

GRADUATE PROGRAM

# Chemical and Biomolecular Engineering



The goal of the UCI chemical and biomolecular engineering program is to develop students' abilities to solve new and challenging engineering problems and promote their skills in independent thinking and learning in preparation for careers in industry, research and teaching.

These objectives are reached through a program of coursework and research designed by each student with the assistance, advice and approval of a primary faculty adviser and a faculty advisory committee.

## DEGREES OFFERED

M.S. & Ph.D.

## HIGHLIGHTS

- World-class faculty conducting research in energy, biotechnology and macromolecular engineering
- Highly collaborative, interdisciplinary research culture
- Students publish impactful research articles and are supported by competitive fellowships
- Active, diverse and engaged graduate student body that participates in departmental affairs

## RESEARCH FOCUS AREAS

- Biomaterials
- Biomedical Computational Technologies
- Biomolecular Engineering
- Energy and Sustainability
- Environment
- Macromolecular Engineering
- Microstructured Materials
- Nanotechnology and Nanoengineering

## AFFILIATED FACILITIES

- Center for Complex Biological Systems
- Flow Cytometry Core Facility
- Genomics High Throughput Facility (GHTF)
- Horiba Institute for Mobility and Connectivity (HIMAC)
- Institute for Design and Manufacturing Innovation (IDMI)
- Integrated Nanosystems Research Facility (INRF)
- Irvine Materials Research Institute (IMRI)
- Laser Spectroscopy Facility
- Mass Spectrometry Facility
- National Fuel Cell Research Center (NFCRC)
- Nuclear Reactor Facility
- Sue and Bill Gross Stem Cell Center

## RECOMMENDED BACKGROUND

It is strongly recommended that students have background and training in core chemical engineering topics (transport phenomena, thermodynamics and reaction kinetics) as well as a strong background in mathematics, chemistry and physics.

## ADMISSION REQUIREMENTS

The requirements for admission are tailored to students who have a bachelor's degree in engineering, physical science or biological science disciplines, and the recommended minimum grade point average is 3.2 in upper-division coursework. Students admitted to the Ph.D. program generally have relevant prior research experience. For international students whose native language is not English, the recommended minimum score on the Test of English as a Foreign Language (TOEFL iBT) is 90.

## LEARN MORE!

