

# Doctoral Degree Requirements

## Department of Mechanical Engineering | UC Berkeley

### Normative Time

5 years or 10 semesters

### Minimum Number of Units To Complete Degree

36 Semester units. For students who are in the process of obtaining or have obtained their master's degrees at UC Berkeley, master's degree units that meet the restrictions below can be used towards their PhD unit requirement.

### Minimum Units You Required In Order To Be Registered Each Semester

Students must enroll in 15 units each semester

### Maximum Amount of Independent Study Units (298, 299, 300 and Above)

Independent course units are not counted towards the 36 semester units needed to graduate. The maximum of these units you can enroll per semester are listed below.

- 298s: 8 units
- 299s: 12 units
- 300s: 6 units
- 600s: 8 units

### Maximum Number of Courses That Can Be Transferred Towards Degree

Students can transfer up to 2 courses from another school towards the PhD

- *Courses must be in the major field of study*
- Courses must be letter graded
- Courses cannot be from the student's Undergraduate course of study; courses must have been taken while in graduate standing

### GSI/ME 300-Level Course Requirement

Each student must either serve as a Graduate Student Instructor (GSI) for at least 1 semester or have taken a 300-level course on teaching.

### Minimum Grade Point Averages (GPAs)

All students are required to have the following minimum Grade Point Averages:

- 3.5 in Major

- 3.0 in Minors

Only courses with a C- or better can count towards graduate requirements. Please note that only 1/3 of your unit total at the time of graduation may be pass/not pass or satisfactory/unsatisfactory. Please note that to earn a “pass” or a “satisfactory” grade in a graduate course you need a grade of B- or better.

### **Required Emphases**

Each student must declare 1 Major area as well as 2 Minors. At least one Minor is required to be outside of the department. The minor fields are required to broaden the base of the studies and lend support to the major field as well as the dissertation research.

### **Required Number of Courses**

- 5 Courses in your major, all of which must be letter graded
  - 3 Courses in your First Outside ME Minor (only 1 of these courses can be taken with the Satisfactory/Unsatisfactory option rather than letter graded)
  - 2 Courses in your Inside ME or 2nd Outside ME Minor, all of which must be letter graded
- 2 Courses to support your Major or one Minor

Please note that 2/3 of the courses counted towards your degree must be letter graded.

### **Preliminary Examination (Prelim)**

The objective of the Preliminary Examination is the early assessment of a student's potential for satisfactory completion of the doctoral degree. The exams are entirely closed - no books or notes are allowed. Please see the FAQ on the department website for the latest information.

The examination is given twice a year, during the first week of the Spring and Fall semesters, and must be taken following two semesters of registration as a graduate student at the latest. Tests cannot be taken before entering the program.

### **Qualifying Examination**

This is an oral exam which covers courses and research. Exam should be scheduled 1 month in advance of the end of student's 3rd year/6th semester. Students receive 2 attempts to pass. It may be taken after having completed:

- 4 courses in the major for a GPA of 3.5, all of which must be letter-graded
- 2 courses in each minor for a GPA of 3.0
- *Or, if you are in the Mechanics major field, all courses need to have been taken.*

## Qualifying Exam Committee Requirements

<ul style="list-style-type: none"><li>• Chair (the first Inside ME member)</li><li>• Second Inside ME member</li><li>• Third Inside ME or additional members</li><li>• Outside ME member</li></ul>	<ul style="list-style-type: none"><li>• At least 2 members must be from the ME Department.</li><li>• The Chair of the Qualifying Examination Committee cannot also serve as the Chair of the Dissertation Committee for the same student.</li><li>• There cannot be co-chairs for the Qualifying Exam.</li></ul>
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Detailed requirements can be found in Graduate Division's *Guide to Graduate Policy*:  
<http://grad.berkeley.edu/policy/>

### Advancement To Candidacy

All students must complete the Advancement to Candidacy Application directly after passing their qualifying exam. The form can be found [Section 13](#).

### PHD Dissertation

Dissertations are required of all students. Each dissertation committee must include

- Chair (the first Inside ME member)
- Second Inside ME member
- Outside ME member
- A third ME member may be added but is not required.
- Two co-chairs may replace one chair (one of these may be a faculty member in a department other than ME).
- The Dissertation Chair cannot be the same person as the Chair of the Qualifying Examination for the same student.

All members of the dissertation committee must be members of the Berkeley Division of the Academic Senate. Detailed requirements and restrictions can be found in Graduate Division's *Guide to Graduate Policy*:  
<http://grad.berkeley.edu/policy/>

### PHD Candidate Seminar

Each student must present their dissertation findings with at least one member of their dissertation committee present. The seminar must take place prior to the end of the semester in which you receive your degree.