INTRODUCTION TO THE MAJOR

The Operations Research and Management Science (ORMS) major provides a solid foundation in the quantitative, model building, and problem-solving skills of operations research and management science. The major is very math intensive and is appropriate for students who enjoy and are good at mathematics, computers, and solving practical, multidisciplinary problems.

The ORMS major is designed for students in the College of Letters & Science and is administered by the Department of Industrial Engineering and Operations Research (IEOR) in the College of Engineering. The department also offers a major and minor in IEOR, as well as a combined Bachelor's-Master's program.

ADMISSION TO THE MAJOR

To be considered for admission to the ORMS major, students should have a minimum 3.2 overall GPA in the prerequisite courses. The major is impacted and applications are submitted by invitation only. Visit ieor.berkeley.edu/undergraduate-resources/orms for more information.

We recommend students apply during the semester that they are completing their final prerequisite courses or prior to the accumulation of 80 units (not including high school units). For most students, this is typically at the end of their sophomore year. For transfer students, you must apply at the end of your first semester at UC Berkeley.

“...The IEOR community is vibrant, bright and supportive, which allowed me to navigate through my undergraduate career and find my passion.”

– Zilan (Eleanor) Yuan, ORMS Class of 2020

ADVISORY

ORMS students are assigned to faculty advisors in the IEOR department. Before the enrollment period for each semester, students meet with their faculty advisors to discuss their tentative schedule of classes.

The Undergraduate Advisor for ORMS is also available for advising on academic matters, including academic difficulty, change of major/double major/simultaneous degrees, withdrawal/readmission, degree completion, education abroad, academic progress, and petitions and exceptions. Contact the Undergraduate Advisor at ieor-student-services@berkeley.edu.

HOW TO USE THIS MAP

Use this map to help plan and guide your experience at UC Berkeley, including academic, co-curricular, and discovery opportunities. Everyone’s Berkeley experience is different and activities in this map are suggestions. Always consult with your advisors whenever possible for new opportunities and updates.

Visit vcue.berkeley.edu/majormaps for the latest version of this major map.

CONNECT WITH US

Cal Day
Come to UC Berkeley’s annual Open House in April for information sessions, campus tours, special talks, and more.

Golden Bear Orientation
Join your peers in the campus-wide UC Berkeley orientation program for all new students.

Events
Attend department events with students, faculty, and staff. Visit ieor.berkeley.edu for news and updates.

AMPLIFY YOUR MAJOR

• Get involved in a student organization such as the Engineering and Project Management Society and Institute of Industrial Systems Engineers (IISE).
• Take a Challenge Lab course such as IEO 185.
• Enrich your studies with the Sutardja Certificate in Entrepreneurship and Technology.
• Participate in the ORMS honors program by completing an original research project or graduate-level coursework in ORMS.
OPERATIONS RESEARCH AND MANAGEMENT SCIENCE
Bachelor of Arts

FIRST YEAR

- Meet with your major and college advisor to discuss your academic plans.
- Review major and college requirements.
- Talk to the ORMS advisor about department programs and research opportunities.
- Enroll in UCIS 98: College Success in L&S.
- Consider doing an externship.
- Consider a gap year.
- Consider a summer minor.
- Complete lower division prerequisites and apply to the major.
- Plan now for a certificate, course thread, or summer minor.
- Review major guidelines for study abroad.
- Complete any “bucket list” courses and remaining major, college, and campus requirements.
- If eligible, take part in the ORMS honors program.
- Consider applying for the IEOR-ORMS Masters Program.
- Consider a public service career.
- Consider a master’s degree.
- Consider earning the Sutardja Certificate in Data Science.
- Teach your own DeCal course.
- Teach for America.
- Teach your own CalTeach course.
- Teach your own American Cultures Engaged Scholarship course.
- Teach your own Project Management course.
- Teach your own International Studies course.
- Teach your own Systems Analysis course.
- Teach your own Business Discourse course.
- Teach your own Global Leadership course.
- Teach your own Cal in the Capital course.
- Teach your own Public Service Leaders program.
- Teach your own John Gardener Fellowship.
- Teach your own Community Development course.
- Teach your own Peace Corps.
- Teach your own Teach for America.
- Graduate Programs

Connect and build community

- Get involved in a Berkeley Connect and L&S Mentors Program.
- Find study groups, tutoring, and academic support at the Student Learning Center.
- Enroll in UGIS 98: College Success in L&S.
- Take advantage of STEM community and resources from programs like Cal HERDS.
- Discover new interests in a Freshman Seminar, L&S 1, or a student-run DeCal course.
- Attend the Undergraduate Research and Scholarships Fair in October.
- Learn how to get involved in research on campus with Undergraduate Laboratory at Berkeley.
- Broaden your perspective by attending Newton Series or View from the Top Lectures.
- Enroll in a Sophomore Seminar, Big Ideas Course or Discovery Course.
- Learn about research taking place within the IEOR department.
- Assist faculty and graduate students in their research through URAP and SURF-SMART.
- Enjoy teaching! Explore a career in education while gaining teaching skills with CaTeach.
- Apply for a research opportunity if you haven’t done so already.
- Explore entrepreneurship through the Sutardja Center and Skydeck.
- Consider earning the Sutardja Certificate in Entrepreneurship and Technology.
- Experience life at another UC or college on a visit or exchange program.
- Study and intern in Washington D.C. with UCDC or Cal in the Capital.
- Consider a Berkeley Global Internship in the United States or abroad.
- Hone your leadership skills with the Peter E. Haas Public Service Leaders program.
- Explore service opportunities after graduation, such as Peace Corps, Teach for America, or U.S. Department of State.
- Utilize job search tools from the Career Center.
- Browse job listings on the department website.
- Meet employers at Employer Info Sessions and On-Campus Recruiting.
- Apply to jobs, graduate school, and other opportunities.

WHAT CAN I DO WITH MY MAJOR?

The IEOR major prepares students for technical careers analyzing a broad array of systems-level decision problems concerned with economic efficiency, productivity, and quality. It provides a strong foundation for those headed for operations management positions or for those intending to go on to specialized graduate study in operations research, analytics, or business administration.

Jobs and Employers

- Analyst, Cornerstone Research
- Analyst, WI Harper Group
- Consultant, Applied Predictive Technologies
- Digital Risk Solution Associate, PwC
- Software Development Engineer, Amazon
- Software Engineer, Google
- Technology Analyst, Deloitte

Graduate Programs

- Business, Masters
- Computational Math, Masters
- Computer Science, Masters, PhD
- Economics, PhD
- Engineering Science, Masters
- Industrial Engineering, Masters, PhD
- Operations Research, Masters

Examples gathered from the First Destination Survey of recent Berkeley graduates.