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.

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 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.

"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

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 ue.berkeley.edu/majormaps for the latest version of this major map.
## OPTIONS

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>SECOND YEAR</th>
<th>THIRD YEAR</th>
<th>FOURTH YEAR</th>
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</thead>
<tbody>
<tr>
<td><strong>Explore your major</strong></td>
<td>Complete lower division prerequisites and apply to the major.</td>
<td>Focus on upper division requirements and electives such as machine learning (IEOR 140) or production systems analysis (IEOR 110).</td>
<td>Do a degree check to ensure you are on track to graduate.</td>
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<tr>
<td>- Meet with your major and college advisor to discuss your academic plans.</td>
<td>- Review major and college requirements.</td>
<td>- Review your degree progress with your major and college advisor.</td>
<td>- Complete any &quot;bucket list&quot; courses and remaining major, college, and campus requirements.</td>
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<tr>
<td>- Review major and college requirements.</td>
<td>- Talk to the ORMS advisor about department programs and research opportunities.</td>
<td>- Take a Challenge Lab course (IEOR 185), Data X (IEOR 195) or another project-based class.</td>
<td>- If eligible, take part in the ORMS honors program.</td>
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<tr>
<td>- Talk to the ORMS advisor about department programs and research opportunities.</td>
<td>- Complete a certificate, course thread, or summer minor.</td>
<td>- Consider applying for the IEOR-ORMS Masters Program.</td>
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## Connect and build community

<table>
<thead>
<tr>
<th><strong>Discover your passions</strong></th>
<th><strong>Engage locally and globally</strong></th>
<th><strong>Reflect and plan your future</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Get mentoring with Berkeley Connect and L&amp;S Mentors Program</td>
<td>- Attend Calapalooza student activities fair and get involved with a student organization.</td>
<td>- Visit the Career Center and Career Counseling Library.</td>
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<tr>
<td>- Find study groups, tutoring, and academic support at the Student Learning Center.</td>
<td>- Find service opportunities through the Berkeley Volunteer Center.</td>
<td>- Check out the Career Center.</td>
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<tr>
<td>- Enroll in UGIS 98: College Success in L&amp;S.</td>
<td>- Enroll in a Sophomore Seminar, L&amp;S 1 or a student-run DeCal course.</td>
<td>- Sign up for Handshake and CareerMail.</td>
</tr>
<tr>
<td>- Take advantage of STEM community and resources from programs like Cal HERDS.</td>
<td>- Attend the Undergraduate Research and Scholarships Fair in October.</td>
<td>- Explore fields in the Career Connections Networking Series or a winter internship.</td>
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</tbody>
</table>

## 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.