IEOR Graduate Student Handbook

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Chapter 1: Introduction

Welcome to the IEOR Graduate Student Handbook where you will find department-specific information regarding course and degree requirements, as well as a collection of resources that will aid IEOR (Industrial Engineering and Operation Research) graduate students in navigating their way towards completing their studies at Berkeley.

This Graduate Handbook is meant as a reference only. The Graduate Division Guide to Graduate Policy is the primary source of rules and regulations relating to graduate degrees and programs throughout the University. We hope that you find this document useful. For additional information, answers to your questions or feedback, please contact Anayancy Paz, Graduate Student Advisor.
Chapter 2. Administration

2.1 STAFF

The IEOR Staff provides information and resources that are intended to assist students during their studies and to clarify some of the necessary administrative demands of the Graduate Division.

Contact information and departmental roles of IEOR Staff members can be found at http://www.ieor.berkeley.edu/People/Staff/index.htm.

2.2 IEOR ADVISORY BOARD

The IEOR Advisory Board (IAB) is a volunteer group of leaders from industry, government, academia, and the engineering profession who have a major influence on the IEOR field. Advisory Board members are strongly committed to maintaining and strengthening the excellence of the IEOR department at UC Berkeley so that it continues to be one of the best educational and research programs in the world.

The Advisory Board provides:

- Feedback on Department's educational, research and outreach initiatives.
- Insights and counsel from industrial and other external organizations into the trends, opportunities and challenges in the field.
- Fundraising support, advice and engagement with developing the department's resources and industrial partnerships, and related activities.
- Advocacy for the Department within the College of Engineering and the broader UC Berkeley campus community.

A list of current IEOR Advisory Board members can be found at http://www.ieor.berkeley.edu/People/Advisory/index.htm
Chapter 3. Faculty

3.1 FACULTY CONTACT INFORMATION

Contact information for faculty can be found at [http://www.ieor.berkeley.edu/People/Faculty/index.htm](http://www.ieor.berkeley.edu/People/Faculty/index.htm)
Chapter 4. Registration Information and Adding/Dropping Courses

4.1 FIRST TIME REGISTRATION

Registration is a two part process - one must enroll in courses as well as pay the registration fees accessed (this includes Non-Resident Tuition a.k.a NRT for non-Residents). Incoming students will be able to enroll near the beginning of August (the exact date changes from year to year and you will be notified of this date by the Graduate Division Admissions Office [http://www.grad.berkeley.edu/new_students/index.shtml].

Registered Students

- Must register for 12 units
- May take classes
- May graduate
- Have access to the Recreation and Sports Facilities (RSF) and Libraries
- Are covered by GSHIP (Graduate Student Health Insurance Plan)
  The Student Health Insurance Plan (SHIP) is a comprehensive major medical insurance plan, providing medical, counseling, prescription, vision and dental services. For more information, please see [http://uhs.berkeley.edu/students/insurance/].
- May hold GSR, GSI and Reader appointment(s)
- Eligible for all student services and privileges

4.1.1 To Enroll:

1. Review Graduate Division's Registration and Enrollment site for deadlines and regulations: [http://registrar.berkeley.edu/current_students/current_reg.html]

2. Find your PIN number (located on a personalized document entitled Taking the Next Step package). As a new incoming student you will only need this number to enroll in courses for the first semester. In subsequent semesters you are not require to use any numbers to enroll.

3. Review courses on the Online Schedule of Classes, located at [http://schedule.berkeley.edu/]

4. The department requires students to take at least 12 units a semester. Failing to do so can result in the rescission of any fellowships and/or fee remission as well as incur other penalties.

5. You will be able to login to TeleBEARS and make the changes to your schedule until the end of the 3rd week of courses. If you are drastically changing your schedule, it is recommended...
you revisit the Head Graduate Advisor to discuss the changes.

6. You have until the end of the 3rd week of classes to be enrolled in the final 12 units of coursework necessary to be considered a full-time registered student.

7. To make changes after the first 3 weeks, fill out the Petition to Change Class Schedule Form (instructions can be found at http://registrar.berkeley.edu/DisplayMedia.aspx?ID=PettoChgCCS.Inst.pdf, obtain the Head Graduate advisor's signature, and turn it in to 4145 Etcheverry Hall. Please note each change occurring after the first 3 weeks will incur fees. If you are not registered in a class you are attending you need to add it; otherwise you will not receive credit for the class as your name will not appear on the final course report.

8. When you have finalized your schedule, make sure that you check your schedule on TeleBEARS to ensure that all changes have been made. You are in charge of your own schedule, making sure you are making adequate progress towards your degree, and meeting Departmental and Graduate Divisions Deadlines.

4.1.2 To Pay Fees:

For information on how to pay your bill, please see http://studentbilling.berkeley.edu/.

Students who have IEOR Department support, such as a GSI, Reader or GSR appointment or who have been granted fellowships, may have partial or full fees paid by their Research adviser's Grant or by the department. Some students on external fellowships such as the NSF will also have their fees paid. Percentages dictate the level of payment. Please see http://grad.berkeley.edu/policies/pdf/fee_remission_eligibility.pdf for details.

Details of your fee payment status can be found at the Quick Statement link in Bearfacts at http://bearfacts.berkeley.edu.

4.2 CONTINUING STUDENT REGISTRATION

To be officially registered, you must enroll in at least eight units and pay the first installment of your fees. That will allow you access to the Class Pass (for transit), libraries, financial aid awards and fellowship stipends. Therefore, it is best to enroll prior to the start of each semester. A full course load consists of 12 units, which may be finalized after meeting with the Head Graduate Advisor of the department.

You will meet the Head Graduate Advisor of the department at orientation. Prior to or during the first week of classes, you should meet with the Head Graduate Advisor to discuss your
course schedule. With the goal of serving your interest and meeting degree requirements, you and the Head Graduate Advisor will decide what courses you should take in the academic year.

Registered Students

- May take classes
- May graduate
- Have access to the Recreation and Sports Facilities (RSF) and Libraries
- Are covered by GSHIP (Graduate Student Health Insurance Plan)
  The Student Health Insurance Plan (SHIP) is a comprehensive major medical insurance plan, providing medical, counseling, prescription, vision and dental services. For more information, please see [http://uhs.berkeley.edu/students/insurance/](http://uhs.berkeley.edu/students/insurance/).
- May hold GSR, GSI, and Reader appointment(s)
- Eligible for all student services and privileges
- Must register for 12 units

4.2.1 To Enroll:

1. Review Graduate Division's Registration and Enrollment site for deadlines and regulations: [http://registrar.berkeley.edu/current_students/current_reg.html](http://registrar.berkeley.edu/current_students/current_reg.html).

2. Review courses on the Online Schedule of Classes, located at [http://schedule.berkeley.edu/](http://schedule.berkeley.edu/).

3. Login to TeleBEARS to begin to enroll in your courses.

4. During Phase I, sign up for up to 10 units worth of courses. Please note that students usually take 3 courses and the rest of the units are usually IEOR 299 or IEOR 298. If you are unable to enroll in your desired courses because they are full, be sure to place your name on the waitlist and attend the first lectures. Instructors have the ability to request that you be moved automatically from the waitlist into the course.

5. During Phase II, you may add additional courses until you are taking at least 12 units.
6. The department requires students to take at least 12 units a semester. Failing to do so can result in the reversal of any fellowships and/or fee remission as well as incur other penalties.

10. If, after meeting with the Head Graduate Advisor, there are changes to be made to your schedule, you will be able to login to TeleBEARS and make the changes yourself until the end of the 3rd week of courses. If you are drastically changing your schedule, it is recommended you revisit the Head Graduate Advisor of the department to discuss the changes.

11. You have until the end of the 3rd week of classes to be enrolled in the final 12 units of coursework necessary to be considered a full-time registered student.

12. To make changes after the first 3 weeks, fill out the Petition to Change Class Schedule Form (instructions can be found at http://registrar.berkeley.edu/DisplayMedia.aspx?ID=PettoChgCCS.Inst.pdf), obtain the Head Graduate advisor's signature, and turn it in to 4145 Etcheverry Hall. Please note each change occurring after the first 3 weeks will incur fees. If you are not registered in a class you are attending you need to add it; otherwise you will not receive credit for the class as your name will not appear on the final course report.

13. When you have finalized your schedule, make sure that you check your schedule on TeleBEARS to ensure that all changes have been made. Ultimately, you are in charge of your own schedule, making sure you are making adequate progress towards your degree, and meeting Graduate Divisions Deadlines.

14. If you are registered in a class that you did not request, YOU MUST DROP IT. Otherwise, you will receive an F for non-attendance.

4.2.2 To Pay Fees:

For information on how to pay your bill, please see http://studentbilling.berkeley.edu/.

Students who have IEOR Department support, such a fellowship, GSI, or GSR may have partial or full fees paid by their Research Advisor's Grant or by the department. Some students on external fellowships such as the NSF will also have their fees paid. Percentages dictate the level of payment. Please see http://grad.berkeley.edu/policies/pdf/fee_remission_eligibility.pdf for details.

Details of your fee payment status can be found at the Quick Statement link in Bearfacts at http://bearfacts.berkeley.edu.
4.3 IN ABSENTIA REGISTRATION

In absentia status is a form of registration available to academic and professional graduate students undertaking coursework or research related to their degree programs outside of California. Students registered in absentia are only assessed full health insurance fees, and 15 percent of the combined University Educational and Registration Fees. If applicable, students are also assessed non-resident tuition and/or professional school fees.

Registration Forms and other information can be found at http://grad.berkeley.edu/policies/absentia.shtml. All applications are due in early August for the fall semester and early January for the spring semester to the Student Services Office at 4145 Etcheverry Hall.

Please contact the Student Services Office with any questions you may have.

Eligibility Criteria

- The student must be enrolled full-time in regular UC units. Students in self-supporting programs or exchange programs are not eligible for in absentia registration.
- Research or coursework
  - Must be of a nature that makes it necessary to be completed outside of California for at least one full academic term.
  - Must be directly related to the student's degree program as evidenced by faculty approval.
  - Must involve only indirect supervision appropriate to evaluating the student's academic progress and performance from UC faculty during the in absentia period.
  - Must involve no significant studying or in-person collaboration with UC faculty during the in absentia period.
- Doctoral students:
  - Must be advanced to candidacy by the time in absentia begins.
  - May only use in absentia registration for a maximum of four semesters.

Students may hold University fellowships and GSR appointments, but may not hold GSI, Reader, or Tutor appointments during the in absentia period.

International Students planning on registering in absentia. Those students in F and J status who plan to be outside California but still within the U.S. or to go in and out of the U.S. must register in absentia and also inform the Berkeley International Office (2299 Piedmont Avenue, 642-2818) of their plans.
4.4 WITHDRAWN STUDENTS

For instructions on how to withdraw from study, please see http://grad.berkeley.edu/policies/guides/d1-8-withdrawal/.

Withdrawn students

- May not take classes
- May not graduate
- Must pay for the Recreation and Sports Facilities (RSF)
- Must pay for GSHIP (Graduate Student Health Insurance Plan) - Memo from Department to GSHIP stating student is was in good standing when s/he left the department required each semester.
- Must pay for library card
- Cannot hold GSR or GSI appointment
- May be Junior Specialist or Reader - International students see SISS (Services for International Students and Scholars) first
- May take Prelim Exam with permission of Head Graduate Advisor and Chair of Prelim Committee
- May not take Qualifying Exam
- Must apply for readmission. No guarantee that student will be accepted back into the program. Please note that there is a reapplication fee.

For information about how to apply for readmission please see http://grad.berkeley.edu/policies/guides/d1-9-readmission/
GRADUATE PROGRAMS

Chapter 5. MS (Master of Science Degree)

The M. S. is a technical and full-time master's degree program. Participants in the program are self-funded; the Department of IEOR does not offer funding and students will not be eligible for ASE (Academic Student Employment) appointments funded by the department. The M.S. is a terminal degree, meaning that students enrolled in the M.S. program are not expected to continue further into the IEOR Ph.D. Program.

UC Berkeley students who are interested in a Master of Science Degree have two options in our department. They can apply to the standard MS or, if they are currently an Industrial Engineering and Operations Research or Operations Research and Management Science undergraduate student at UC Berkeley, they can choose to apply for our 5th Year MS Program. Students who received their undergraduate degree from other universities can only apply to the MS or PhD program.

5.1 FIVE YEAR BACHELOR’S-MASTER’S PROGRAM IN IEOR - ORMS

INTRODUCTION
The Department of Industrial Engineering and Operations Research (IEOR) is implementing a five-year combined Bachelor’s-Master’s program for IEOR and Operations Research and Management Science (ORMS) undergraduates to broaden their educational experiences at Berkeley.

The five-year Bachelor’s-Master’s program is designed for a small number of students with outstanding performance to allow the students to obtain both degrees in five years. The IEOR Master’s program typically takes two semesters to complete. Admission to this program will be more selective than the standard admission to the MS program.

ADMISSION PROCESS, APPLICATION DEADLINES AND DETAILS:

The admission process for the 5th-year Master's Program has three steps and two deadlines.

1. Applicants complete the Departmental Application in the Fall semester of the senior year (including Statement of Purpose, Draft Course of Study Plan, current transcript, two Letters of Recommendation). **Deadline 1.**

2. The Department Graduate Admissions committee selects a subset of applicants for interviews. Only a subset of those interviewed will be admitted by the Department.
3. Students admitted by the Department are required to submit an application to the Graduate Division. **Deadline 2.**

For additional information, please see [Program & Admission Information](http://www.ieor.berkeley.edu/AcademicPrograms/Grad/index.htm).

**NOTE:** For Berkeley students admitted to the five-year program, the normal departmental requirement of the GRE is waived when applying for the Master’s program.

Students selected for the program are required to meet all of the normal requirements for applying for an M.S. degree during their senior year, with the understanding that as long as they maintain good performance in their courses and have incurred no disciplinary actions, their admission recommendation to the Graduate Division should be pro forma.

**REQUIREMENTS FOR THE MS DEGREE WITHIN THE 5-YEAR PROGRAM**

**COURSE REQUIREMENTS**

In addition to the course requirements that all M.S. students must complete (see [http://www.ieor.berkeley.edu/AcademicPrograms/Grad/index.htm](http://www.ieor.berkeley.edu/AcademicPrograms/Grad/index.htm) for details), each student must complete three courses in his or her area of concentration. Applicants will find it helpful to consider the following areas of concentration when preparing their course of study plan.

Potential IEOR courses in each area are listed below. Students should consult the Head Graduate Advisor for potential courses in other departments.

**Operations Research**
IEOR 261, 262B, 263B, 264, 266, 267, 268, 269

**Production, Logistics and Service Operations**
IEOR 215, 250, 251, 253, 254

**Financial Engineering**
IEOR 215, 221, 290A, 290R

**5.2 MASTER OF SCIENCE DEGREE IN IEOR**

Master of Science Degree, Plan II (Comprehensive Examination or Project):
Students are required to complete 24 semester units of coursework, 12 units of which must be graduate courses in the major taken for a letter grade. IEOR298 units do not count towards this requirement.
All students are required to take at least one course from each of the following groups:

   *Students may take EECS 227A as an alternative to 262A

Students must also register for and attend the department’s Monday seminar for at least one unit in one semester. In addition, the student must pass a comprehensive examination, complete a capstone project, or write a thesis. The comprehensive exam is generally offered towards the end of every semester. Students opting to write a thesis must complete 20 units of work (excluding the thesis).

**Master of Science Tracks:**
A Master of Science student who wishes to specialize in a sub-area of the discipline may include one or more of the following tracks in his or her program. Students are not required to choose a track, but may instead, customize their selections. All Master of Science students, whether they choose a track or a customized program, must complete the requirements of the Master of Science degree listed above. Current tracks are listed below. They are revised periodically as course offerings change.

**Operations Research Track**
- IEOR 262A
- IEOR 263A
- 2 of: IEOR 221, 261, 262B, 263B, 264, 266, 267, 268, 269

**Production and Service Operations Track**
- Two of the following: IEOR 250, IEOR 251, IEOR 254
- One of the following: IEOR 150, 151, 153 *
- One of IEOR 130, 131 or 165, or another course from the preceding category. *
- *Students may substitute another related course if they have prior equivalent coursework.

**Simulation and Decision Technology Track**
- IEOR115 or IEOR215
- IEOR261 or IEOR131
- 2 of: IEOR166, 262A, BA147, 148

**PLAN II CAPSTONE**

Oral comprehensive exam or master’s project (a project report and oral examination by a committee of two faculty members).
Chapter 6. MEng (The Professional Master of Engineering Degree)

**Normative Time**
9 months or 2 semesters

**Minimum Number of Units to Complete Degree**
25 Semester Units

**Minimum Number of IEOR Units**
12 Semester Units
(must be in 200 series and letter-graded)

All students are required to take the new *M. Eng. Core Courses*: IEOR 240 and IEOR 241.

Students must take two additional graduate IEOR courses. For guidance, we propose the following concentrations.

**Decision Analytics** – Provides students with a broad understanding of cutting-edge approaches to quantitative analysis and managerial decision-making applicable across a wide range of industries.

*Course Requirements:* IEOR 240, IEOR 241, and any two of IEOR 220, IEOR 231, IEOR 250, IEOR 251, IEOR 252, IEOR 253, IEOR 254

**Risk Management & Finance** – Prepares students for careers in finance, energy, and other industries where risk management is critical.

*Course Requirements:* IEOR 240, IEOR 241, IEOR 221 and one of IEOR 222 or IEOR 231

**Simulation & Modeling** – Prepares students for careers as analysts focusing on production and distribution systems, service systems, product or process design, or marketing in a wide range of industries.

*Course Requirements:* IEOR 240, IEOR 241, IEOR 231 and one of IEOR 250, IEOR 251, IEOR 252, IEOR 253, or IEOR 220

See the IEOR web site for tentative schedule of classes.

**CORE LEADERSHIP CURRICULUM UNITS**

Students must enroll in 8 Semester Units (must be in 200 series). These must consist of:

- **2 Semester Units** — E291: Capstone Integration (taken for a letter grade)
- **3 Semester Units** — E271: Engineering Leadership I (taken for a letter grade)
- **3 Semester Units** — E272: Engineering Leadership II (taken for a letter grade)

**OPTIONAL** — Innovation Lecture Series (taken S/U)
CAPSTONE PROJECT UNITS (E296M A-B)

Students must enroll in 5 Semester Units of 296M A-B (letter graded), which can be counted towards the 25 unit total requirement. The semester enrollment restrictions for these courses are as follows:

2 Semester Units - Fall
3 Semester Units – Spring

Students are required to complete a capstone project. The project enables the student to integrate the core leadership curriculum with the concentration and gain hands-on industry experience.

MINIMUM GRADE POINT AVERAGES (GPAS)

All students are required to have a minimum overall Grade Point Average of 3.0.

MINIMUM UNITS YOU ARE REQUIRED IN ORDER TO BE REGISTERED EACH SEMESTER

Full time graduate students must enroll in at least 12 Semester units during the Fall and 13 Semester units during the Spring.

ADVANCEMENT TO CANDIDACY

Students should apply for Advancement to Candidacy at the beginning of their second semester. The form can be found on the department website.

ORAL PRESENTATION AND REPORT

An oral presentation and a written report of the capstone project are required by the end of the Spring Semester. The audience at the oral presentation can consist of the student’s IEOR Advisor, instructor(s), peers and industry partners.

Two committee members are needed for the report:

Your IEOR Advisor
IEOR or Outside Professor

Both members must also be members of the Berkeley Division of the Academic Senate.
Chapter 7. PhD (Doctorate Degree)

The Department of Industrial Engineering and Operations Research offers two doctoral degrees: Ph.D. in IEOR, and D.Eng. in I.E. There is some difference between the two degrees in the nature of an acceptable dissertation, but all other degree requirements are the same. For students specializing in a particular area and/or working with particular faculty members, acceptable programs may be more tightly structured, as determined by the faculty involved. Course numbers are for courses within this Department; consult the General Catalogue for course descriptions. Excluded here are University requirements regarding registration and residence.

7.1 Course Requirements

Doctoral students are required to complete at least nine IEOR graduate courses prior to graduation. The set of courses must include:

- IEOR262A (Mathematical Programming I),
- IEOR263A (Applied Stochastic Processes I),
- at least one additional course from Group A,
- at least one additional course from Group B,
- at least two courses from Group C,
- IEOR231 (Introduction to Data Modeling, Statistics, and System Simulation). IEOR231 must be taken before the end of the second year.
- IEOR298-1 (Departmental Seminar) at least one semester in the first year. Also, students must attend at least half of the departmental seminar (298-1) presentations in every subsequent semester.

**Group A - Optimization**
- 262B (Mathematical Programming II)
- 264 (Computational Optimization)
- 266 (Network Flows and Graphs)
- 269 (Integer Programming and Combinatorial Optimization)

**Group B – Stochastic Modeling**
- 263B (Applied Stochastic Processes II)
- 267 (Queueing Theory)
- 268 (Applied Dynamic Programming)
- 261 (Experimenting with Simulated Systems)

**Group C – Modeling and Applied Operations Research**
- 215 (Analysis and Design of Databases)
- 220 (Economics and Dynamics of Production)
- 250 (Introduction to Production and Logistics Models)
- 251 (Facilities Design and Logistics)
- 253 (Supply Chain Operations and Management)
- 268 (Applied Dynamic Programming)
- 254 (Production and Inventory Systems)
Advanced undergraduate courses in Linear Algebra and Real Analysis (equivalent to Math 110 and Math 104) are prerequisites for the PhD program. Students who have not taken these courses prior to entering the graduate program are required to do so during their first year.

Students in the doctoral program are strongly encouraged to take eight courses (four per semester) their first year in the graduate program, in addition to the department seminar.

7.2 The Doctoral Entrance Examination

Every doctoral student is required to take the Doctoral Entrance Examination. Students entering without an MS degree are required to complete all MS degree requirements, and may do so by completing the MS course requirements and passing the Doctoral Entrance Exam.

The Entrance Examination consists of three parts:

(1) An optimization exam: Students are required to take 262A and at least one other course in Group A to be prepared for this exam.

(2) A stochastic processes exam: Students are required to take 263A and at least one other course in Group B to be prepared for this exam.

(3) An exam on modeling and applied operations research: Students are required to take two courses in Group C to be prepared for this exam.

All required courses for the Doctoral Entrance Examination must be taken for a letter grade.

The Entrance Examination will be offered near the end of every spring semester, approximately two weeks before finals. Passing the Entrance Examination is based on both superior performances on all parts of the exam, and on previous coursework. Students are required to take the entire exam at the same time. In order to take the exam, students are expected to perform sufficiently well in their first year courses. During the middle of the spring semester, a faculty committee will review the performance of first year doctoral students, and students who have performed sufficiently well on their coursework so that a superior performance on all parts of the exam will lead to passing will be permitted to take the exam.

All students who would like to be considered for the doctoral program are expected to take this exam no later than their third semester in this Department. In particular, students who
enter in the fall are expected to take the exam at the end of the spring semester in the same academic year.

7.3 Program of Study: Major and Minor Requirements

Some students have specific research interests and goals when they enter a doctoral program; for others, these interests develop in the process of taking courses and preparing for the Entrance Examination. In either case, it is imperative that students begin their research as soon as possible after completing their Entrance Examination. One of the important initial steps in this process is finding a faculty member who will agree to supervise the dissertation (Thesis Adviser). Every student is required to complete at least one unit of independent study with a faculty member each semester after passing the Entrance Examination until finding a Thesis Adviser.

A minimum of nine graduate courses are required in the major, including those taken prior to the Entrance Examination. Usually, these are courses taken in this Department, but to a very limited extent, courses taken in other departments or at other institutions may be counted as part of this requirement. These courses should provide depth in the student’s probable research area.

In addition, course work is required in two minor areas. This is a College of Engineering requirement, which specifies that "two or three courses (of advanced undergraduate or graduate level) typically represent a minimum program for a minor." This loose wording reflects the diverse needs of the College. In this Department, each minor must consist of six units at the graduate level, at least three of which must be taken for a letter grade. A minor may serve either to strengthen theoretical foundations (e.g., measure-theoretic probability theory), or as an area of application (e.g., transportation). At most one course of one minor can be a course from within this Department, as long as this course is distinct from the major. Both minors should be selected to strengthen the student’s background in his or her research area, and subject to the approval of the Head Graduate Advisor. Graduate courses at other institutions may make up part of a minor if the subject matter is appropriate.

The Thesis Adviser, once known, should be consulted about all matters regarding the program of study.

7.4 The Qualifying Examination

The Qualifying Examination is a written and oral examination administered by four faculty members. Three of these faculties members are required to be IEOR faculty members and the fourth committee member must be from outside the department, and have expertise in one of the student’s minor areas of study. Students are expected to take the Qualifying Exam within three semesters after completing the Doctoral Entrance Exam. Priority in department funding (especially NRTs) will be given to students who have passed their Doctoral Entrance Exams and are in their 3rd, 4th, and 5th semesters. Although it is necessary for a student to identify a potential research area and some potential dissertation topics in order to complete this exam,
it is not necessary for the student to do a substantial amount of research in the area of the examination.

The student is required to have completed or be currently enrolled in courses that will complete at least one of the two minors at the time of the Qualifying Examination. At least one of the minors completed or being completed at the time of the Examination must consist entirely of courses from outside the department. In addition, at the time of the Qualifying Examination, the student is required to have a specific plan for completing the other minor within two semesters.

Prior to the exam, the student is required to identify a research area (broadly defined) in which he or she will be able to demonstrate expertise during the oral part of the examination. In addition, the student must be prepared to demonstrate expertise in one minor field. The objective of the exam is to assess the student’s ability to demonstrate knowledge in a broad research area, and to identify potential research topics within this area.

At least six weeks prior to the approximate date of the Qualifying Examination, the student needs to begin to arrange for Graduate Division approval of the exam committee. The student needs to pick up the appropriate form from the Student Affairs Officer. Once the date and the exam committee are decided upon, the student must also request a room in which the exam can be held. Meanwhile, the student should prepare a list of topics, called a syllabus, which will form the basis of the Exam. The syllabus should include topics from the three subject areas to be listed on the "Application for Qualifying Examination" form, i.e., equivalent to several courses, together with topics from one the minor areas.

At least one month before the exam date, the student must also prepare and submit the following documents to Head Graduate Advisor: a white Program of Study card that includes all major and minor courses taken or planned (whether or not they are included in the syllabus), a transcript, a list of faculty members who will serve on the exam committee, a syllabus, a preliminary draft of the technical report for the exam committee, and the student’s advisor’s signature to approve the intended date and topics. Both the Graduate Division's "Application for Qualifying Examination" form and the Program of Study card must be approved and signed by the Head Graduate Advisor.

At least two weeks prior to the exam, the student must submit his or her Qualifying Exam Report, to the qualifying exam committee. This report should be in the form of a research proposal, and should include both a substantial survey and critical evaluation of the literature in the likely area of the dissertation, and a potential research agenda in this area. If the student has completed preliminary research in this area, it is also appropriate to include a report of this research in this document. However, preliminary results are not required, and cannot make up the bulk of the document.

The Qualifying Exam document will be reviewed by the three professors who represent the major on the student’s Qualifying Examination Committee, to determine adequacy of preparation for the research area. For students who follow these guidelines and the recommendations of the Graduate Adviser and Thesis Adviser, this usually results in quick
approval. However, if preparation is judged to be inadequate, they may recommend additional course work and postponement of this Examination.

In many departments, including ours, it has been the practice for students to schedule their own Qualifying Examinations. This exam is to be scheduled for three hours, at a time when all Committee members can attend.

The oral portion of the Qualifying Examination has two parts. In the first part, the student presents a 45-minute talk based on his or her Qualifying Examination Report. The Committee will ask questions pertaining to the report and presentation at this time. During the second part of the oral examination, the committee will ask more general questions to determine the student’s level of expertise in the broadly defined research area specified by the student (and described in the syllabus). During this time, the outside committee member will also ask questions about one of the student’s minor areas.

If the student’s performance is judged to be unsatisfactory, the Committee may recommend reexamination, possibly after additional preparation has been completed. If the reasons for the unsatisfactory performance are judged to be major and fundamental, the Committee may recommend that a second attempt be denied.

7.5 Advancement to Candidacy

After passing the Qualifying Examination, the student should file an application for Advancement to Candidacy, which sets up a three-person Guidance Committee for the Dissertation. Once this is approved, the student is eligible for reduced fees. After advancing to candidacy, the student is expected to spend full time doing research on his or her dissertation, and on related teaching tasks.

7.6 Dissertation Workshops and Dissertation Defense Workshop

At least once a year after passing the qualifying examination, the student is required to hold a dissertation workshop. Each Dissertation Workshop has two primary objectives: (1) It provides the Department an opportunity to review the progress of students who have passed the Qualifying Examination, toward completion of their Doctoral Dissertation. (2) It facilitates interaction between the student and the Dissertation Committee and provides the basis for useful and consistent guidance. While the Dissertation Committee is primarily responsible for providing guidance, feedback from other faculty and from students is sought as well.

During the Workshop, the candidate is expected to present a prospective of, and results from, the dissertation research. Dissertation Advisers should advise students about the appropriate time for the Workshops. However, initiation of the Workshops is the student's responsibility. The student needs to notify the Department at least one month in advance of the desired Workshop date, and coordinate this date with the Dissertation Committee. At least two weeks prior to each Workshop, the student shall distribute to the Dissertation Committee a report called the Dissertation Prospectus. Announcement of the Workshop will be made through all the channels used to announce Departmental Seminars.
Each workshop is divided into two parts. The first part is devoted to a public presentation by the student and subsequent discussion. This part is conducted as a seminar and is open to all faculty and students. Graduate students and faculty who have research interests that relate to the Workshop are encouraged to attend; this may be their best opportunity to provide constructive feedback to the candidate. (Graduate students who have not yet reached this stage in their own program often find that participating in workshops is a valuable educational experience.) The Dissertation Committee moderates the presentation and discussion, controls the asking of questions by the audience, and calls an end to the first part of the Workshop.

In the second part of the Workshop, which immediately follows the public presentation, the Dissertation Committee and other interested faculty members will reconvene in private with the candidate for the purpose of giving more feedback and specific guidelines for continuing research. At this time, the Committee may decide that the candidate's progress is unsatisfactory. Should the Committee reach this conclusion, it will be reported in writing, with proper justification, to the candidate and the Department Chairman. The committee may require an additional workshop sooner than one year after the unsatisfactory one. Recurrent failure to present a satisfactory Prospectus Workshop may result in disqualification of the student and termination of Doctoral Candidacy.

Once the candidate has completed his or her research and completely written the thesis, a Defense Workshop must be scheduled and held. A completed copy of the thesis must be distributed to the committee at least two weeks before this final workshop. This workshop will follow the same format as other workshops. The committee will inform the candidate about any remaining problems or issues with the thesis. If the committee has serious issues with the thesis, they may require an additional defense workshop.
Chapter 8: Filing Fee

8.1 FILING FEE: GENERAL INFORMATION

The Filing Fee is a reduced fee (one-half of the University Registration fee) for doctoral students who have completed all requirements for the degree except for filing the dissertation (Plans A and B) and presenting the Final Defense (Plan A). It is also available to master's students with no requirements remaining except for filing the thesis (Plan I) or completing the final report and presentation (Plan II). The Filing Fee is not a form of registration nor is it equivalent to registration. If students wish to use university services that are supported by registration fees, they must pay those fees. Filing Fee is available for the fall and spring semesters only.

**Duration of the Filing Fee.** The Filing Fee applies for the length of the semester for which Filing Fee status has been approved, up to the last working day of the term, which is the deadline for filing a thesis or dissertation.

**Eligibility requirements for the Filing Fee.** To use the Filing Fee in a fall semester, the student must have been registered in the previous spring or summer. Summer Sessions’s enrollment must be for a minimum of three units. To use the Filing Fee in spring, the student must have been registered in the previous fall. Filing Fee status is not available for Summer Sessions. However, students are permitted to file a thesis or dissertation while registered for Summer Sessions. Please note that a letter of support from the Head Graduate Adviser must accompany all Filing Fee applications.

**How to apply for the Filing Fee.** Students must apply for the Filing Fee by the end of the first week of classes of the semester in which they intend to file. Students complete the Filing Fee Application available from the [Graduate Division Website](#). Please note that the departmental deadline is earlier than this, so please check at 4145 Etcheverry for the date you need to bring the form to 4145 Etcheverry in order to get the Head Graduate Advisor's approval. Students are billed the Filing Fee on their CARS statement. The degree cannot be awarded until the Filing Fee is paid.

**Limitations on Filing Fee status.** The Filing Fee may be used only once during a student's career. However, students who used the Filing Fee to file for a master's degree will be permitted to apply for the Filing Fee for the doctoral degree.

If a student does not complete the final degree requirements (filing the dissertation or thesis, or passing the final comprehensive exam) during the semester for which the Filing Fee is approved, the student must be readmitted and pay regular registration fees during the semester in which the requirements are completed. Readmission procedures can be found at [Section D1.9 Policies and Procedures](#).

**Filing Fee status and academic student appointments.** Students with academic appointments for which registration is required are not eligible for Filing Fee status. To hold an appointment,
students must be appropriately registered and enrolled in at least 12 units unless advanced to doctoral candidacy.

**Filing Fee status and international students.** To avoid visa problems with the U.S. Immigration and Customs Enforcement, international students must contact the Berkeley International Office well before the beginning of the semester during which they plan to use the Filing Fee. Filing fee status can satisfy the SEVIS requirement for international students only if the student has obtained the signature of the BIO student adviser located at 2299 Piedmont Avenue, International House.

**Health insurance for students on Filing Fee.** U.S. resident students may purchase Student Health Insurance Plan (SHIP) coverage for the semester they are on approved filing fee status if they have not already purchased SHIP during a period of withdrawal beyond one semester. UHS allows purchase of SHIP if a student is in a non-registered status for two semesters only, which pertains to both filing fee and withdrawal. For eligibility information and enrollment details, refer to the UHS website.

**8.1.1 Summarization of Key Issues:**
- Filing may be used once for MS and once for PhD
- Students must be Advanced to Candidacy for either MS or PhD Degree before eligible
- Students may not take classes
- Students lose all UC Berkeley Building Access
- Students must pay for GSHIP, RSF, & library card, if they want to use these resources
- Students may not hold GSR or GSI appointment, but can hold a Reader appointment
- While on Filing Fee, students may not take the Prelim Exam or Qualifying Exam
- Students may graduate while on filing fee
- Costs one-half of the University Registration Fee

*This information was taken from The Graduate Guide to Policy, D2: http://grad.berkeley.edu/policies/guides/d2-filing-fee/.*

**8.2 HOW TO APPLY FOR FILING FEE**

1. Apply for Filing Fee by the departmental deadline: [http://www.grad.berkeley.edu/policies/pdf/FilingFee.pdf](http://www.grad.berkeley.edu/policies/pdf/FilingFee.pdf)
2. Complete the form in its entirety (minus the Head Graduate Adviser's Signature - that's our Head Graduate Advisor and the IEOR Staff will obtain this signature on your behalf).
3. Make a copy of the form.
4. Bring the completed form to 4185 Etcheverry.
5. The IEOR Staff will send the application to Graduate Division on your behalf.

If Filing Fee is approved

- you will be charged one-half of the University Registration fee through CARS
- you will be able to see your status on Bear Facts
- The degree cannot be awarded until the Filing Fee is paid.

8.3 READMISSION PROCEDURE

To apply for readmission after being on filing fee status, a student should submit a Readmission Application and a Statement of Legal Residence (SLR) for the Head Graduate Advisor's approval and pay the application fee. Current fees are listed on the application form. The readmission deadline is April 15th for the following Fall Semester and November 1st for the following Spring Semester.

It is important for students to note that our department is not obliged to readmit a student who has withdrawn for any reason. Readmission is recommended at the judgment of the department, which assesses the strength of the student's academic record in weighing its approval. Although a student may have left having made satisfactory academic progress, some departments weigh petitions for readmission against their pool of new applicants for admission, who may be stronger candidates.
Chapter 9. California Residency

For tuition purposes, US citizens or permanent residents who are not residents of California may be able to establish California residency to be effective in one year. Please note that International students cannot become residents unless they become Permanent Residents or U.S. Citizens.

To become a California resident for tuition purposes you must show that you have lived in California and established the intent to make California your permanent home for more than one (1) year before the first day of classes in the semester for which you seek resident status. You must begin to document your presence in the state as soon as you arrive. Be sure to:

1. Obtain a driver's license or a California Identification Card (if you have never had an out-of-state driver's license) within ten (10) days of settling in California. You must have a valid California operator's license to drive a car, motorcycle or moped in the state. You can obtain a license at any of the local Department of Motor Vehicles (DMV) offices in nearby Oakland (5300 Claremont Ave.), (800)-777-0133, El Cerrito (6400 Manila Ave., (510) 235-9171. If you have a driver's license from another state you will be required to pass a written test of California vehicle laws, pass an eye exam and provide a certified copy of your birth certificate. A driving test is required if you do not have a valid license from another state or if you plan to operate a motorcycle. The DMV handbook is located at the following web site: http://www.dmv.ca.gov/pubs/pubs.htm.

2. Register your vehicle in the state of California within 20 days of settling in California. Vehicles are registered at the local DMV office.

3. Open a local bank account as soon as possible and close all non-California bank accounts. Retain official documents showing the opening and closing of your accounts.

4. Register to vote and vote in California elections. Voter registration forms are available from the Graduate Division and at voter registration tables on Sproul Plaza or any fire station, public library or DMV office. The form is postage-paid - just fill it out and mail. You should receive verification from the County Registrar within four weeks of submitting your application. If you do not receive confirmation of your voter's registration you should immediately contact your County's Registrar of Voters.

5. Use your California address as your permanent address. Do not list your parents or any other out-of-state address as a permanent address on any University form or other legal documents.

6. Remain in California when school is not in session. Some travel allotted for purposes of research, fieldwork or a fellowship may not necessarily jeopardize your resident
classification if the absence is part of a regular requirement for your degree program or fellowship. Contact the Residence Affairs Unit at [http://registrar.berkeley.edu/current_students/contact_residency.html](http://registrar.berkeley.edu/current_students/contact_residency.html) for more information regarding any absences outside California.

7. Financial independence is another factor considered when determining your eligibility for classification as a California resident for tuition purposes. For fall classification, you are presumed by law to be financial independent if you are at least 24 years of age by December 31. If you will not be 24 years of age by this date, then you must show that you are not claimed as an income tax deduction by your parents or any other individual for the next tax year.

8. Financial independence is not a factor in determining residence for graduate students who are employed as Graduate Student Instructors or Graduate Student Researchers for a minimum of 49% time or awarded the equivalent in University-administered funds for the term in which resident classification is sought.

9. Your physical presence in California must be demonstrated during nonacademic periods. You should keep all dated material that proves your presence in the state, including airline tickets; paycheck stubs from work; credit card receipts; and bank and credit card statements showing ATM, credit card and debit card activity. Students with joint accounts should consult with the Residence Affairs Unit. The credit card receipts need not be signature copies. The foregoing items are primary indicators of physical presence and will be weighted heavily in determining your status. Items such as copies of lease agreements, rent or utility checks etc., are much lesser indicators of physical presence and are not acceptable alone.

10. Your intent will be questioned if you are absent from California for more than 21 total days during the period in which you are establishing resident status for tuition purposes. Graduate students who are planning to travel outside California for more than 21 total days during nonacademic periods should visit the Residency Affairs Unit at 120 Sproul Hall to seek advising prior to filing for classification and leaving the state.

**Note:** This summary is not a complete explanation of the law regarding California residence. Changes may be made in the residence requirements between this publication date and the relevant residence determination date.

For more details regarding Residency, please see [http://registrar.berkeley.edu/current_students/residency.html](http://registrar.berkeley.edu/current_students/residency.html).
Chapter 10. Financial Support

Numerous programs provide ways you can cut the cost of graduate school. Fellowships, loans, Graduate Student Instructorships, Research Assistantships, Readerships, and even subsidized housing and childcare each can help a great deal. Some programs are merit-based and administered through the Graduate Division Fellowship Office. Others are need-based and administered through the Financial Aid Office. The academic departments also administer additional funding sources. By tapping these and other resources you can plan a program of financial support.

If you are not a resident of California, you will need to know the current requirements on establishing legal residency. While all out-of-state students are required to have three years of financial independence in California before being eligible to reclassify for lower registration fees. In most cases graduate students can qualify for legal residency by their second year of graduate school, thereby significantly reducing their fees.

International students and students who are not US citizens or permanent residents cannot establish California residency and should expect to pay nonresident tuition each semester of their graduate study. Doctoral candidates will be eligible for a NRT waiver for up to three (3) years after Advancement to Candidacy.

10.2.1 Graduate Student Instructor Appointments

GSIs are appointed to various courses based upon class enrollment. Appointments which are made at the 25%-50% time (10-20 hours per week) will pay your University Registration Fee, Educational Fee and Health Insurance Fee as well as provide a monthly stipend.

GSIs are responsible for various aspects of course instruction. GSIs hold regular office hours and may also be asked to proctor exams, make solution sets and grade homework problems. Larger classes have Readers who help the GSI with grading homework.

GSIs believe that being a teaching assistant is great preparation for the Qualifying Examination as both situations require good English skills and think accurately and spontaneously.

GSIs are paid automatically each month after their appoint has been submitted to the hiring unit. The current GSI Salary Scale can be found here.

To apply for a GSI or reader position please visit https://willow.coe.berkeley.edu/PHP/psiappp/menu.php?dept=ieor
10.2.2 Reader Appointments

Appointees to the Reader title are employed to render diverse services as course assistants, which will normally include the grading of student papers and examinations. Subject to assignment by the department, duties might also include attendance at lectures, office hours, consultation with the instructor, and other course-related duties. Readers may not perform teaching duties.

To apply for a reader or GSI position please visit https://willow.coe.berkeley.edu/PHP/gsiapp/menu.php?dept=ieor

10.2.3 GSI/Reader Appointment Paperwork

Hiring paperwork for those who have received official GSI/Reader position offers from the IEOR Department are processed by the Human Resources Team in ERSO. Students being offered the position will receive instructions as part of the offer letter.

10.3 Graduate Student Researcher Appointments

GSRs are supported to do research work that fulfills part of their degree requirements for the MS and PhD degrees.

The duties of a GSR vary according to who your research advisor is and the chosen field of study. Some research advisors will give complete instructions with lots of detail about what they want. Others may give a general direction to "work on this" with no other instruction unless you ask. In some cases, students may spend their first year developing presentations from coursework or from research literature and will only begin hands-on work after they have gained considerable background. In experimental work, GSRs may become more involved in the research projects sooner.

Most GSRs are paid from faculty grants. GSRs who work at least 45% for the entire semester are entitled to have their GSHIP (Graduate Student Health Insurance Plan) paid as well as Fees and if applicable the Non-resident Tuition in full by this GSR appointment.

Effective Fall 2013, the normal salary steps for students in our department are the following:

- Entering Students: Step I
- Students who have passed the Preliminary Exam: Step II
- Student who passed the Qualifying Exam: Step III

The current GSR Salary Scale can be found at http://apo.berkeley.edu/scales13_14.html

If you are a GSR in the IEOR Department, most employment forms are processed through the Human Resources Team in ERSO. Your hiring faculty will direct you to the hiring unit where you will complete these hiring forms.
For more information about GSR, GSI and Reader appointments please see [What You Need to Know About Being a GSI, GSR, Reader, or Tutor](#).
Chapter 11. Graduate Appeals Procedure

11.1 Purpose and Scope

The purpose of this procedure is to afford graduate students in the Department of IEOR an opportunity to resolve conflicts, complaints or issues regarding dismissal from graduate standing, placement on probationary status, denial of re-admission, and other administrative or academic decisions that terminate or otherwise impede progress toward academic or professional degree goals.

The scope of this procedure is limited to the matters listed above and excludes complaints regarding denial of admission, student records, grades in courses of instruction, student employment, student discipline and auxiliary student services such as housing, child care, etc. This procedure may not be used for complaints regarding actions based solely on faculty evaluation of the academic qualify of a student’s performance, or evaluation of a student’s appropriate academic progress unless the complaint alleges that the actions may have been influenced by non-academic criteria.

11.2 Informal Resolution Procedures

A student may pursue informal resolution of a complaint by scheduling a meeting with the Head Graduate Advisor to discuss the issue and explore possible avenues of resolution. If informal resolution is pursued, it must be initiated and should be completed within 30 days. At any point in this process, if a satisfactory solution cannot be reached, the student may initiate formal resolution by putting the complaint in writing.

11.3 Formal Resolution Procedures

A written complaint must include information regarding the action being complained of and the date it occurred, the grounds upon which the appeal is based and the relief requested. The complaint must be based on one or more of the following grounds:

1. Procedural error or violation of official policy by the academic or administrative personnel.
2. Judgments improperly based upon non-academic criteria including, but not limited to, discrimination or harassment on the basis of sex, race, national origin, color, age, religion, sexual orientation or disability.
3. Specific mitigating circumstances beyond the student's control not properly taken into account in a decision affecting the student's academic program.

A written complaint must be received by the Head Graduate Advisor within thirty (30) days from the time the student knew or could reasonably be expected to have known of the action that is the subject of the complaint. The department should complete its investigation and notify the student of the outcome of the complaint within sixty (60) days of the date received.
The time frame for filing a written complaint may be extended by the department if the student has been involved in continuing efforts toward informal resolution, and the informal resolution process was initiated within thirty (30) days of the time the student know or could reasonably be expected to have known of the action that is the subject of the complaint. All time frames referred to in the procedure refer to calendar days. Summer and inter-semester recesses are not included within these time frames.

Upon receipt of a written complaint, the Head Graduate Advisor will assign an individual to investigate the complaint and make a recommendation to the Head Graduate Advisor regarding the outcome of the complaint. Generally, the investigation will include an interview with the complainant, review of any relevant written materials, and an effort to obtain information from available witnesses (e.g., interviews or written statements or documents). The Head Graduate Advisor will notify the student in writing of the outcome of the complaint. A written complaint under the procedure satisfies the requirement of a unit level resolution process pursuant to the Graduate Appeals Procedure.

11.4 Appeal to the Graduate Division

If the student is not satisfied with the outcome of the complaint under the department's procedure, he or she may bring the complaint to the Formal Appeal Procedure of the Graduate Appeals Procedure. The formal appeal must be received in the Office of the Dean of the Graduate Division, 424 Sproul Hall within fifteen (15) days of the date of the written notification for the result of the unit level procedure. Copies of the Graduate Appeals Procedures may be obtained from the Office of the Dean of the Graduate Division.

If the complaint is about an action taken by the Head Graduate Advisor, the complainant may elect to take the complaint directly to the Department Chair. If the student is still not satisfied with the outcome, the student may take the complaint to the Formal Appeal State of the Graduate Appeals Procedure. Such a complaint must be received by the Office of the Dean of the Graduate Division.

11.5 Complaints Involving Discrimination

If the complaint involves allegations of discrimination or harassment on the basis of sex, race, national origin, color, age, religion, sexual orientation or disability, the department should consult the appropriate campus compliance officers prior to commencing informal or formal resolution procedures. The names, telephone numbers and campus addresses of these individuals are listed in various campus publications and may be obtained from the Office of the Dean of the Graduate Division at (510) 642-5472 or the Academic Compliance Office at (510) 642-2795.
Chapter 12. Deadlines

12.1 GRADUATE DIVISION DEADLINES

Graduate Division Deadlines can be found at: http://grad.berkeley.edu/policies/degree_filing_deadlines.shtml. Please note that most forms associated with these deadlines must be provided to the IEOR Student Services Office in advance for processing and submitting to the Graduate Division.

12.2 GRADUATE FELLOWSHIP DEADLINES

Graduate Division Fellowship Deadlines can be found at: http://grad.berkeley.edu/financial/deadlines.shtml.
Chapter 13. Department and Campus Services

13.1 Department Services

13.1.1 Copy Services

Students may use the copy machine (located in room 4145 Etcheverry) only for course support or research purposes. Please request your account number from our 4141 Etcheverry office.

13.1.2 Student Mail

The department of IEOR provides open mail boxes to all graduate students. The boxes are on the 4th floor of Etcheverry Hall next to room 4145 office. Please pick up your mail on a regular basis. The drawers are cleared out at the end of each semester and any mail in them is discarded. All mail must include the mail code 1777 after the zip code.

13.2 Campus Services

13.2.1 Disabled Student Program

The campus offers many different resources for graduate students with disabilities. The purpose of an academic accommodation is to offer the graduate student an equal opportunity to meet the department’s academic standards and requirements.

- The Disabled Student Program at http://dsp.berkeley.edu or call (510) 642-0518 serves graduate students with disabilities (who complete the process for establishing eligibility) by authorizing academic accommodations.
- The Disabled Access Services at http://access.berkeley.edu or call (510) 643-6473 or 643-6456 can usually assist with accommodations to extra-curricular events.
- The Campus Access Guide at http://acads.chance.berkeley.edu/CAG/ is the office where most physical access issues are addressed.
- Disability Resolution Officer at http://acads.chance.berkeley.edu/ada.shtml or call (510) 642-2795 will assist with problems accommodations reported on campus

13.2.2 Photo Identification

All students must have their photo taken for your student ID card. The Cal Photo ID card is the official student identification. It is important that you obtain your card as soon as possible. Your ID card will be created on the spot using a computerized photo identification system. To obtain your card you need to bring your TeleBears letter or Letter of Acceptance, Student Identification Number and a valid photo ID (driver's license, state ID card or passport).

Lost or damaged cards may be replaced at the Cal Photo ID Office. Please note that there may be a charge for the replacement.
The Cal Photo ID Office is located at 180 Cesar Chavez Center in Lower Sproul Plaza. The office is open Monday through Friday 9 am to 5 pm. For additional information please check the website: [http://services.housing.berkeley.edu/c1c/static/index.htm](http://services.housing.berkeley.edu/c1c/static/index.htm).

### 13.2.3 Library

Your Cal Photo ID serves as your library card at both the Doe and Moffitt libraries as well as subject specialty libraries. It also allows you to use the library of any other campus in the UC system, as well as interlibrary borrowing ([http://www.lib.berkeley.edu/ILS/ils.html](http://www.lib.berkeley.edu/ILS/ils.html)). You are eligible for free borrowing privileges from the Stanford University Libraries and the University of Texas, Austin through the Research Library Cooperative Program (RLCP). For more information, visit the Library Service Desk at Level A, Gardner Stacks.

When you arrive on campus, a good way to get acquainted with the vast resources of the Library is to enroll in drop-in library research, Internet and other workshops (including online catalog and article database orientation) or a faculty seminar offered by the Teaching Library, (510) 643-9959. For more information about the workshops, please see [http://www.lib.berkeley.edu/Help/index.html](http://www.lib.berkeley.edu/Help/index.html).

If you are a Graduate Student Instructor you can arrange for a library resources session for your class by calling the Teaching Library. If a subject specialty library serves your discipline, telephone that library for specific tour information. A listing of subject specialty libraries is available on the Library web site [http://www.lib.berkeley.edu/](http://www.lib.berkeley.edu/).

**Kresge Library (i.e. The Engineering Library)**

The services and collection of the Kresge Engineering Library support the research and teaching programs of the College of Engineering. They are located in 110 Bechtel Engineering Center.

The collection includes more than a quarter of a million volumes in all areas of engineering, except for chemical engineering. The library collects at the research level for our core priorities: bioengineering, civil engineering, computer science, electrical engineering, environmental engineering, industrial engineering, materials science and engineering, mechanical engineering, offshore engineering, operations research, and nuclear engineering.

The Engineering Library subscribes to more than 1,200 print and 2,400 electronic journals. The library provides access to all the major engineering article databases, as well as a substantial number of online reference materials and monographs. The library also houses a large collection of technical reports of federally sponsored research, particularly reports from NASA, DOE, and the EPA.

For more information, services and to learn how to use to library, please visit their website at [http://www.lib.berkeley.edu/ENG1/](http://www.lib.berkeley.edu/ENG1/).
13.2.4 Sports and Exercise

You will find just about everything you need to stay in shape at the campus Recreational Sports Facility (RSF): swimming pool, racquetball/handball courts, weight room, cardiovascular machines, basketball, volleyball and badminton courts, fitness classes and more. Once you have your Cal Photo ID hyou can use the RSF fee of charge. CalAerobics, CalFIT classes and one-on-one personal training are available at special student rates. Spouses of UC Berkeley graduate students can buy a pass to the RSF at a special rate. For more information call (510) 7642-7796 or at the web site http://recsports.berkeley.edu/index.aspx.

13.2.5 Campus Safety Services

The campus provides a number of Safety Services for both Students and Staff on campus such as BearWALK, Owl Service and WarnME. For details and guidelines, please see the UC Police’s Site on Safety.

http://police.berkeley.edu/safetyinfo/

13.2.6 Housing and Transportation Office

For information about Student Housing Options, please see the UC Berkeley Residential and Student Services Programs' website.

http://www.housing.berkeley.edu/

13.2.7 Parking and Transportation Office

Parking for students near campus is severely limited and on the street parking in the surrounding area is restricted to 2 (two) hours for nonresidents of the area. The best plan is to walk, bike or use public transportation.

Bike racks outside most buildings make bicycling to campus a convenient and inexpensive transportation solution. Be sure to always lock your bike securely and register it with the UC Berkeley Police Department.

For more information, please see http://pt.berkeley.edu/

13.2.8 Class Pass

Funded by a portion of every student's registration fees each semester, an incredible service is provided to students to ride free of charge on AC Transit (including the Transbay lines to San Francisco and U-Line from Fremont BART to Stanford) and BearTransit campus shuttle buses. For details please see http://pt.berkeley.edu/pay/transit/classpass.
Chapter 14. Resources

- **Center for Student Conduct & Community Standards**
  
  The Center for Student Conduct and Community Standards has an educational purpose in helping our community discuss and hold each other responsible for living up to the standards outlined in the Code of Student Conduct. We address behavior through a resolution process that reflects the rights and responsibilities of all parties involved. The Student Code of Conduct can be found here.

  [http://campuslife.berkeley.edu/conduct](http://campuslife.berkeley.edu/conduct)

- **Course Catalog for UC Berkeley**
  
  Lists courses and department information for each department on campus. The Mechanical Engineering section of the catalog can be found here.

  [http://campuslife.berkeley.edu/conduct](http://campuslife.berkeley.edu/conduct)

- **Degrees Office**
  
  The Degrees staff monitors student progress from registration to graduation. Much useful information can be found on the Degrees Office web pages, including answers to frequently asked questions, policies, procedures, and almost all of the forms and applications that you might need. After consulting staff in your department, you can drop in or schedule an appointment in the Degrees Office to discuss specific academic or personal concerns such as readmission, the qualifying exam, advancement to candidacy, filing fee, probation, and eligibility for the Dean's Normative Time Fellowship. Master's theses and doctoral dissertations are filed in this office.

  [http://grad.berkeley.edu/policies/degrees_office.shtml](http://grad.berkeley.edu/policies/degrees_office.shtml)

- **Disabled Students' Program**
  
  The Disabled Students' Program (DSP) is committed to ensuring that all students with disabilities have equal access to educational opportunities at UC Berkeley. We offer a wide range of services for students with disabilities. These services are individually designed, and based on the specific needs of each student as identified by our Disability Specialists.

  [http://dsp.berkeley.edu/](http://dsp.berkeley.edu/)
- **Division of Student Affairs**

  The mission of Student Affairs includes three strategic priorities: Access: Maintain access and affordability; provide opportunities for equity and excellence; Service: Improve and sustain cutting edge student services, making them more applicable to this generation of students; Engagement: Foster learning and leadership development, transforming students into engaged local, national, global citizens. Together these create the student experience and foster student success.

  [http://www.uga.berkeley.edu/](http://www.uga.berkeley.edu/)

- **Electronic Communications Policy**

  This page contains regulations that pertain to all electronic communications on campus, including email.

  [http://www.ucop.edu/ucophome/policies/email/email.html](http://www.ucop.edu/ucophome/policies/email/email.html)

- **ERSO (The Engineering Research Support Organization)**

  The Engineering Research Support Organization functions as a central hub, providing administration support to all research centers, departments, and affiliated ORUs in the UC Berkeley College of Engineering. ERSO focuses on providing effective and efficient research administration, which allows the faculty to focus on developing and growing the research enterprise rather than managing business services. ERSO will maintain a customer-oriented operation, with appropriate levels of faculty and staff oversight to support a culture of continuous improvement.

  [http://www.erso.berkeley.edu/](http://www.erso.berkeley.edu/)

- **Financial Aid Office**

  The Graduate and Professional Unit (GPU) of the Financial Aid and Scholarships Office (FASO) administers Federal Direct Student Loans for Berkeley graduate students as well as several smaller federal loan programs, and the Federal Work Study Program. Federal loans and work-study are limited to U.S. Citizens and permanent residents.

  [http://students.berkeley.edu/finaid/index.htm](http://students.berkeley.edu/finaid/index.htm)

- **Graduate Division's Website for Current Students**

  This contains information that you may find helpful during your graduate studies at Berkeley.

  [http://grad.berkeley.edu/current/index.shtml](http://grad.berkeley.edu/current/index.shtml)
• **Graduate Division's Student Life & Resources Page**
  
  [http://www.grad.berkeley.edu/life/resources.shtml](http://www.grad.berkeley.edu/life/resources.shtml)

• **GSI and Reader Information**
  [http://gsi.berkeley.edu/](http://gsi.berkeley.edu/)
  
  
  [http://grad.berkeley.edu/training/fee_remission/one.shtml](http://grad.berkeley.edu/training/fee_remission/one.shtml)

• **International Office**
  
  Berkeley International Office's mission is to enhance the academic experiences of international students and scholars by providing the highest levels of knowledge and expertise in advising, immigration services, advocacy, and programming to the UC Berkeley campus community.

  [http://internationaloffice.berkeley.edu/](http://internationaloffice.berkeley.edu/)

• **Labor Relations**
  
  The University of California and the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW) have agreed to a one year agreement which will be effective October 1, 2012 through September 30, 2013. The contract has been extended through October 22, 2013. This labor agreement will cover the Academic Student Employee Unit at the following campuses: Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, Santa Barbara and Santa Cruz.

  [http://hrweb.berkeley.edu/hrlabor.htm](http://hrweb.berkeley.edu/hrlabor.htm)

• **Legal Services**
  
  The Attorney for Students advises currently registered Cal students regarding their legal questions, rights, and obligations. A student legal consultation might include (but is not limited to) one of the following examples: a landlord-tenant dispute, a citation for a criminal infraction or misdemeanor, filing an action in California Small Claims Court, questions related to credit card debt and/or collection actions, issues arising from a car accident or auto insurance, or questions about family law. Please note that Student Legal Services provides counsel and guidance only, and does not represent or advocate for individual students with regard to their potential legal claims or disputes. If your situation requires legal representation, the Attorney for Students will help refer you to
appropriate resources. Student Legal Services counsel and guidance is limited to California law only.

http://campuslife.berkeley.edu/legal

- **Map of Campus**

  http://berkeley.edu/map/

- **Office of the Registrar**

  Services from the Office of the Registrar support every currently registered student at UC Berkeley as well as all faculty and staff members who interact with those students. Specifically, we are responsible for: class enrollment and registration, fee assessment, verifying graduation, diplomas, preservation of student academic records and protection of their privacy, transcripts, maintenance of the schedule of classes, reservations for over 200 classrooms on campus, residency determinations, and assistance for special populations such as veterans.

  http://registrar.berkeley.edu/

- **OMBUDS Office for Students and Postdoctoral Appointees**

  The Ombuds Office can be your first step, your last resort, or anything in between. If you wish assistance sorting through a campus-related conflict or concern, please contact us. The Ombudsperson will listen to your concerns, serve as a sounding board, discuss your options with you, and help you get a new perspective and determine the next steps to take. The office is strictly confidential and no one will know you have spoken with us unless you wish them to. The only exception to this confidentiality is where there appears to be imminent risk of serious harm or danger.

  http://students.berkeley.edu/ombuds/

- **Parents Network**

  This web site contains thousands of pages of recommendations and advice contributed by members of the Berkeley Parents Network, a parent-to-parent email network for the community of parents in the San Francisco Bay Area. Founded in 1993, the BPN is run by a group of volunteer parents in their "spare" time. We send out 10-12 email newsletters each week to 26,754 local parents. Many busy parents have taken the time to enlighten and inform us all with their suggestions, their wisdom, and their experience, archived here for all who need it. Please help yourself and use it in the spirit of sharing!

  http://parents.berkeley.edu/
• **Reader and GSI Application**

  [http://www.me.berkeley.edu/StudentAffairs/CurrentStudents/Graduate/Employment/GSIsandReaders/](http://www.me.berkeley.edu/StudentAffairs/CurrentStudents/Graduate/Employment/GSIsandReaders/)

• **Registrar Forms**

  [http://registrar.berkeley.edu/GeneralInfo/elecforms.html](http://registrar.berkeley.edu/GeneralInfo/elecforms.html)

• **RESOURCE**

  Resource is Berkeley’s official student handbook. The online edition is chock full of useful information and links to other campus services. A lot of Resource is lost when formatted for your browser. You won't see 97 neatly laid out pages filled with photos, graphics and student quotes, but you still get all the same great content.

  [http://resource.berkeley.edu/](http://resource.berkeley.edu/)

• **Schedule of Classes**

  [http://schedule.berkeley.edu/](http://schedule.berkeley.edu/)

• **Student Code of Conduct**

  [http://sa.berkeley.edu/code-of-conduct](http://sa.berkeley.edu/code-of-conduct)

  The University of California at Berkeley is a community of scholars committed to maintaining an environment that encourages personal and intellectual growth. It is a community with high standards and high expectations for those who choose to become a part of it, including established rules of conduct intended to foster behaviors that are consistent with a civil and educational setting. Members of the University community are expected to comply with all laws, University policies and campus regulations, conducting themselves in ways that support a scholarly environment. In this context, faculty are guided by The Faculty Code of Conduct, Section 015 of the Academic Personnel Manual, and students by the Berkeley Campus Code of Student Conduct, articulated here.

• **Tele-BEARS**

  Berkeley’s interactive enrollment and registration system is called Tele-BEARS (for Berkeley Enrollment And Registration System). More information and deadlines can be found at [http://registrar.berkeley.edu/StudentSystems/tbinfo.html](http://registrar.berkeley.edu/StudentSystems/tbinfo.html).
• **Tuition and Fees**

   [http://grad.berkeley.edu/admissions/cost_fees.shtml](http://grad.berkeley.edu/admissions/cost_fees.shtml)

• **University Health Services (UHS)**

   University Health Services (UHS) provides comprehensive medical, mental health and health promotion services to all Cal students and a variety of occupational health services to faculty and staff. UHS also provides services to UC staff who choose UHS as their Health Net provider, and to staff at the Lawrence Berkeley National Laboratory. Berkeley campus visiting scholars and spouses/domestic partners of Berkeley students may also use UHS on a fee-for-service basis.

   [http://uhs.berkeley.edu/](http://uhs.berkeley.edu/)
Chapter 15. Student Life

15.1 Student Groups

UC Berkeley hosts hundreds of student organizations which connect students with a stronger sense of community while providing opportunities for students to engage in organizational and leadership development. Cal's many student organizations serve as outlets for self-expression and sharing of talents. The staff of the Center for Student Leadership provide comprehensive advising and resources for all student organizations at Cal. The Center provides guidance to student organizations for recognition, organizational and leadership development, and event planning.

For a complete list of Student Groups within the College of Engineering, please see http://coe.berkeley.edu/students/current-undergraduates/student-involvement/engineering-student-societies.html.

For a list of groups campus-wide, please see UC Berkeley's Student Organization site and the Campus life and Leadership site.

http://campuslife.berkeley.edu/studentaffairs

15.2 Obtaining Your Professional Engineering License

Please see the Board for Professional Engineers and Land Surveyors site.

http://www.pels.ca.gov/

15.3 Resources of Interest

- **Office of Student Affairs**

  The Office of Student Affairs (OSA) exists to promote, encourage, and facilitate students' growth and development through their involvement in student organizations by providing program advice, support, and direction. The OSA also serves as functional advisor to the Graduate Assembly and the undergraduate student government -- The Associated Students of the University of California (ASUC). It's website is a clearing house for most student activities on campus.

  http://asuc.berkeley.edu/osa/

- **Division of Student Affairs**

  The mission of Student Affairs includes three strategic priorities: Access: Maintain access and affordability; provide opportunities for equity and excellence; Service: Improve and sustain cutting edge student services, making them more applicable to this generation of students; Engagement: Foster learning and leadership development,
transforming students into engaged local, national, global citizens. Together these create the student experience and foster student success.

http://campuslife.berkeley.edu/studentaffairs

- **UC Berkeley's Campus Life Page**
  
  http://berkeley.edu/life/

- **UC Berkeley's Entertainment and Recreation Page**
  
  http://berkeley.edu/life/ent.shtml

- **Recreational Sports Facility**
  
  Cal Recreational Sports is dedicated to enhancing the knowledge, wellness, fitness, personal skills and quality of life for students, faculty, staff, and the community. By providing facilities, programs, activities and the opportunity for cooperative and competitive play, Recreational Sports teaches life-long fitness skills, leadership, management, interpersonal skills, and helps to balance the stress of studying and working in a rigorous academic environment.

  http://recsports.berkeley.edu/

- **Campus Safety**
  
  This is UC Berkeley's Police Site for all Safety Issues on Campus.

  http://police.berkeley.edu/safetyinfo/

**Parking and Transportation**

The UC Berkeley Parking and Transportation Department provides a full range of parking and transportation services, serving a diverse community of more than 32,000 students and 19,000 faculty and staff in the City of Berkeley, at the heart of the San Francisco Bay Area. If you have a bike or a car, this is a good resource.

http://pt.berkeley.edu/

15.4 Publications of Interest

- **The Graduate**
  
  Magazine published by the Graduate Assembly.

- **Resource**

  A Reference Guide for new Berkeley students published by Student Activities and Services and distributed at Orientation.

  [http://resource.berkeley.edu/](http://resource.berkeley.edu/)
Chapter 16. Parents

16.1 Resources for Student Parents

Berkeley Parents Network

This web site contains thousands of pages of recommendations and advice contributed by members of the Berkeley Parents Network, a parent-to-parent email network for the community of parents in the San Francisco Bay Area. Founded in 1993, the BPN is run by a group of volunteer parents in their "spare" time. We send out 10-12 email newsletters each week to 28,301 local parents. Many busy parents have taken the time to enlighten and inform us all with their suggestions, their wisdom, and their experience, archived here for all who need it. Please help yourself and use it in the spirit of sharing!

http://parents.berkeley.edu/

Child Care for Student Families

http://www.housing.berkeley.edu/child/families/

Childcare Reimbursement Program

http://hrweb.berkeley.edu/labor/contracts/BX/childcare-reimbursement-program

Family Student Housing

http://www.housing.berkeley.edu/livingatcal/studentsfamilies.html

A Handbook for Student Parents


Health Insurance for Dependents of Students

http://www.uhs.berkeley.edu/students/insurance/families.shtml

MEMO: Graduate Council Student Parent Policies


Petition for Childbirth Accommodation Funding for Women Doctoral Students

http://www.grad.berkeley.edu/policies/pdf/childbirth_accommodation_form.pdf
Pregnancy Disability Leave

http://hrweb.berkeley.edu/er/leaves/pregnancy

Student Family Assistance

Learn more about campus resources that aid student families in the search for affordable housing, child care, health insurance, and more.

http://grad.berkeley.edu/financial/student_family.shtml

The Transfer, Re-entry, and Student Parent Center

The Transfer, Re-entry, and Student Parent Center (TRSP) serves a diverse population of students and is dedicated to providing programs and services in support of the academic and personal success of transfer, re-entry, and student parents. As a supportive and inclusive community, we are committed to increasing students access to and awareness of campus resources and enrichment opportunities. The center also promotes campus and community engagement and leadership development that enrich and support students' academic and professional goals.

http://studentparents.berkeley.edu/

UAW Contract (Article 17): Leaves

http://hrweb.berkeley.edu/sites/hrweb.berkeley.edu/files/attachments/ASE_LEAVES_CHART.doc

UCB Early Childhood Education Program Parent Handbook


UCB Early Childhood Education Programs

http://www.housing.berkeley.edu/child/