	Customer Analysis	3
MKTG776	Strategy and Advanced Marketing Concepts	3
	Total	6

MAJOR ELECTIVE (CREDITS)

Select four courses from:

MKTG 659	Global Market Management	3
MKTG 710	Marketing Research	3
MKTG 720	Electronic and Mobile Business	3
MKTG 722	Conflict and Negotiation	3
MKTG 725	Data Mining and Data-Driven Marketing	3
MKTG 729	Game Theory and Strategy	3
MKTG 740	Customer Relationship Marketing	3
MKTG 747	Personal Sales and Sale Management	3
MKTG 751	Product Management, Innovation and Commercialization	3
MKTG 752	Services Marketing	3
MKTG 754	Supply Chain Management and Logistics	3
MGMT 734	Strategic Sourcing and Vendor Management	3
ITKM 749	Decision Support Systems	3
	Total	12

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*

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Engineering Technology Building
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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:

CPSC 501	Object Oriented Programming using Software Design Patterns Using C++
CPEG 410	Introduction to Computer Architecture
CPEG 572	Data and Computer Communication
CPEG 448D	Introduction to VLSI Design
or CPEG 447	Logic Synthesis Using FPGAs
ELEG 443	Applied Digital Signal Processing

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
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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.

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.

Course Requirements

REQUIRED COURSES

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

CPSC 400	Object Oriented Programming Using C++
CPSC 450	Data Base Design
CPSC 502	Analysis of Algorithms
CPSC 503	Operating Systems
CPEG 471	Data and Computer Communication

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/ub/dlearning/

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

Counseling *Master of Science Degree*

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

Secretary (information and application material): Angela DiMario
Charles A. Dana Hall
Telephone: (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

Bachelors 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 masters 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 pre-requisite 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 component of your program after completing the required coursework and approval from faculty. The internship is the heart of the master's degree training program in Counseling at the University of Bridgeport (UB). It provides a venue within which students receive the guidance necessary for development as an entry-level counselor. Program faculties provide didactic and experiential training, which serves as the foundation for the development of skills necessary for independent work in clinical settings. The internship operationalizes this training and, in the person of the clinical supervisor, personifies the profession with which the intern ideally identifies. Therefore, careful consideration should be given to the type of internship site that you choose and you should discuss this closely with your advisor. Successful internship training can only occur when program faculty and site supervisors form a close collaborative relationship with the mission of providing quality training and the development of the intern as a whole person. Internships are not guaranteed and approval to attend internship is dependent upon students' performance both interpersonally and academically. Internships must be completed over two semesters, typically over the course of a full academic year, starting in the fall and ending in the spring.

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, Professional Associations*
- Demonstrated an ability to assess needs of different groups within a particular college environment, develop appropriate program, implement and assess program
  As measured by: *Internship*
- Demonstrate understanding of the historical influences that have shaped student affairs practice
  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 of the historical influences within human services and the management within the human service environment
  As measured by: *C532, C625, C620*
- Demonstrate an ability to review counseling research and integrate its contribution to specific areas of knowledge
  As measured by: *C535, Masters Project*
- Demonstrate an ability to integrate the knowledge and awareness gained to individual courses
  As measured by: *Internship, Masters Project*

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.

		Credit Hours
Coun505	Helping Relationships	4
Coun568	Counselor as Professional	3
Coun545	Social & Cultural Foundations	3
Coun540	Group Process Application & Theory	4
Coun610	Career & Lifestyle Development	3
Coun512	Theories of Counseling	3
Coun570	Strategies & Techniques of Counseling	4
Coun582	Appraisal Processes for Counselors	3
Coun595	Addiction & Treatment	3
Coun535	Research Methods	3
Coun552	Human Growth & Development	3
Coun600	Clinical Mental Health Counseling Internship 1	4
Coun605	Clinical Mental Health Counseling Internship 2	4
Coun585	Trauma & Crisis Intervention	3
Coun587	Psychopharmacology	3
Coun502	Orientation	1
Coun515	Clinical Skills for Counselors	3
	Elective (Practicum)	3
	Elective	3
	Total	60

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.

		Credit Hours
COUN 503	Orientation in Student Affairs	1
COUN 505	Helping Relationships	4
COUN 512	Counseling Theories	3
COUN 520	Introduction to Student Affairs	3
COUN 527	Student Affairs Administration	3
COUN 536	Assessment in Student Affairs	3
COUN 540	Group Process	4
COUN 545	Social & Cultural Foundations	3
COUN 552	Human Growth and Development	3
COUN 555	Student Development Theory	3
COUN 562	Today's College Student	3
COUN 601	CSP Internship 1	3
COUN 606	CSP Internship 2	3
COUN 610	Career and Lifestyle	3
COUN 615	Ethical & Legal Issues in Higher Ed	3
	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.

		Credit Hours
COUN 505	Helping Relationships	4
COUN 508	Counseling Theories	3
COUN 532	History of Systems of HS	3
COUN 535	Research Methods	3
COUN 540	Group Process	4
COUN 545	Social & Cultural Foundations	3
COUN 552	Human Development	3
COUN 568	Counselor as Professional	3
COUN 602	HUSV Internship 1	3
COUN 607	HUSV Internship 2	3
COUN 620	Leadership/Contemporary Workforce	3
COUN 625	Organization/Admin for MHS	3
COUN 590	Masters Project	1-3
COUN	Capstone	3
COUN	Elective	3
	Total	44-45

Design Management *Master of Professional Studies Degree*

Chair: Alex W. White
Arnold Bernhard Center
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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

DSNMG 400	Collaborative Design Studio I	2
DSNMG 410	Design Management I	3
MKTG 600	Marketing Concepts (Marketing)	3
MGMT 600	Leadership & Management (Management)	3

Second Semester

DSNMG 401	Collaborative Design Studio II	2
DSNMG 410	Design Management II	3
BLAW 600	Legal Environment of Business and Ethics (Law)	3
DSNMG 599	Special Projects	2
DSNMG 598	Internship or Coop (Elective*)	1

Third Semester

DSNMG 500	Collaborative Design Studio III	2
DSNMG 511	Design Management III	3
ACCT 600	Financial Accounting (Finance)	3
ITKM 600	Information Systems & Technology	3

Fourth Semester

DSNMG 501	Collaborative Design Studio IV	2
DSNMG 511	Thesis/Design Management IV	3
MGMT 652	Small Business & Entrepreneurship (Strategy)	3
or		
DSNMG 580X	New Product Commercialization	3
DSNMG 598	Internship or Coop (Elective*)	1

**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
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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 amiable 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)

GLDP/EAPRS 501	Research Methods	3
GLDP/EAPRS 522	Conflict Analysis and Resolution	3
GLDP/EAPRS 528	Sociopolitical Implications of the World's Religions	3

SEMESTER II

EAPRS 530	Pacific Rim Culture and Development	3
EAPRS 542	Political and Economic Integration of the Pacific Rim	3

Concentration A: Negotiations and Diplomacy
Choose One

GMCS 557	Political Communication and Governance	3
EAPRS 563	Business and Diplomacy—East Asia vs the West	3
GLDP 580	Advanced Diplomacy	3
One Course in one Concentration B, C or D		3

Concentration B: International Political Economy and Development
Choose One

GLDP 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

Or One Course in Concentration A, C or D if the student has not yet completed this requirement.

Concentration C: Global Management Track
Choose One

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 One

GMCS 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 III

EAPRS 591	Internship	3

SEMESTER IV

Concentration A: Negotiations and Diplomacy
Choose Three

GMCS 557	Political Communication and Governance	3
EAPRS 563	Business and Diplomacy—East Asia vs. the West	3
GLDP 580	Advanced Diplomacy	3
One Course in one Concentration B, C or D		3

Concentration B: International Political Economy and Development
Choose Three

GLDP 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 of213 (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*

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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

Inern Director: Joyce A. Cook
Carlson Hall, Room 111
Telephone: (203) 576-4193
Fax: (203) 576-4200
Email: joycec@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 into a Certification Track Program in Elementary Education, Middle Grades Education, Secondary Academic Subjects, or Music:

1. A Bachelor's Degree in a subject area 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 gals 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.

- 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

PROFESSIONAL EDUCATIONAL 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
and 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 Leteracy 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 399	College Math for Teachers	2

LITERACY AND ENGLISH LANGUAGE LEARNING

EDUC 536C	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 REQUIREMENT

(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

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)

OTHER REQUIREMENTS FOR STATE OF CONNECTICUT CERTIFICATION

Additional Coursework for Certification
(required if noted)

Middle Grades, 4-8, Certification Track Program

Chair: Joyce A. Cook
Email: joycec@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 560M	Human Growth and Development Middle Level*	3

*This course requirement 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 EDUCATIONAL REQUIREMENTS

CURRICULUM AND METHODS OF TEACHING – 12 credits (required)

TEACHING IN MIDDLE GRADES CLASSROOMS – 6 credits (required)

EDUC 537	Middle Grades Interdisciplinary Teaching and Teams	3

and **METHODS AND MATERIALS SUBJECT AREA COURSES (One of the following)**

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

READING AND LANGUAGE ARTS – 6 credits *(required)*

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 515M	Internship	3
and EDUC 516M	Internship	3
and EDUC 348M	Directed/Supervised Student Teaching	6

ADDITIONAL PROGRAM REQUIREMENTS

STATUTORY REQUIREMENTS – 1 credit *(required)*

EDUC 511	Statutory Requirements in Education	1

Additional Coursework Required if Noted

EDUC 515M	Internship	3

ELECTIVES IN MATHEMATICS:

EDMM 600B	Analyses for Teachers (Cross list - Math 407)	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 Leaner	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	Thesis Research	
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)*

Secondary Academic Subjects Certification Track Program

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

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	Intership	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	1
HIST 300	U.S. History for Teachers	3

FINAL DEGREE REQUIREMENT

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

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: mulcahyp@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: acook@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.

MATH CONTENT – 12 credits (required)

MATH 401 (EDMM 600B)	Advanced Analysis for Scientists	3
MATH 402 (EDMM 600B)	Advanced Analysis II	3
MATH 407 (EDMM 600B)	Intro to Modern Analysis	3
MATH 414 (EDMM 600B)	Numerical Analysis	3
or MATH 399 (EDMM 600B)	Topics - College Math for Teachers - Survey Praxis II Math	3
MATH 415 (EDMM 600B)	Advanced Numerical Analysis	3
MATH 480 (EDMM 600B)	Topics - Math Modeling - 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	Intership	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	Statutory Requirements	1

ADDITIONAL COURSEWORK (Required if Noted)

EDUC 500	Research and Report Writing	3
EDUC 570	Instruction for the English Language Leaner	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-Ernt
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 assissments, 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.

Education *Master of Science Degree*

Planned Program of Study

PREREQUISITE REQUIREMENTS

Foundations of Education	3
Educational Psychology	3
Children's or Adolescent Literature	3
Special Education	3

PROFESSIONAL EDUCATION REQUIREMENTS

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

EDUC 440C	Methods and Materials in Teaching Language Arts	3
or EDUC 440M/J	Methods and Materials in Teaching Language Arts	3
and EDUC 574	Developmental Reading in the Elementary School	3
and EDUC 575	Reading and Writing in the Content Area	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 PRACTICES IN READING AND LANGUAGE ARTS – 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

TECHNOLOGY IN EDUCATION – 2 credits (required)

EDUC 592	Technology Literacy for Educators	2
or EDUC 594	New Technologies for Learning	2

SECOND LANGUAGE LEARNING AND ACQUISITION – 1 credits (required)

EDUC 570	Instruction for the English Language Learner	1

ADDITIONAL GRADUATE COURSEWORK (required if noted)

EDUC 500	Research and Report Writing	3
EDUC 515	Internship	3
EDUC 516	Internship	3
EDUC 570	Instruction for the English Language Learner	3
EDUC 573	Early Literacy Instruction	1

FINAL DEGREE REQUIREMENT

(Choose one of the following:)

EDUC 566	Contemporary Educational Problems II	3
EDUC 568	Studies in Literacy Research	1
or EDUC 595	Thesis Research	2-6

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.

Education *Master of Science Degree*

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 toics provides flexibility through which students may gain competencies.

Summary of Requirements

PROGRAM REQUIREMENTS

EDMM 500	Analysis, Assessment & Planning Core	3
EDUC 566	Contemporary Educational Problems II	3
		6

COURSE TOPICS

Courses are offered in the following topics, with several courses available under each topic. for courses offered each semester, consult the course schedule.
(Choose among the following)

EDMM	600A	Reading	1
EDMM	600B	Mathematics	1
EDMM	600C	Social Studies	1
EDMM	600D	Science	1
EDMM	600E	Exceptional Children, Gifted Students	1
EDMM	600F	Art 1-3 SDS 599G, Foreign Languages	1
EDMM	600H	Home Economics	1
EDMM	600J	Industrial Arts, Vocational Education	1
EDMM	600K	Curriculum Studies	3
EDMM	600L	Language Arts	1
EDMM	600M	Music	1
EDMM	600N	Physical Education	1
EDMM	600P	Drama	1
EDMM	600Q	Early Childhood Education	1
EDMM	600R	Guidance and Human Development	1
EDMM	600S	Technology Literacy for Educators	1
EDMM	600T	Adult Educ. and Parent Educ.	1
EDMM	600U	Leadership, Admin., and Supervision	3
EDMM	600V	Classroom Mngm and Teaching Skills	1
EDMM	600W	Educational Law and Legal Issues	3
EDMM	600X	Testing and Evaluation	3
EDMM	600Z	Foundations of Education	1
			29

Several programmatic arrangements are available through Teacher Leadership from the School of Education office.

TOTAL **33**

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) 576-4200
Email: mulcahyp@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 us 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 appropritate coursework, field experiences, and performance assissments, 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/J	Methods and Materials in Teaching Language Arts	3
and EDUC 574	Developmental Reading in the Elementary School	3
and EDUC 575M/J	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

STATUTORY REQUIREMENTS (required as noted)

EDUC 511	Statutory Requirements in Education	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 21

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.

Education *Sixth Year Certificate of Advanced Study (CAS)*

Reading and Language Arts Consultant Certification Program

Chair: Patricia Mulcahy-Ernt
Carlson Hall, Room 118
Telephone: (203) 576-4201
Fax: (203) 576-4200
Email: mulcahyp@bridgeport.edu

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).

PREREQUISITE REQUIREMENTS*

***These requirements may be met by taking an undergraduate or graduate course with a grade of at least a "B."**

EDUCATIONAL PSYCHOLOGY – 3 credits *(required)*

EDUC 509	Psychological Foundations in Education	3

CHILDREN'S OR ADOLESCENT LITERATURE – 3 credits *(required)*

EDUC 536C	Children's Literacy	3
or EDUC 536J	Adolescent Literacy	3

SPECIAL EDUCATION – 3 credits *(required)*

EDUC 564	Education of the Exceptional Student	3

TESTS AND MEASUREMENTS – 3 credits *(required)*

EDUC 558	Evaluation of Instructional Outcomes	3

CURRICULUM: METHODS AND MATERIALS IN TEACHING LANGUAGE ARTS – 3 credits *(required)*

EDUC 440C	Methods and Materials in Teaching Language Arts	3
or EDUC 440M/J	Methods and Materials in Teaching Language Arts	3

TECHNOLOGY IN EDUCATION– 2 credits *(required)*

EDUC 592	Technology Literacy for Educators	2
or EDUC 594	New Technologies for Learning	2

SECOND LANGUAGE LEARNING AND ACQUISITION – 1 credit *(required)*

EDUC 570	Instruction for the English Language Learner	1
Total Credits		16

INITIAL PROGRAM REQUIREMENTS

(The initial program requirements may be met through completion of the following courses at the Master's or Sixth Year level:)

DEVELOPMENTAL READING – 6 credits *(required)*

EDUC 574	Developmental Reading in the Elementary School	3
and EDUC 575M/J	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

CLINICAL FIELD EXPERIENCE – 7 credits *(required)*

EDUC 596	Field Experience in Reading and Language Arts	1
EDUC 597	Practicum in Reading and Language Arts	6
Total Credits		*16*

ADVANCED PROGRAM REQUIREMENTS

ADVANCED READING AND LANGUAGE ARTS DIAGNOSIS – 2 credits *(required)*

EDUC 572	Advanced Diagnosis of Reading and Language Arts Difficulties	2

ORGANIZATION, ADMINISTRATION, AND SUPERVISION OF READING – 4 credits *(required)*

EDLD 611	Administration: Organizing and Staffing Educational Institutions	3
or EDLD 613	Leadership	3
EDLD 611A	Organization, Administration, and Supervision of Reading and Language Arts Programs	1

READING AND LANGUAGE ARTS CONSULTANT PRACTICUM AND APPLIED RESEARCH – 6 credits *(required)*

EDLD 683	Internship for the Reading & Language Arts Consultant	6
Total Credits		*12*

ADDITIONAL PROGRAM REQUIREMENTS

FINAL DEGREE REQUIREMENT
(Choose one of the following:)

EDUC 668	Literacy Research Project	1
EDUC 669	Sixth Year Project	3
or		
EDUC 695	Advanced Thesis Research– Sixth Year	3

ADDITIONAL COURSEWORK FOR CERTIFICATION
(required if Noted)

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

EDMM 500	Analysis, Assessment and Planning Core	3
EDUC 669	Sixth Year Project	3
or EDUC 695	Advanced Thesis Research	3
		6

COURSES

ELEMENTARY EDUCATION

Educ 598	Clinical Assessment	2

Choose Elementary Courses

Secondary Education

Choose Secondary Courses

EDMM 600A	Reading	1
EDMM 600B	Mathematics	1
EDMM 600C	Social Studies	1
EDMM 600D	Science	1
EDMM 600E	Exceptional Children, Gifted Students	1
EDMM 600F	Art 1-3 SDS 599G, Foreign Languages	1
EDMM 600H	Home Economics	1
EDMM 600J	Industrial Arts, Vocational Education	1
EDMM 600K	Curriculum Studies	3
EDMM 600L	Language Arts	1
EDMM 600M	Music	1
EDMM 600N	Physical Education	1
EDMM 600Q	Early Childhood Education	1
EDMM 600R	Guidance and Human Development	1
EDMM 600S	Technology Literacy for Educators	1
EDMM 600T	Adult Education and Parent Education	1
EDMM 600U	Leadership, Administration, and Super.	3
EDMM 600V	Classroom Manage. & Teaching Skills	1
EDMM 600W	Educational Law and Legal Issues	3
EDMM 600X	Testing and Evaluation	3
EDMM 600Z	Foundations of Education	1
		29

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 departments 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 seminers 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.

Electrical Engineering *Master of Science Degree*

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
4. Microelectronics and Computer Architecture
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 admit 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.

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

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

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 ofthe World's Religions	
Or GLDP	Globalization	

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

Semester II

Core for All Students

GLDP 501	Research Methods

Specialization Track A Conflict Analysis and Resolution

Choose Two:

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

Specialization Track B International Political Economy & Development

Choose Two:

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

Specialization Track C Global Media and Communication

Choose Two:

GMCS 511	Communication Theory
GMCS 529	Advanced Intercultural Communication
GMCS 543	Communication and National Development
GMCS 555	News Media & International journalism
GMSC 562	Media Communication Law and Legal Issues

or

Specialization Track D Global Management

Choose Two:

GLDP 523	Corruption	
GSB 537/MGMT 532	Global Program and Project Management	3
GSB 580/MGMT 523	Leadership, Teams & Managing Change	3
GLDP 528	Political and Economic Integration	

Semester III

For all Tracks

GLDP 591	Internship

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
GMCS 543	Communication and National Development
GLDP 563	International Human Rights
GMCS 529	Advanced Intercultural Communication

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	
GSB	539	International Issues	3

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	3
FIN	630	International Financial Management	3
FIN	743	Technical Analysis & Trading	3
GLDP	561	Sustainable Development	3
MGMT	779	International Issues	3
MGMT	632	Global Program and Project Management	3

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 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.

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

GMCS 501	Graduate Seminar in Research Methods	3
GMCS 511	Communication Theories	3

Global Communication Track (Choose One of Following) 3

GMCS 535	International Advertising and Public Relations
GMCS 543	Communication and National Development
GMCS 555	News Media and International Journalism
GMCS 557	Political Communication and Public Diplomacy
GLDP 522	International Conflict and Negotiation
MKTG 650	Global Market Management

*One additional course outside the Global Communication Track

New Media Communication Track (Choose one of the Following) 3

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 II

GMCS 529	Advanced Intercultural Communication	3
GMCS 537	Global Communication and Mass Media	3

Global Communication Track (Choose One of Following) 3

GMCS 529	Advanced Intercultural Communication
GMCS 537	Global Communication and Mass Media

Global Communication Track (Choose One of Following) 3

GMCS 535	International Advertising and Public Relations
GMCS 543	Communication and National Development
GMCS 555	News 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 one of the Following) 3

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 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	News 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 of213 (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):

GLDP/GMCS 501	Research Methods	3
GMCS 529	Advanced Intercultural Communication	3
GMCS 511	Communication Theories	3
GMCS 537	Global Communication and Mass Media	3
GMCS 590	Media Communication Law and Legal Issues	3
GMCS 591	Internship	3
GMCS 598	Tutorial	3
GMCS 599	Thesis or Project Demonstrating Excellence (PDE)	3
		24

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

Requirements for Track A: Global Communication Track:

GMCS 555	News Media and International Journalism	3
GMCS/GLDP 543	Communication and National Development	3
GMCS 557	Political Communication and Public Diplomacy	3
GMCS 535	International Advertising and Public Relations	3
GLDP 522	International Conflict and Negotiation	3
		9

Requirements for Track B: New Media Communication Track: (Take GMCS 546 and two additional courses)

GMCS 518	Traditional Media and New Media	3
GMCS 552	Advanced Web Publishing and Design II	3
GMCS 572	Advanced Digital Video Creation II	3
GMCS 546	Social Media, Business and Society	3
GMCS/GLDP 543	Communication and National Development	3
		9
	Free elective	3

Total Semester Hours 36

Mechanical Engineering *Master of Science Degree*

Chair: Jani Pallis
Engineering Technology Building
Telephone: (203) 576-4579
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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*

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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):

TCMG 400	Marketing, Entrepreneurship and Innovation Issues & Practices in Management
TCMG 495	Technical Writing in Communications and Research in Engr & Tech Mgmt
TCMG 524	Statistical Quality Control Techniques
MGMT 555 or MGMT 632 or MGMT 723	Global Program & Project Management
MGMT 523 or MGMT 723	Leadership, Teams and Managing Change
TCMG 525	Finance and Accounting for Managers

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 alternately 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:

TCMG 500	Graduate Co-Op/Internship in Technology Management (1-3 credit hours)
TCMG 597	Master's Project (3 credit hours)
TCMG 597C	Masters Project Extension (1 credit hour)
TCMG 598	Thesis in Technology Management (3-6 credit hours)
TCMG 599	Independent Study in Technology Management (3 credit hours)

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*

Program Coordinator:
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Engineering Technology Building
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The Ph.D. degree is a certification of critical aptitude in scholarship, imagination, knowledge in the discipline, enterprise in research, and proficiency and style in communication. A candidate obtaining a Ph.D. degree must display a thorough understanding in the major areas of computer science and engineering and must master the necessary tools and techniques so as to be able to make original contributions to the field of computer science and engineering. An equally important aspect is that of proficiency in oral and written communication skills.

The requirements of the Ph.D. program are: successful completion of preliminary examinations and courses, satisfactory performance in written comprehensive and oral examinations, admission to Ph.D. candidacy, successful completion and defense of original work documented as a dissertation, and the satisfaction of additional requirements such as teaching and seminars.

The formal degree to be offered is the Doctor of Philosophy in Computer Science and Engineering. This will be awarded to candidates who complete all the requirements of the Ph.D. degree described later in this section.

Admission Requirements

Students admitted to the Ph.D. program should have a master degree in computer science or engineering or related discipline with at least a 3.3 GPA. Interested students in the Ph.D. program without an M.S. degree must apply and be admitted into the M.S. program first, and then upon finishing the M.S. degree, they would be eligible to apply for the Ph.D. program.

Students admitted from non-English speaking foreign countries, having a master's degree in computer science and engineering will also be required to have a TOEFL score of at least 550. GRE's are not required for admission into the program, but are recommended.

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 hours) 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.

coordinator awards a Pass/Fail grade after consultation with the student's dissertation advisor. The student is required to register for one seminar course.

F. Comprehensive Examination:

One of the major checkpoints in the Ph.D. program that assesses the breadth and depth of the student is the written and oral (proposal defense) comprehensive examination. The comprehensive examination will test the breadth and depth of knowledge in all aspects of computer science and engineering.

The Ph.D. program coordinator will organize this comprehensive examination. The seminar requirement represents the oral (proposal defense) section of the exam. The outcome of this examination will be of fail or pass. A student can retake this examination no more than once. A student who does not pass the comprehensive examination in two attempts will be dismissed from the program.

G. Dissertation Committee:

After passing satisfactorily the written comprehensive examination and selecting a dissertation advisor, the student is required to define a problem of merit, carry out a literature search and prepare a course of action to solve the selected problem. The candidate is expected to produce a dissertation proposal. The Ph.D. program coordinator, in consultation with the dissertation advisor, recommends a dissertation committee for the student. The dissertation committee contains at least three members in addition to the dissertation advisor. At least four members of the dissertation committee must be from a professorial rank within the school. Additionally, an external examiner is appointed as well. The external examiner is one who has been distinguished in the field of computer science and engineering. S/he might not hold a professorial rank. Ph.D. Program Coordinator and the Dean of the School of Engineering must then approve the dissertation committee.

H. Admission to Candidacy:

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.
10. Formation of dissertation committee.
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.
14. Graduation with a Ph.D. degree in Computer Science and Engineering.