

BIOTECHNOLOGY

Degree Requirements

Master of Biotechnology

Requirements listed here are in addition to Graduate Council policies listed under GCAC-700 Professional Degree Policies (<https://gradschool.psu.edu/graduate-education-policies/>).

A minimum of 30 credits at the 400, 500, or 800 level is required for completion of the degree, 18 credits of which must be from courses in the 500 or 800 level, with a minimum of 6 credits at the 500 level. Students are required to take 16 to 18 credits from core courses listed below. Additional credits are from industry internship or cooperative education (co-op) and elective courses. A list of approved elective courses is maintained by the graduate program office. All Master of Biotechnology candidates are required to write a research paper based on a research project conducted in an academic, government, or industry research laboratory as the culminating experience for the degree. The research paper is completed while the student is enrolled in MCIBS 594.

Code	Title	Credits
Required Courses		
BMB 400	Molecular Biology of the Gene	3
BIOTC 479	Methods in Biofermentations	3
or BE 468	Microbiological Engineering	
MCIBS 571	Current Issues in Biotechnology	2
MCIBS 590	Colloquium	2
MCIBS 591	Ethics, Rigor, Reproducibility and Conduct of Research in the Life Sciences	2
MCIBS 593	Molecular Biology Laboratory	3
Electives ¹		
Culminating Experience		
MCIBS 594	Research Topics	3-6

¹ These courses are chosen from offerings in various academic departments based on students' interest or track and career objectives. These also include MCIBS 595 (Internship) and any 596 (Individual Studies) course under a faculty member whose research relates to a student's area of interest. A list of approved elective courses is maintained by the graduate program office.