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/academics/ba-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.

AMPLIFY YOUR MAJOR

- Get involved in a student organization such as the Engineering and Project Management Society and Institute of Industrial Systems Engineers (IIESE).
- Take a Challenge Lab course such as IEOR 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.
Explore your major
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.

Connect and build community
Get to know the Berkeley community. Find study groups, tutoring, and academic support at the Student Learning Center. Take advantage of STEM community and resources from programs like Cal NERDS.

Discover your passions
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.

Engage locally and globally
Attend the Calapalooza student activities fair and get involved with a student organization. Find service opportunities through the Public Service Center. Explore study, internship, and research abroad options with Berkeley Study Abroad.

Reflect and plan your future

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.

SECOND YEAR
- Complete lower division prerequisites and apply to the major.
- Plan for a certificate, course thread, or summer minor.
- Review major guidelines for study abroad.

THIRD YEAR
- Focus on upper division requirements and electives such as machine learning (IEOR 145) or production systems analysis (IEOR 195).
- Review your degree progress with your major and college advisors.
- Take the Challenge Lab course (IEOR 195) or another project-based class.

FOURTH YEAR
- Do a degree check to ensure you are on track to graduate.
- 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.

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.