# Recommended Ph.D. Program Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
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| 1ST YEAR | Chm Eng 200  
Chm Eng 298  
Chm Eng 299  
Chm Eng 597B  
Elective1  
TA Class 495 | Chm Eng 210  
Chm Eng 220  
Chm Eng 298  
Chm Eng 299  
Chm Eng 597B | Chm Eng 298  
Chm Eng 299  
Chm Eng 597B  
Elective1 | *Advisor Selection Process  
*PRELIMINARY ORAL EXAM  
*Submit Course Study Plan  
*Nominate Doctoral Committee |
| 2ND YEAR | Chm Eng 298  
Chm Eng 299  
Chm Eng 597B  
TA Conference before School Year begins | Chm Eng 298  
Chm Eng 299  
Chm Eng 597C | Chm Eng 298  
Chm Eng 299  
Chm Eng 599 | *Submit Research Proposal (7TH WEEK)  
*PH.D. Oral Qualifying Exam/Advance to Doctoral Candidacy (9TH WEEK) |
| 3RD YEAR | Chm Eng 298  
Chm Eng 299  
Chm Eng 599 | Chm Eng 298  
Chm Eng 299  
Chm Eng 599 | Chm Eng 298  
Chm Eng 299  
Chm Eng 599 | *Oral Progress Report |
| 4TH YEAR | Chm Eng 298  
Chm Eng 299  
Chm Eng 599 | Chm Eng 298  
Chm Eng 299  
Chm Eng 599 | Chm Eng 298  
Chm Eng 299  
Chm Eng 599 | *File Dissertation/Graduation |

*Consult with the Graduate Adviser or research advisor. All must be 200 level, letter-graded courses. Three are required. Two of the three must be ChE; the remaining courses may be in any field of science, mathematics, or engineering. Must be enrolled in 12 Units/Quarter. The PWE is taken during Spring break of the 1st Year. For Non-Chemical Engineering undergrads the undergrad courses for Transport Phenomena, Thermodynamics and Chemical Reaction, Engineering are recommended. Please consult your research advisor.

- 101A-Transport Phenomena I/Fall Quarter
- 106-Chemical Reaction Engineering/Fall Quarter
- 101B-Transport Phenomena II: Heat Transfer/Winter Quarter
- 102A-Thermodynamics I/Winter Quarter
- 101C-Transport Phenomena III/Spring Quarter
- 102B-Thermodynamics II/Spring Quarter