Milestones/Forms for Ph.D. Degree in Chemical 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 and then provide the department your choices for Major Professor. 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 as well before approval by the Graduate Coordinator.

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
 - o Admission to the Candidacy form (https://www.usf.edu/graduate-studies/forms.aspx)
 - 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: https://www.usf.edu/engineering/graduate/thesis-dissertation-info.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 (https://www.usf.edu/graduate-studies/forms.aspx)

Application to hold Ph.D. Qualifying Examination Chemical, Biological, and Materials 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.
Tentative date, time and place	e of Qualifying Examination:
Major or Co-Major Professor	:
Major or Co-Major Professor	:
Ph.D. Supervisory Committee	e Members:
10 0	sal Title and Abstract must be attached to this form. f study should also be included.
Signature of Major or Co-Ma	jor Professor:
Signature of Major or Co-Ma	jor Professor:
Approved: Signature of Gra	duate Coordinator:
After approval please submit advertise your proposal defer	to the Graduate Office in Chemical Engineering to with request to use.

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 MS or PhD Defense

Instructions to the Student:

Complete Section 1, then give a copy to each member of the committee to complete at the end of examination.

Section 1.							
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 assess the student's ability by checking the box (leave blank if unable to evaluate	e).1 =	Poor	and	5 = Exc	cellent		
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)							
Assessment of the student's ability analyze complex and multi-faceted data							
Assessment of student's ability to give oral technical presentations							
(delivery, quality of slides used, answer questions, timeliness etc.)							
Assessment of student's ability to write technical reports (quality of writing, style, grammar, correct punctuation, correct citations, clear abstract etc.)							
Assessment of student's ability to use modern computational and/or modeling tools for analysis							
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?)							
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?)							

Department of Chemical, Biological and Materials 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 abov Committee forms signed, and a majority of completed the oral qualifying examination.	
Signatures:	
Student:	Date:
(Co)-Major Professor:	Date:
Co-Major Professor:	Date:
Committee Member:	Date:
Name	
Committee Member:	Date:
Name	
Committee Member:	Date:
Name	
Committee Member:	Date:
Name	

SUBMIT TO CHEMICAL, BIOLOGICAL and MATERIALS ENGINEERING OFFICE

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

Department of Chemical, Biological and Materials 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. <u>Each committee member hereby</u> certifies that he/she has received the final draft of the dissertation.

		Nar	ne	(print or type c	nearry)	USF ID#	F	Degree
Doctoral Candida	ate					U -		
Graduate Program (abbreviate)		Graduate Department (abbreviate)		Dept. Mail				
							Code	
Dissertation Title								
Time, Date and P								
Chairperson o Examination, De and Mail Code (Address)	pt.,							
Examining Commit	tee							
		e (print pe clearly)		Received Final Draft of Dissertation	Signatu	re of Approva	ıl	Date Signed
☐ Major Professor ☐ Co-Major Professor								
☐ Co-Major Professor ☐ Member								
Member								
Member								
Member								
Member								
3.7								1

Approvals

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

UNIVERSITY OF SOUTH FLORIDA College of Engineering SUCCESSFUL DEFENSE FORM

The undersigned verify that the final oral defense of the thesis/dissertation has been successfully completed by the following student.

	Name (print or ty	pe clearly)	USF ID#	Degree
Student			U	
Department				
Thesis/Dissertation Title				
Defense Date				
	Examini	ng Committee		
	Name (print or type clearly)	Signature of Approv	ral Da	ate Signed
☐ Major Professor ☐ Co-Major Professor				
☐ Co-Major Professor ☐ Member				
Member				
Member				
Member				
Member				
Member				
Member				
Member				
Chairperson of Defense (PhD Defense				

Student emails completed form to Catherine Burton in College of Engineering Dean's Office, sburton@usf.edu