Industrial Engineering and Operations Research
Bachelor of Science

INTRODUCTION TO THE MAJOR
Industrial engineers find the most effective and efficient way to use basic factors of production—people, machines, materials, information, and energy—to make a product or provide a service. In Industrial Engineering and Operations Research (IEOR), we invent, analyze and teach tools and approaches for design, analysis, risk management, and decision-making in complex real-world systems like supply chains, energy systems, healthcare systems, and financial systems.

The department offers a major accredited by the Engineering Accreditation Commission of ABET. A minor in IEOR is available, as well as an Operations Research and Management Science major in the College of Letters & Science.

AMPLIFY YOUR MAJOR
• Join an Engineering student group such as the Institute of Industrial Systems Engineers or Alpha Pi Mu.
• Take a Challenge Lab course such as IEOR 185.
• Enrich your studies with the Sutardja Certificate in Entrepreneurship and Technology.
• Build your skills with electives such as IEOR 142: Introduction to Machine Learning and Data Analytics or IEOR 150: Production Systems Analysis.

This world is full of challenges, and with an IEOR education I can tackle many—if not all—of them.

– Jenny Cortez, IEOR Class of 2018

THE IEOR CURRICULUM
The core of the IEOR program includes basic science, mathematics including probability and statistics, engineering optimization, and stochastic models. This forms the methodological foundation for upper division IEOR electives involving the analysis and design of production and service systems, information systems, and human work systems and organization, among others.

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.
ATTEND THE FIRST DESTINATION SURVEY OF RECENT BERKELEY GRADUATES.