



# GRADUATE PROGRAMS

## in BIOTECHNOLOGY at UMBC

### M.P.S. Biotechnology Program Sequence

The chart below provides guidance when making course selections based on a fall semester start. Please note that the science courses (BTEC 650 through BTEC 654) must be taken in sequence, starting in the fall. Students interested in completing the degree within two years would need to take at least two courses per semester including summer. If you have questions about the appropriate course(s) to register for, please contact Lisa Gambino at [gambino@umbc.edu](mailto:gambino@umbc.edu) or 410-455-3034.

	FALL	SPRING	SUMMER
YEAR 1	<b>Required 1st Science</b> <b>BTEC 650</b> Applied Biochemistry  <b>Core Management Courses</b> <b>BTEC 660</b> Regulatory Issues <b>BTEC 665</b> Management, Leadership & Communication ❖ <b>BTEC 680</b> Financial Management  <b>Electives</b> <b>BTEC 685</b> Project Management ❖ <b>BTEC 690</b> Innovation and Technology Entrepreneurship ❖	<b>Required 2nd Science</b> <b>BTEC 651</b> Molecular & Cell Biology  <b>Core Management Courses</b> <b>BTEC 670</b> Legal & Ethical Issues <b>BTEC 680</b> Financial Management  <b>Electives</b> <b>BTEC 662</b> Good Manufacturing Practices <b>BTEC 685</b> Project Management ❖	<b>Required 3rd Science</b> <b>BTEC 652</b> Molecular Biotechnology  <b>Core Management Courses</b> <b>BTEC 660</b> Regulatory Issues in Biotechnology ❖ <b>BTEC 665</b> Management, Leadership & Communication ❖ <b>BTEC 680</b> Financial Management  <b>Electives</b> <b>BTEC 685</b> Project Management ❖
YEAR 2	<b>Required 4th Science</b> <b>BTEC 653</b> Applied Bioprocess Engineering  <b>Core Management Courses</b> <b>BTEC 660</b> Regulatory Issues <b>BTEC 665</b> Management, Leadership & Communication ❖ <b>BTEC 680</b> Financial Management  <b>Electives</b> <b>BTEC 685</b> Project Management ❖ <b>BTEC 690</b> Innovation and Technology Entrepreneurship ❖	<b>Required 5th Science</b> <b>BTEC 654</b> Emerging Topics in Biotechnology  <b>Core Management Courses</b> <b>BTEC 670</b> Legal & Ethical Issues <b>BTEC 680</b> Financial Management  <b>Electives</b> <b>BTEC 662</b> Good Manufacturing Practices <b>BTEC 685</b> Project Management ❖	<b>Degree Requirements:</b>  <b>(5) Life Science:</b> BTEC 650 - 654  <b>(4) Core Management Courses:</b> BTEC 660, 665, 670, 670  <b>(1) Elective Course from the following:</b> BTEC 662, 685, 690

❖ Hybrid (part online, part face-to-face): A class that replaces some of its weekly, face-to-face sessions with online activities.

**NOTE:** F-1 students are required to enroll in 2 credit per semester, except for the summer and their last semester.