



“There will always be a frontier where there is an open mind and a willing hand.”

—Charles F. Kettering, engineer

Want to design the next generation of passenger jets? Bring wind power to a remote Southwestern village? Help land a space vehicle on Mars? Our Department of Mechanical Engineering could be your launch pad.

You will join a broad engineering field that's vital to countless industries. You'll learn to apply mathematics and physics to design and build mechanical components and systems like automobiles, power plants, robots, and spacecraft. You'll be introduced to exciting new career paths in emerging fields like biomechanics and electromechanics. In our innovative and award-winning **Design4Practice Program**, you'll gain a broad set of technical, managerial, and professional skills.

For three years running, *U.S. News & World Report* ranked the university in the top third of national engineering programs that terminate in a bachelor's or master's degree. We emphasize extensive faculty-student interaction, undergraduate research, and hands-on experience. In programs like our Mini-Baja race car competition and our annual Celebration of Undergraduate Research and Design, we nurture the engineers of the future. People like you.

Degree Program

- Bachelor of Science in Engineering, Mechanical Engineering

“I have worked on two research projects with one of my professors involving simulation and design. The Department of Mechanical Engineering also helped me obtain an excellent internship the summer following my sophomore year at Raytheon Missile Systems, which carried over to the next summer. My senior design project opened the door for me to obtain a job with my client, W.L. Gore & Associates. I am excited and ready to start working after graduation.”

Danielle Anderson, Class of 2007

Career Opportunities

Study to become a . . .	Begin your career in these industries . . .
Design engineer	Aerospace
Field service engineer	Automobile design/production
Manufacturing engineer	Consulting
Product engineer	Manufacturing
Production supervisor	Medical devices
Researcher*	Pharmaceuticals
University or college professor*	Production management

*Further study required

Explore Courses that Jump-start Your Career

Design your future

Private industry partners participated in creating our **Design4Practice Program**, which will give you a broad set of technical, managerial, and professional skills, including high-level design, machining, management, communication, teamwork, and ethics. In four cross-disciplinary design courses that span the freshman to senior years, you'll collaborate with students from the university's other engineering programs to solve problems in a simulated corporate environment. This required sequence culminates with your capstone senior project. You'll leave college ready to step into the professional engineering world.

Go with the flow

Fluid mechanics are essential for designing vehicles, propulsion systems, jet engines, building energy systems, and much more. In our **Aerodynamics** class, you'll learn the basics of fluid mechanics and thermodynamics. Take what you learn into the world of industrial design.

Harness sustainable power

Demand for energy will continue to rise in our world of finite traditional resources. Prepare for the future in our **Renewable Energy** course. You'll learn the fundamental concepts of energy resources, conversion technology, and hybrid system design, with an emphasis on solar, photovoltaics, and wind energy.

Participate!

You'll make professional connections and meet peers as a student member of the **American Society of Mechanical Engineers (ASME)**. Find a mentor through ASME's E-mentoring program. Use the online technical library for research. Find internships and international work opportunities in the ASME jobs database.

Meet friends and find support in the **Society of Women Engineers**, which seeks to break down barriers that discourage women in the engineering professions. The campus chapter is open to all engineering students and hosts study groups, fundraisers, and social events, while also providing mentoring for local high school students.

Work on projects relating to mobile industries and applications in the **Society of Automotive Engineers (SAE)**. The student chapter participates in the SAE Collegiate Design Competitions, which allow students to go beyond textbook theory to design, build, and test real vehicles. Our students compete with others from around the globe, gaining exposure to future engineering job opportunities by talking with recruiters from leading companies.

Connect with new friends in campus chapters of the **National Society of Black Engineers** and **Society of Hispanic Professional Engineers**, which foster professionalism, academic excellence, and social equity among engineering students.

Engineer a better world in the university chapter of **Engineers Without Borders**. Gain a deeper cultural awareness and help developing communities, locally and globally, find sustainable ways to meet basic human needs.

Experience the Work World

Earn academic credit, develop your skills, and make professional contacts through research and internships. Our dedicated industrial advisory board will work to place you in research projects linked to NASA, the National Science Foundation, and the Office of Naval Research. Work on renewable energy systems, advanced composite materials, computational fluid dynamics, nanotechnology, bioengineering, and more.

Study Abroad

Study for a summer, a semester, or an academic year in universities around the globe. We provide international education opportunities to all academically qualified students. The university has cooperative agreements with institutions in Australia, Canada, Germany, Ireland, Malta, Sweden, and the United Kingdom. Start your travel planning with a visit to nau.edu/international.

