# Graduate Programs in ENGINEERING MANAGEMENT





#### **Master of Science:**

**Engineering Management** 

#### **Post-Baccalaureate Certificate:**

**Engineering Management** 

#### Engineering Management - a professionally-focused and relevant graduate degree

- » Learn to manage complex technological and business-related problems present in today's economy.
- » Develop leadership and project management skills to successfully lead technical teams.
- » Acquire technical skills in your chosen technical field.

### When you choose UMBC Professional Programs, you can count on:

- » Courses developed and taught by industry experts and designed to address real-world problems in the workplace.
- » Programs that combine practical business approach with in-depth technical courses plus an emphasis on how to lead people and manage complex projects.
- » Flexible evening class schedule that accommodates working professionals.
- » Wide-ranging resources offered at a top-notch public research university.

#### Why UMBC?

- » UMBC provides a comprehensive and quality education at a manageable cost.
- » For six years running, UMBC was ranked #1 in the U.S. New and World Report's list of 'national up-and-coming' universities, and in 2015 ranked #4 as 'most innovative schools.'
- » UMBC is classified by the Carnegie Foundation as a Research University (High Research Activity).
- » UMBC is uniquely positioned to provide education and training that respond to the state's need for qualified technical professionals in the engineering field.

# Admission Requirements M.S. and Graduate Certificate:

- » A bachelor's degree in Engineering, Computer Science or Information Systems
- » Minimum undergraduate GPA of 3.0 on a 4.0 scale
- » Letters of recommendation and GRE scores are not required for applicants with a degree from an accredited U.S. institution

#### **International Applicants:**

Please visit <u>umbc.edu/engm/international</u> for detailed admissions requirements for international applicants.

» Please pay special attention to English proficiency and testing requirements

#### **Admission Deadlines**

Fall: August 1
Spring: December 1

For detailed application process please visit: <u>umbc.edu/engm</u>

### Office of Professional Programs

UMBC's Office of Professional Programs offers a broad array of professionally focused master's degree and certificate programs that address industry needs while anticipating future opportunities. umbc.edu/professionalprograms

Master's Program

Master of Science (M.S.): Engineering Management
30 Credits (10 courses)

# Required Core Management Courses (12 credits)

ENMG 650: Project Management Fundamentals
OR
ENMG 668: Project and SE Management
ENMG 652: Management, Leadership, and
Communication
ENMG 656: Engineering Law and Ethics
ENMG 658: Financial Management



# Elective Management Courses (Select 2 courses) 6 Credits:

ENMG 654: Leading Teams and Organizations
ENMG 659: Strategic Management
ENMG 660: Systems Engineering Principles\*
ENMG 661: Leading Virtual/Global Teams
ENMG 663: Advanced Project Management
Applications
ENMG 664: Quality Engineering and
Management\*
ENMG 672: Decision and Risk Analysis\*

ENMG 690: Innovation and Technology
Entrepreneurship

ENMG 692: Principles of Organization
Learning

CYBR 620: Introduction to Cybersecurity\*

CYBR 621: Cyber Warfare

CYBR 622: Global Cyber Capabilities &
Trends

CYBR 623: Cybersecurity Law and Policy

Courses marked with an asterisk can be counted as either a management elective or technical elective.

# Courses in Engineering, Computer Science, and Information Technology (12 credits)

Chemical/Biochemical Regulatory Engineering
Chemical Engineering
Computer Engineering
Computer Science
Cybersecurity
Electrical Engineering
Environmental Engineering

Health Information Technology
Human Centered Computing
Information Systems
Mechanical Engineering
Systems Engineering

Consult umbc.edu/engm/programmaster for listing of courses in each specialization.

## Certificate Program

### Post-Baccalaureate Certificate: Engineering Management

### **4 Required Courses (12 Credits)**

ENMG 650: Project Mgmt. Fundamentals OR ENMG: 668: Project and SE Management

ENMG 652: Management, Leadership and Communications

ENMG 656: Engineering Law and Ethics ENMG 658: Financial Management

Please consult <u>umbc.edu/engm</u> for schedule.



DPS0111201

This academic program is a participant in the U.S. Department of Education Gainful Employment program.

For more information, http://ged.financialaid.umbc.edu/emang/Gedt.html