Mechanical Engineering (MECH)

Learn to design, develop, and manufacture environmental, transportation, health, fabrication, and energy systems essential to people and their communities.

Program Overview

Students dive into mechanical engineering courses starting in their first year. Hands-on laboratory instruction provides an active learning environment designed to further develop students’ design, modeling, and analytical skills. Our students become ethical professionals who make an impact on society’s global challenges.

Coursework Includes

- Introduction to Manufacturing Processes
- Engineering Experimentation
- Thermodynamics
- Mechatronics & Measurement Systems
- Machine Design
- Thermal/Fluid Sciences Laboratory
- Mechanics & Thermodynamics of Flow Processes
- Engineering Design or Research Practicum

Concentrations and Specializations

- Students can select a concentration in aerospace engineering or advanced manufacturing. Credits count toward the 129-credit degree requirement.
- Mechanical Engineering can be paired with a degree in Biomedical Engineering. This dual bachelor’s degree program is completed in five years.
- Students may apply for a combined bachelor’s and master’s degree program to begin a graduate program during their senior year of undergraduate study.

Career Options

Aeronautical/aerospace engineer • Automotive engineer
Biomedical engineer • Field service engineer • Industrial engineer
Production engineer • Quality control manager • Consulting
Robotic engineer • Construction engineer • Energy engineer

Extensive undergraduate research opportunities
Small class size and high teacher-to-student ratio
Education abroad opportunities
Hands-on laboratory experience

More information about the MECH undergraduate program
Engage your curiosity

Facts

- Mechanical
- Civil and Environmental
- Electrical and Computer
- Biomedical
- Chemical and Biological
- Open Option

- 2,408
- Average number of enrolled undergraduate students

Benefits

- World class laboratories and facilities
- Senior design projects tied to research and industry partnerships
- Access to 3D printing labs
- 40+ engineering student organizations
- Internship and Co-op opportunities
- Annual Engineering Career Fair with industry employers
- Engineering Residential Learning Community with on-site tutoring

Admissions Requirements

- GPA: 3.0
- Standardized testing not required
- 4 years of college prep math equivalent to algebra, geometry, algebra 2 AND an additional year at or above the level of algebra 2
- 1 year of chemistry or physics completed or in progress

Undergraduate Scholarships and Aid

- $2,162,000
- 134
- Total amount of the 323 individual scholarships awarded in 2021-2022.
- Engineering scholarship funds
- Additional grants, scholarships, loans, and work study opportunities offered through the CSU Office of Financial Aid.

Find your future