# 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

**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.  

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Semester</td>
<td>72</td>
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</table>

**First Year**

**Fall**

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
  1
- CBE:5120 Data Science in Chemical and Engineering Systems  
  3
- ENGR:7270 Kinetics course  
  3
- Elective course  
  3

**Spring**

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
  1
- CBE:5110 or CBE:5115 Intermediate Thermodynamics or Transport Phenomena I  
  3
- Elective course  
  3
- Elective course  
  3

**Hours**  

| 0 |

**Second Year**

**Fall**

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
  1
- CBE:7999 Research: Chemical and Biochemical Engineering PhD Dissertation  
  3
- Breadth Requirement course  
  3
- Elective course  
  3

**Spring**

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
  1

**Hours**  

| 10 |

**Third Year**

**Any Semester**

- Comprehensive Exam  
  0

**Fall**

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
  1
- CBE:7999 Research: Chemical and Biochemical Engineering PhD Dissertation  
  8

**Hours**  

| 9 |

**Spring**

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
  1
- CBE:7999 Research: Chemical and Biochemical Engineering PhD Dissertation  
  8

**Hours**  

| 9 |

**Fourth Year**

**Fall**

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
  1
- CBE:7999 Research: Chemical and Biochemical Engineering PhD Dissertation  
  6

**Hours**  

| 7 |

**Spring**

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
  1

**Hours**  

| 1 |

**Fifth Year**

**Fall**

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
  1

**Hours**  

| 1 |

**Spring**

- CBE:5000 Seminar in Chemical and Biochemical Engineering  
  1
- Final Exam  
  1

**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* Choose one course from CBE:3205 (offered every spring), CBE:5315 (offered fall of even years), or CBE:5425 (offered spring of even years).

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

*f* CBE:5110 is typically offered spring of even years and CBE:5115 is typically offered spring of odd years.
g Students take a 3 s.h. course taught in the Department of Chemical and Biochemical Engineering (prefix CBE) in an area outside their prior graduate degree training and research specialization area.

h Complete within three years of entering program.

i Dissertation defense.