

Department of Biological Sciences

Graduate Program in Biology

Summary of Degree Requirements

Master of Science Degree

1. 30 credit hours beyond B.S.
 - a. With Thesis (lab research project with a faculty mentor. MS thesis must be approved by MS thesis committee and submitted to Office of Graduate Education.)
 - i. 21-26 credits coursework
 - ii. 4-9 credits MS thesis
 - b. Without Thesis (lab research project or non-research project supervised by faculty mentor.)
 - i. 21-26 credits coursework
 - ii. 2-9 credits professional project
2. At least 15 credits at the 6000 level
3. At least 15 credits must have BIOL or BCBP prefix

4. PhD Degree

5. 72 credit hours beyond BS degree
6. Take two-semester Core Course and maintain 3.0 GPA
 - a. Passing of core course meets qualifying exam requirement
7. Completion within 7 years (5 years if entering with a MS)
8. Be a teaching assistant for undergrad course (1 semester required)
9. Register as a full-time student
10. Attend weekly Biology Seminar Series
11. Rotate in 3 research labs. Upon completion of third rotation, join a lab for PhD research before end of first year
12. Select a thesis committee (Spring of year 2)
13. Pass qualifying exam (core course)
14. Pass written and oral candidacy exam
15. Present department seminar (approximately once per year)
16. Co-author a manuscript in a journal or proceedings
17. Complete a single-author thesis and successful public oral defense

Department of Biological Sciences Graduate Program in Biochemistry & Biophysics

Summary of Degree Requirements

Master of Science Degree

1. 30 credit hours beyond BS degree
2. At least 15 credits at the 6000 level
3. At least three Molecular Biophysics Module courses (See below)
4. An independently-written thesis with sign-off by advisor

PhD Degree

1. 72 credit hours beyond BS degree
2. At least three Molecular Biophysics Module courses (See below)
3. Be a teaching assistant for undergrad course (1 semester required)
4. Rotation in 2 research labs. Upon completion of third rotation, join a lab for PhD research before end of first year
5. Select a thesis committee (Spring of year 2)
6. Pass written and oral candidacy exams
7. Complete a single-author thesis and successful public oral defense

Molecular Biophysics Module Courses

- BCBP-6170 Advanced Topics in Nuclear Magnetic Resonance (4 cr.)
- BCBP-6310 Genetic Engineering (4 cr.)
- BCBP-6640 Proteomics (3 cr.)
- BCBP-6780 Protein Folding (4 cr.)
- BCBP-6810 Biological Spectroscopy (4 cr.)
- BCBP-6870 Protein Structure Determination (4 cr.)
- BCBP-6800 Methods in Biophysics (4 cr.)
- Or equivalent courses (4 cr.) at the discretion of the BCBP graduate program director, including 6000 level courses in Chemistry, Chemical Engineering, Biology, Biomedical Engineering, Physics, Math and independent reading classes.