M.S. in Mechanical Engineering / M.S. in Technology Management Dual Degree Program

The Dual Masters of Science Program in Mechanical Engineering and Technology Management is one of the available Dual Graduate Degree Programs at the University of Bridgeport. The Masters Degree in Mechanical Engineering provides advanced study in traditional and contemporary Mechanical Engineering areas such as solid mechanics, structural dynamics, fluid mechanics, heat transfer, mechanical design, computational methods, CAD/CAE/CAM, Ergonomics, Design and Innovation, Intellectual Property and Manufacturing. The Technology Management Master's Program is designed to develop leaders adept at managing technological change, and skilled in establishing and maintaining superior competitive advantage for their respective enterprises. Admission to the program requires an undergraduate degree in engineering, and includes the following fundamental coursework:

- Design
- Manufacturing
- CAD/CAM
- Management Courses

COURSE REQUIREMENTS

TOTAL NUMBER OF CREDITS 48

REQUIRED COURSES

A. Required Core Courses in Mechanical Engineering.
12 credits

ME Tracks (Choose 4 courses from one Track)

B1. Traditional Track
ME 410 Advanced Fluid Dynamics
ME 452 Advanced Vibration
ME 453 Finite Element Methods
ME 454 Advanced Dynamics
ME 463 Advanced Heat Transfer
Math 401 Advanced Analysis I

B2. Design Management Track:
(Take 3 credits from Traditional Core Courses)
ME 421 Computer Aided Engineering/Design
ME 422 Advanced CAE/CAD Projects
ME 423 CAM & NC Machining
ME 430 Design & Innovation
ME 440 Ergonomics
ME 490 Intellectual Property & Technology

B3. Manufacturing Management Track
(Take 3 credits from Traditional Core Courses)
ME 407X Materials & Methods in Manufacturing
ME 423 Advanced CAE/CAD Projects
ME 571X Innovations & Product Development
ME 572X Production Technology & Techniques
ME 573X Supply Chain Management
ME 574X Principles of Logistics
ME 575X Manufacturing Strategies

B. Required Core Courses in Technology Management. 15 credits

TCMG 400	Marketing, Entrepreneurial & Innovation Issues and Practices in Management
TCMG 424	Total Quality Management and Continuous Process Improvement
TCMG 484/ MGMT 535X	Finance and Accounting for Non-Financial Managers
TCMG 505 MGMT 532X	Global Program & Project Management
TCMG 523/ MGMT 523	Leadership, Teams and Managing Change

C. Mechanical Engineering Masters Project: ME 597 **3 credits**

D. Technology Management Masters Project: TCMG 597 **3 credits**

E. ELECTIVES 15 credits
Students are required to study five elective courses. A student may select these five courses from among the course offerings of either the ME or TM departments. These courses could be used to satisfy one or more of the concentration areas from either the ME or TM concentration areas.

Concentration areas available for students in the ME/TM Dual Graduate Degree program include:

1. Bio-Tech Management
2. CAD/CAM
3. China / India Trade
4. Computer & Information Security
5. Corporate, Government and Information Security & Continuity Management
6. E-Commerce
7. Entrepreneurship
8. Environmental and Energy Management
9. Global Business
10. Global Marketing
11. Global Program and Project Management
12. Health Care Management & Administration
13. Human Resources Management & Development
14. Information Technology
15. Intellectual Property Management
16. Management and Operations
17. Manufacturing Management
18. New Product Development and Management
19. Robotics and Automation
20. Service Management and Engineering
21. Strategic Sourcing and Vendor Management
22. Supply Chain Management

Please refer to the Graduate Studies Division section of this catalog for course work details for all the concentration areas.