MECHANICAL ENGINEERING, B.S.

UNIVERSITY OF CALIFORNIA
MERCED
SCHOOL OF ENGINEERING

WHY APPLY TO MECHANICAL ENGINEERING PROGRAM, B.S.?

The undergraduate major in Mechanical Engineering provides students with a solid foundation and the necessary skills to assume leadership roles in industry and government agencies. The major also offers several opportunities for students intending to continue their education in graduate school. Mechanical Engineering impacts society by developing innovative technologies through design and synthesis of mechanical components and systems.

The innovative curriculum at UC Merced provides a rich educational experience that exposes students to engineering fundamentals, laboratory skills and advanced computational tools to solve realistic engineering problems. With an emphasis on design-thinking, the curriculum prepares students to tackle real-world problems thereby making them more employable.

Apply today at admissions.ucmerced.edu/apply

#1

NO. 1 AMONG PUBLIC UNIVERSITIES
in outperforming expected graduation rates
(US News & World Report Best Colleges Rankings, 2021)

#13 IN THE NATION
for best undergraduate teaching among public universities
(U.S. News & World Report Best Colleges Rankings, 2020)

MECHANICAL ENGINEERING, B.S.

WHERE CAN I WORK?

- Mechanical engineers are recruited in a variety of industries, including automotive, aerospace, power generation, environmental, electronics, bioengineering, agriculture, food processing, and consulting firms, among many others. Mechanical engineers can be guaranteed to be employed as long as this world is mechanized (which is forever).Because of the variety of fields that are relevant to this profession, the undergraduate program covers a broad range of subjects, including dynamics, materials, thermal/fluids, vibrations, controls, computer-aided engineering, design and manufacturing.

A TYPICAL FIRST-YEAR STUDENT'S SCHEDULE:

FALL*:

- Math 021: Calc I for Sci & Eng
- Spark 001: Spark Seminar
- PHYS 008 & Lab: Intro Physics I
- Chem 002: General Chem 1
- ME 001: Intro to Mechanical Engineering

SPRING:

- Math 022: Calc II for Sci & ENGR
- PHYS 009 & Lab: Intro Physics II
- ME 021: Engineering Computing
- WRI 010: College Reading & Composition

***NOTE:** *Depending on your placement exam results, you may need to start in Math 005 (Precalculus), Chem 001 (Preparatory Chemistry), and/or Writing 001 (Academic Writing).*

RESEARCH AREAS

- Biomechanics and Mechano-biology
- Thermal & Electrochemical Energy Devices
- Energy Conversion & Storage
- Nanomechanics and Nanotribology
- Thermal Science and Energy Conversion
- Fire Dynamics and Prevention
- Tribology: Friction, Wear and Lubrication
- Plasmas & Fluid Mechanics
- Radiative Heat Transfer
- Solar Concentration
- Dynamics and Controls
- Mechatronics, Embedded Systems & Automation
- Energy and Mass Transport for Sustainability Applications
- Sustainable Water & Energy Technologies

FOUR (4) ONLINE PLACEMENT EXAMS:

- Take the 4 placement exams: Math, Chemistry, Computer Science & Engineering (CSE), Writing Readiness Review
  - Math, Chem, and CSE placement exams are available starting March 29, 2022
    - Deadline for Math, Chem, CSE: Wed. May 18, 2022
  - Writing Readiness Review is available starting May 1, 2022
    - Deadline for Writing Readiness Review: Tues. May 31, 2022
- All placement exams are free, one-time only, and available in spring only. There is no disadvantage to taking the placement exams.
- If you take a placement exam and later receive AP or IB scores that place you into a more advanced class, you will be able to take the more advanced class.
- This is also true if you complete a transferable college course during the summer and submit the official transcript to UC Merced before August 15.

The Bobcat Advising Center (BAC) is the academic advising home for all first year students.

For more information, visit: bobcat-advising-center.ucmerced.edu

Main phone: (209) 291-9739 **General email:** bac@ucmerced.edu

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