

CHEMICAL ENGINEERING DEPARTMENT
<http://www.chemengr.ucsb.edu/>
College of Engineering
University of California, Santa Barbara

Student Name: _____

Perm Number: _____

DOCTOR OF PHILOSOPHY – CHEMICAL ENGINEERING – 2022-23

In addition to departmental requirements, candidates for graduate degrees must fulfill University requirements described in the “Graduate Education” section of the UCSB General Catalog.

REQUIRED COURSEWORK

The student is expected to undertake a program of courses in chemical engineering and related fields that provide a depth of understanding in the core areas of chemical engineering. Students are required to complete a minimum of **36.0 units** of graded course work before graduation. This includes 30 units required to fulfill the core course requirements. The time-to-degree for the Ph.D. is three years to advance, six years to complete the degree.

Students must take six Core courses, and achieve a grade of “B” or better in each course. Four of these courses must be Ch E 210A, Ch E 220A, Ch E 230A, and Ch E 240A. Two further courses are chosen by the student and must come from the Ch E 210, Ch E 220, Ch E 230, and Ch E 240 series (i.e., the B/C/D courses.) Students must achieve a Core GPA of 3.25 or higher, to be eligible to take the Candidacy Exam.

REQUIRED CORE COURSES (21.0 Units)			
COURSE #	COURSE NAME	UNITS	Grade
Ch E 210A	Fundamentals and Applications of Classical Thermodynamics and Statistical Mechanics	4.0	
Ch E 220A	Advanced Transport Processes-Laminar Flow and Convective Transport Processes	4.0	
Ch E 230A	Advanced Theoretical Methods in Engineering	4.0	
Ch E 240A	Advanced Chemical Reaction Engineering	3.0	

Students must also take an additional **9.0 letter graded units** of technical electives approved by the Chemical Engineering Graduate Advisor and Graduate Affairs Committee.

TECHNICAL ELECTIVE UNITS (9.0 Units)			
COURSE #	COURSE NAME	UNITS	Grade

GENERAL ELECTIVE UNITS (6.0 Units)			
COURSE #	COURSE NAME	UNITS	Grade

ADVANCEMENT TO Ph.D. CANDIDACY

Students who have not yet advanced to Ph.D. candidacy are required to write and submit research progress reports to the Graduate Affairs Committee as specified below and participate in the 1st Year Graduate Student Symposium.

RESEARCH PROGRESS REPORT SUBMISSION	
FIRST YEAR OF GRADUATE STUDY:	
1 st Written Progress Report	Report approved by Graduate Affairs Committee (initially due in July of first year)
	_____ Yes _____ No
First Year Symposium Presentation:	Presented at Symposium (September at end of first year)
	_____ Yes _____ No
SECOND YEAR OF GRADUATE STUDY:	
2 nd Written Progress Report	Report approved by Graduate Affairs Committee (initially due in January of second year)
	_____ Yes _____ No
3 rd Written Progress Report**	Report approved by Graduate Affairs Committee (initially due in July of second year)
<i>**The Graduate Affairs Committee will only require a 3rd report if student does not schedule the candidacy examination to be taken by the normal deadline in the summer of the second year</i>	
	_____ Yes _____ No

Advancement to Candidacy for the Ph.D. degree requires a comprehensive oral examination based primarily on student's research progress through the Winter or Spring Quarter of the student's second year of graduate study. Eligibility to take the oral Candidacy Exam is based on a portfolio submitted by the student that includes a record of performance in graduate chemical engineering course work, the quarterly research progress reports, and a comprehensive written research report. The department does not require a foreign language examination.

Ph.D. Form I and Conflict of Interest form submitted: _____ (date)

GRADUATE COUNCIL REGULATIONS REGARDING Ph.D. COMMITTEES:

The committee must consist of at least three UC Academic Senate members, with a tenure-track faculty member from the student's major (home) department serving as chair or co-chair. At least two members of every committee must be tenure-track faculty. The majority of the three members shall be from the student's UCSB major (home) department. Additional members may be appointed at the department's discretion. Chemical Engineering requires a four-member committee, with the fourth member from outside of the department.

MEMBERS OF THE Ph.D. COMMITTEE	
1.	(Chair)
2.	
3.	
4.	(Must be from outside department)
5.	(May be from outside department) OPTIONAL

CANDIDACY EXAM
Candidacy/Qualifying Exam: _____ (date)
Ph.D. Form II submitted to Graduate Division, and Advancement to Candidacy fee paid: _____(date)
A student is eligible for advancement to candidacy for the Ph.D. degree after passing the oral examination.

POST-CANDIDACY REQUIREMENTS

The student is required to submit a brief report and meet with their Ph.D. committee at least once each academic year after completion of the candidacy exam. The annual deadline to meet with the Ph.D. committee and submit a copy of the report, with a completed signature page, to the Graduate Affairs Committee (GAC) is September 30th.

MEETINGS WITH Ph.D. COMMITTEE
THIRD YEAR OF GRADUATE STUDY Meeting with Dissertation Committee _____ (date) Submitted copy of report to GAC _____ (date)
FOURTH YEAR OF GRADUATE STUDY Meeting with Dissertation Committee _____ (date) Submitted copy of report to GAC _____ (date) Verification that coursework has been completed _____ (date)
FIFTH YEAR OF GRADUATE STUDY (if applicable) Meeting with Dissertation Committee _____ (date) Submitted copy of report to GAC _____ (date)

Approximately one year prior to the Ph.D. defense, each Ph.D. student is required to give an oral presentation on his/her research at the annual department Graduate Student Symposium held in the fall. Typically, the presentation requirement will be completed at the beginning of the fourth or fifth year, allowing for potential incorporation of constructive feedback from symposium attendees into the thesis. If extenuating circumstances prevent a presentation at the Graduate Student Symposium, students may satisfy this requirement by scheduling an advertised Ch E 290 seminar at UCSB no less than six months prior to defense.

RESEARCH PRESENTATION
Graduate Student Symposium: _____ (date)
OR
290 Department Seminar: _____ (date)

Each student is expected to describe the results of their research project in a dissertation. The student must present and defend the dissertation in an oral examination. The period of time between advancement to candidacy and completion of the final oral examination is expected to be approximately three years.

DISSERTATION SUBMISSION

Doctoral Defense passed: _____ (date)

Dissertation submitted to the Graduate Division: _____ (date)

(Includes completed Ph.D. Form III)