

Requirements for the M.S. in Biochemistry & Biophysics

Three types of Masters of Science degrees are available in Biochemistry and Biophysics:

- 1) Course-based Masters
- 2) Thesis-based Masters
- 3) Professional Project-based Masters

Students should consult with the program director prior to choosing one of these options. For all options of the Master of Science degree in Biochemistry and Biophysics, at least 15 credits must be in courses at the 6000–6999 level (of which 8 credits must be from Molecular Biophysics Module courses*).

In addition, for option 2, four to nine credits must be in research and for option 3, two to nine credits must be in professional project. Students must either have taken Molecular Biochemistry (BCBP 4760) in their undergraduate study or must include it in their M.S. Plan of Study.

*Molecular Biophysics Modules include: BCBP 4600, BCBP 6310, 6550, 6650, 6800, 6870

Outcomes of the Graduate Curriculum

Students who successfully complete this program will be able to:

- explain general principles and concepts from a variety of sub-disciplines within the broader fields of biochemistry and biophysics.
- demonstrate extensive knowledge of a specialized fields of biochemistry and biophysics and be able to answer challenging questions in that field.
- critically analyze and interpret the scientific literature and scientific presentations.
- discuss issues related to scientific ethics and scientific misconduct and apply ethical standards to their own research and/or professional conduct.
- for students doing laboratory research—design, prepare, and execute experiments, using appropriate research techniques.
- critically interpret research data and evaluate findings using appropriate statistical analyses.
- effectively communicate their scientific research and findings in a variety of written and oral formats.