



“Engineering problems are under-defined—there are many solutions, good, bad and indifferent. The art is to arrive at a good solution.”

—Ove Arup

Career Opportunities

Study to become a . . .	Begin your career in a . . .
City engineer	City or county planning agency
Designer	Construction firm
Consultant	Consulting engineering firm
Environmental policy-shaper	Environmental consulting firm
Field engineer	Federal or state agency
Project manager	Specialty contracting firm
Land development specialist	* Further education required
University or college professor*	

Society’s demand for essentials like transportation, clean water, and waste disposal impose large scale, practical problems. Our Department of Civil and Environmental Engineering will teach you to design the best solutions.

Civil engineers plan facilities like roads, bridges, waterworks, and sewage treatment plants. Environmental engineers use biological and chemical principles to design and operate pollution-control and impact-mitigation systems. In our civil engineering program you’ll study transportation, water resources, structures, and geo-technology (foundations, earthquakes, and soils). In environmental engineering, you will focus on ecology, air and water quality, pollution control, environmental regulations, toxicology, risk assessment and microbiological processes.

Our programs feature small classes taught by full time faculty who are also professional engineers. We emphasize undergraduate research and hands-on experience. Our innovative and award-winning **Design4Practice Program** will prepare you for careers in the private or public sectors by placing you in design team projects throughout your academic career.

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. So it’s no surprise that 100 percent of our graduates obtain employment or enter graduate school. Join them, and begin solving big problems.

“I have been able to combine my many interests by majoring in environmental engineering, participating in the Society of Automotive Engineers (SAE), and spending the summer of 2007 as SAE International’s intern in Washington, D.C. I would not have had such fine experiences without supportive faculty members who have played a significant role in my endeavors for the past four years.”

Lauren McIntire, Class of 2007

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Degree Programs

- Bachelor of Science in Civil Engineering
- Bachelor of Science in Environmental Engineering
- Minor in Civil Engineering
- Minor in Environmental Engineering

Explore Courses that Jump-start Your Career

Design your future

Engineers don't often work alone. Employers are looking for new graduates who can operate effectively in the team environment. Our **Design4Practice Program** shows how. **Design4Practice** will give you hands-on engineering experience from Day One. Created with help from industry and agency partners, **Design4Practice** teaches the technical skills you'll need, plus the people skills traditionally left out of engineering curricula. In 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. You'll gain a broad set of technical, managerial, and professional skills, including design and build, communication, teamwork, leadership, and ethics. This required sequence culminates with your senior project. You'll leave college ready to step into the professional engineering world—and succeed.

Where is "away" when you throw it away?

Advances in technology result in improved standards of living but also create new problems. Our **Solid and Hazardous Waste Management** course will introduce you to tools and technologies for dealing with the trash and toxic by-products of modern lifestyles. You will study waste transport and disposal and learn how to assess potential and existing waste sites.

Build roads to better transportation

In **Highway Engineering** you'll explore highway design, construction, and maintenance; transportation planning; and traffic engineering. You'll study highway geometric design, including capacity, human factors, safety, and drainage. You'll also become familiar with industry standards and specifications.

Experience the Work World

Want to design a wastewater treatment plant for a remote desert village? Or plan a sustainable forest campsite for children's education programs? Our engineering students already have.

That's because in our **Design4Practice Program**, the campus is the real world. You will complete project-learning courses in a team setting, with public agencies and industry professionals sponsoring projects and evaluating coursework. This engineering design sequence culminates with the capstone senior project, sponsored by an external client. Can you think of a better bullet on your résumé?

Study Abroad

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

Participate!

Make friends and develop career connections in the student chapter of the **American Society of Civil Engineers (ASCE)**. Help bring in guest speakers, plan fundraisers to finance trips to student conferences, and have fun along the way.

Engineer a better world in the university chapter of **Engineers Without Borders**. Gain a deeper cultural awareness and help developing communities, in the region and around the world, find sustainable ways to meet basic human needs. Join other students to design and implement a water quality system for residents of Yua, Ghana.

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.

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 all engineering students.