

PhD Engineering - Biochemical Emphasis

Effective Fall Semester 2017 – Fall Semester 2018

Program of Study

Minimum requirement – 72 credit hours (minimum of 32 credit hours course work; minimum of 40 credit hours research and dissertation)

Required Courses (10 credit hours)

- ENGR 6910: Foundations for Engineering Research (3 credit hours)
- BCHE 8970: Bioengineering Seminar (4 semesters, 4 credit hours)
- ENGR 8103: Computational Engineering (3 credit hours)

Required Course - choose any three of the following (9 credit hours)

- BCHE 8150: Heterogeneous Reactor Design and Bio/Catalysis (3 credit hours)
- ENGR 8160: Advanced Fluid Mechanics (3 credit hours)
- ENGR 8170: Advanced Heat Transfer (3 credit hours)
- ENGR 8180: Advanced Mass Transport (3 credit hours)
- BCHE 8210: Fermentation Engineering Laboratory (3 credit hours)

Electives (13 credit hours)

Minimum of 13 additional graduate-level credit hours of course work selected with the approval of the student's Graduate Advisory Committee.

Research and Dissertation (40 credit hours)

- A minimum of 37 hours of doctoral research (9000) or project-based research (9010). Typically, students complete more than 37 credit hours with the approval of the Graduate Advisory Committee.
- 3 hours of Ph.D. Dissertation (9300) is required on the Plan of Study.