

Milestones/Forms for Ph.D. Degree in Chemical or Biomedical Engineering

1. First semester.

- Meet with Graduate Program Coordinator and Major Professor (if you have one) to determine course selection. Prepare a course plan towards graduation.
- Complete Graduate Student Advising form. Take course selection to ChBME office for course registration approval. Your work during the first semester will typically include an independent study project with a faculty member or Directed Research with your Major Professor.

If you were not assigned a Major Professor at the time of admission then during the first semester you must meet with other faculty members and discuss with them the possibility of working with them. At the end of the semester you will have to provide the graduate coordinator with a list of at least three choices for Major Professor before the last day of class. Every effort will be made to accommodate your research interests, subject to the constraints of funding and resources available. The final selection of the Major Professor is then determined by the ChBME faculty. Once a Major Professor has been appointed you should meet with him or her to discuss your course plan and have it approved.

2. Second Semester

During the second semester you must continue to take courses and must also register for Directed Research hours if approved by your Major Professor.

If you have not already done so, you must also begin to select a Dissertation Supervisory Committee in consultation with the Major Professor.

A diagnostic examination is required of all prospective doctoral students in Chemical Engineering. This requirement will be satisfied by maintaining a grade of B or better in graduate level courses taken in Chemical Engineering during the first year of study.

A student who does not satisfy this diagnostic requirement will be required to achieve an overall GPA of 3.0 or better in graduate level courses taken in Chemical Engineering (ECH5XXX and ECH 6XXX) prior to admission to candidacy. This is in addition to the University requirements of an overall GPA of 3.0 or better.

Additional diagnostic examination requirements may be expected to be imposed by the students' Major Professor in consultation with the thesis/dissertation committee if the committee has been appointed. The format of the additional diagnostic requirements is left to the discretion of the Major Professor and may be used to plan future course requirements for the student.

3. Third and Fourth semester

The student continues the plan of study as approved by the Major Professor. During this year the student should be preparing for the Qualifying Exam, which must be held at the end of the fourth semester. The Qualifying Examination will be conducted by the students' Dissertation Supervisory Committee which shall be appointed by the Graduate Coordinator in consultation with the Major Professor.

- Complete the Supervisory Committee Appointment form and file it with the department. It is required by the college and should be done at least one semester before the examination.
- The student should prepare a document called Proposal for Doctoral Dissertation Research
- Complete the Request to Hold Qualifying Exam and submit to the ChBME office.
- Present a seminar to the department outlining the proposed research. This seminar will be attended by the Supervisory Committee. At the end of the seminar the Committee will examine the student in order to complete the Qualifying Examination.

- Complete and submit the following forms
 - Admission to the Candidacy form (<http://www.grad.usf.edu/student-forms.php>)
 - Qualifying Exam Approval Form
 - Assessment forms

It is your responsibility to complete this Examination on a timely basis. Please note that failure to set up and pass the Qualifying Examination by the end of the fourth semester. You will not be allowed to take Dissertation hours unless you have been admitted as a Candidate for the Ph.D. degree.

4. Following semesters

Register for at least 2 hours of Dissertation Research with the Major Professor. Register for additional hours or courses as needed in consultation with the Major Professor. Prepare and submit papers for publication in refereed journals. In at least one or more, you must be the first and primary author. The publication must be based on your Dissertation research. Presentation at a conference or publication in a proceedings (even if refereed) is not sufficient.

5. Semester before Graduation

- Review graduate school website and **their ETD process**
- Start preparing your dissertation. Follow the guidelines in **College of Engineering Thesis / Dissertation Format Guide** available at: <http://www.usf.edu/engineering/graduate/index.aspx>
Pay special attention to deadlines for College and University
- Apply for graduation online on OASIS and complete Graduate Certification checklist with signature of Graduate Advisor to ChBME Office.

6. Semester of Graduation

- Register for at least 2 hours of Dissertation Research even if no other classes are being taken. Provide proof of publication to Graduate Coordinator for approval of graduation application.
- Schedule a Departmental Seminar for PhD Defense by consulting your major professor and committee. Select an external chair for your defense.
Pay special attention to deadline for defense set by College.
- 30 days prior to the defense complete the Request for the Ph.D. Final Oral Examination form and turn in to the front office with a copy of your abstract for announcement of the defense.
- After successful defense, complete and submit the following
 - Successful Defense Form
 - Assessment form
 - Certificate of Approval (<http://www.grad.usf.edu/student-forms.php>).

**Application to hold Ph.D. Qualifying Examination
Chemical & Biomedical Engineering Department**

Complete Form at least one week prior to Examination.

This form is to be used by students intending to become candidates for a doctoral degree in chemical engineering. Students are expected to complete the Qualifying Examination by the fourth semester after being admitted as a Ph.D. seeking student.

Name: _____ USF ID#: U- _____

Address: _____

Email Address: _____

Degree Sought (circle): Ph.D. in Chemical Engineering Biomedical Engineering

Tentative date, time and place of Qualifying Examination: _____

Major Professor: _____

Co-Major Professor: _____

Ph.D. Supervisory Committee Members: _____

1. A copy of your Proposal Title and Abstract must be attached to this form.
2. A copy of your plan of study should also be included.

Approved: Signature of Graduate Coordinator: _____

After approval please forward this to your Major Professor(s) for further action. The form should be submitted to the Graduate Office in Chemical Engineering

Signature of Major Professor: _____

Signature of Co-Major Professor: _____

Assessment of Master's and Doctoral Students

Candidate: Please collect these and turn these into the ChBME Office immediately after the exam.

To be completed by each of the Examining Committee Members at the time of Thesis or Dissertation Examination (or by the Graduate Advisor for non-Thesis students).

Instructions to the Student: Please complete Section 1 and give a copy to each member and ask them to complete it at the end of your examination.

Section 1. (To be completed by student)
Name:
Degree Sought:
Title of Thesis or Dissertation:
No of publications based on your research in refereed journals:
No of conference presentations based on your research:

Section 2. (To be completed by each committee member.).

Please summarize your assessment of the student's ability on a scale of 1-5, 1 being Poor and 5 being Excellent. Leave blank if unable to evaluate.

On a scale of 1-5, 1 = Poor and 5 = Excellent, please rate the following:

Item	1	2	3	4	5
Assessment of the student's ability to ability to use modern research methods to conduct an in-depth study of a current issue in their chosen area of research. (ability to formulate a hypothesis, verify the hypothesis, conduct necessary experiments/modeling, analyze the results and come to appropriate conclusions)	1	2	3	4	5
Assessment of the student's ability analyze complex and multi-faceted data	1	2	3	4	5
Assessment of student's ability to give oral technical presentations (delivery, quality of slides used, answer questions, timeliness etc.)	1	2	3	4	5
Assessment of student's ability to write technical reports (quality of writing, style, grammar, correct punctuation, correct citations, clear abstract etc.)	1	2	3	4	5
Assessment of student's ability to use modern computational and/or modeling tools for analysis	1	2	3	4	5
Assessment of student's ability to do a critical review of the literature in their chosen area of specialization (Did the student conduct a complete and thorough study of the literature, analyze prior work, summarize it succinctly?)	1	2	3	4	5
Assessment of the student's contribution to advance the body of knowledge in their chosen area of specialization (Was there an original contribution to the field, has it been validated by publications in the appropriate forum?)	1	2	3	4	5

Department of Chemical & Biomedical Engineering, USF

Ph.D. Qualifying Exam Approval

(Form must be submitted within 2 weeks of the exam date)

(Please print legibly)

Name of Student: _____ Email: _____

(Co-)Major Professor(s): _____

Date of Oral Exam: _____

Student is in good standing (GPA 3.0 or above, no incompletes or missing grades, PhD Committee forms signed, and a majority of coursework completed) and has successfully completed the oral qualifying examination.

Signatures:

Student: _____ **Date:** _____

(Co-)Major Professor: _____ **Date:** _____

Co-Major Professor: _____ **Date:** _____

Name

Committee Member: _____ **Date:** _____

Name

Committee Member: _____ **Date:** _____

Name

Committee Member: _____ **Date:** _____

Name

Committee Member: _____ **Date:** _____

Name

SUBMIT TO CHEMICAL & BIOMEDICAL ENGINEERING OFFICE

Request for Doctoral Dissertation Defense
To be completed at least 1 month prior to defense date

Department of Chemical & Biomedical Engineering

The undersigned request that the University community be notified that the following doctoral candidate for the Ph.D. degree stands ready to defend his/her dissertation. Each committee member hereby certifies that he/she has received the final draft of the dissertation.

	Name (print or type clearly)	USF ID#	Degree
Doctoral Candidate		U -	

Graduate Program (abbreviate)	Graduate Department (abbreviate)	Dept. Mail Code
Dissertation Title		
Time, Date and Place of Examination		
Chairperson of Examination, Dept., and Mail Code (or Address)		

Examining Committee

	Name (print or type clearly)	Received Final Draft of Dissertation	Signature of Approval	Date Signed
<input type="checkbox"/> Major Professor				
<input type="checkbox"/> Co-Major Professor				
<input type="checkbox"/> Co-Major Professor				
<input type="checkbox"/> Member				
Member				
Member				
Member				
Member				
Member				

Approvals

	Name (print or type clearly)	Signature of Approval	Date Signed
Dept. Chairperson			

UNIVERSITY OF SOUTH FLORIDA

SUCCESSFUL DEFENSE OF THE PH.D. DISSERTATION

The undersigned verify that the final oral defense of the dissertation has been successfully completed by the following doctoral candidate and that the dissertation is ready to submit to the Graduate School pending revisions.

	Name <i>(print or type clearly)</i>	USF ID#	Degree
Doctoral Candidate		U	

Graduate Program	
Graduate Department	
Dissertation Title	

Examining Committee

	<i>Name (print or type clearly)</i>	Signature of Approval
<input type="checkbox"/> Major Professor <input type="checkbox"/> Co-Major Professor		
<input type="checkbox"/> Co-Major Professor <input type="checkbox"/> Member		
Member		
Member		
Member		
Member		
Member		
Chairperson of Defense		
Defense held on (date)		
Successful Defense Form signed (date)		