MPS Biotechnology - a professional industry-relevant and practical graduate degree

» Biotechnology is a growing economic sector creating new opportunities for qualified individuals.
» Courses in life science, management, and business are combined to create an effective curriculum.
» Ideal for working professionals pursuing management opportunities in Biotech.
» Students learn critical skills needed in the biotech industry including literature research and analysis, written and oral communication, experimental design, regulatory, legal, and business management techniques.

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

» Courses taught by instructors who are subject-matter experts with extensive industry experience.
» Flexible evening class schedule that accommodates working professionals.
» Wide-ranging resources offered at a top-notch public research university.

Why UMBC?

» The excellent academic and research expertise in the biosciences provides the foundation for the M.P.S. Biotechnology programs and certificate programs.
» The 2017 U.S. News & World Report Best Colleges guide ranks UMBC in the top five on its closely-watched Most Innovative Schools list and has recognized UMBC as a global leader in higher education.
» UMBC provides a comprehensive and quality education at a manageable cost.

Professional Experience Program (PEP) Option

The MPS Program offers assistance to students interested in expanding on their industry experiences to include a Professional Experience. Please contact the Program Director for more information.
Admission Requirements

M.P.S.:
- A bachelor’s degree in any life science related field including Biology, Chemistry, Biochemistry, Biochemical Engineering, Biotechnology and Food and Agricultural Sciences.
- Minimum undergraduate GPA of 3.0 on a 4.0 scale
- GRE scores are not required for applicants with a degree from an accredited U.S. institution
- Two semesters of general chemistry and two semesters of organic chemistry

Graduate Certificates:
Biotechnology Management:
- A bachelor’s degree in any discipline
Biochemical Regulatory Engineering:
- A bachelor’s degree in science or relevant discipline
- Minimum undergraduate GPA of 3.0 on a 4.0 scale

International Applicants:
Please visit biotech.umbc.edu/international 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: biotech.umbc.edu

Master’s Program
Master’s of Professional Studies (M.P.S.): Biotechnology
30 Credits (10 courses)

Core Courses
18 credits (6 Courses)

- BTEC 675: Business of Biotech*
- BTEC 655: Emerging Topics in Biotechnology Seminar
- BTEC 656: Experimental Design
- BTEC 665: Management, Leadership and Communication
- BTEC 670: Legal and Ethical Issues in the Science Professions
- BTEC 654: Capstone
* BTEC 675 should be taken in the first semester of enrollment

Biotechnology Tracks (Select one track)
12 Credits (4 Courses)

Regulatory Track
BTEC/ENCH 660: Regulatory Issues in Biotechnology
BTEC/ENCH 662: Good Manufacturing Practices for Bioprocesses
ENCH 664: Quality Control and Quality Assurance for Biotechnology Products
ENCH 666: Biotechnology GMP Facility Design, Construction and Validation OR BTEC 668: Clinical Trials: Design and Management

Bioprocessing Track
BTEC 653: Principals of Upstream Processing
BTEC 658: Principals of Downstream Processing
BTEC 659: Fundamentals of Bioprocess Development
ENCH 664: Quality Control and Quality Assurance for Biotechnology Products

Certificate Programs

Post-Baccalaureate Certificate:
Biotechnology Management
12 Credits (4 courses)

- BTEC 665: Management, Leadership and Communication
- BTEC 670: Legal and Ethical Issues in the Science Professions
- BTEC 680: Financial Management
- BTEC 685: Project Management Fundamentals

Post-Baccalaureate Certificate: Biochemical Regulatory Engineering
12 Credits (4 courses)

BTEC/ENCH 660: Regulatory Issues in Biotechnology
BTEC/ENCH 662: Good Manufacturing Practices for Bioprocesses
ENCH 664: Quality Control & Quality Assurance for Biotechnology Products
ENCH 666: Biotechnology GMP Facility Design, Construction and Validation

Please consult biotech.umbc.edu/schedule for current schedule.

This academic program is a participant in the U.S. Department of Education Gainful Employment program. For more information, https://gradschool.umbc.edu/resources/careers/gainfulemploy/