# Chemical and Biochemical Engineering, PhD

## Academic Plans

### Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

### Chemical and Biochemical Engineering, PhD

**Course** | **Title** | **Hours**
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### Academic Career
#### Any Semester
72 s.h. must be graduate level coursework; graduate transfer credits allowed upon approval. More information is included in the General Catalog and on department website.  

| Hours | 0 |

#### First Year

**Fall**
- CBE:5000 Seminar in Chemical and Biochemical Engineering  
- CBE:5105 Introduction to Literature Review and Proposal Writing  
- CBE:5120 Data Science in Chemical and Engineering Systems  
- ENGR:7270 Engineering Ethics  
- Elective course  

| Hours | 11 |

**Spring**
- CBE:5425 or CBE:5315 or CBE:3205 Atmospheric Chemistry and Physics  
- CBE:5000 Seminar in Chemical and Biochemical Engineering  
- CBE:5110 Intermediate Thermodynamics  
- Elective course  
- Elective course  

| Hours | 13 |

#### Second Year

**Fall**
- CBE:5000 Seminar in Chemical and Biochemical Engineering  
- CBE:7999 Research: Chemical and Biochemical Engineering PhD Dissertation  
- Elective course  
- Elective course  

| Hours | 10 |

### Third Year

**Any Semester**
- Exam: Doctoral Comprehensive Exam  

| Hours | 0 |

**Fall**
- CBE:5000 Seminar in Chemical and Biochemical Engineering  
- CBE:7999 Research: Chemical and Biochemical Engineering PhD Dissertation  

| Hours | 9 |

#### Spring

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
- CBE:7999 Research: Chemical and Biochemical Engineering PhD Dissertation  

| Hours | 7 |

#### Fourth Year

**Fall**
- CBE:5000 Seminar in Chemical and Biochemical Engineering  

| Hours | 1 |

**Spring**
- CBE:5000 Seminar in Chemical and Biochemical Engineering  

| Hours | 1 |

#### Fifth Year

**Fall**
- Exam: Doctoral Final Exam  

| Hours | 1 |

| Total Hours | 72 |

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*a Students must complete specific requirements in the University of Iowa Graduate College after program admission. Refer to the Graduate College website and the Manual of Rules and Regulations for more information.

*b Students must take this course each semester in residence.

*c Must be completed during first semester.

*d Work with faculty advisor to determine appropriate graduate coursework and sequence.

*e CBE:5315 is typically offered only during fall semesters.

*f Complete within three years of entering program.
Dissertation defense.