CORROSION ENGINEERING
What is Corrosion?

A $400 billion problem in the United States alone, corrosion is the steady destruction of materials due to a chemical reaction with the environment. Corrosion occurs in all settings and impacts every industry. Some of the hardest hit fields are transportation, infrastructure, pipelines, defense and manufacturing.

What is Corrosion Engineering?

Corrosion engineers are trained in corrosion science, fundamental engineering, and management. Corrosion engineers may develop new materials to mitigate or control the occurrence of corrosion, or they may investigate corrosion-related incidents or failures and make recommendations for improvements. Corrosion engineers could work in an office setting doing planning for large projects, or in the field inspecting structures like pipelines or bridges, or consulting on the construction of a new airplane or automobile. Corrosion engineers may spend time in the laboratory discovering new coatings formulations or testing the endurance of materials like steel or composites.

Is a Corrosion Engineering degree right for YOU?

☐ Do you enjoy solving problems, investigating complications, and finding efficient and effective solutions?
☐ Do you have strong analytical skills, logical reasoning, and an inquisitive nature?
☐ Do you enjoy chemistry, mathematics, economics, complex calculations, and technical problems?
☐ Are you a team player with strong communications skills and leadership potential?
☐ Are you interested in travel, adventure, and a fast-paced work environment?
☐ Do you want to be in a highly sought after career field with a variety of career opportunities and high earning potential?

First in the Nation

The University of Akron’s College of Engineering is the first and only in the nation to offer a baccalaureate degree in Corrosion Engineering. This cutting edge degree program produces uniquely qualified engineers with core competencies in the corrosion field, making graduates highly sought after by multiple industries.

Job Opportunities

Corrosion jobs are found in a wide-range of industry sectors, including: oil and gas, water and wastewater, chemical processing, biomedical, aerospace, defense, coatings, and manufacturing. Corrosion engineers are able to easily transfer from one field to another in order to make career advancements. The average salary of a corrosion engineer is approximately $103,000.

Real-world Experience

Students have the opportunity to perform multiple Co-Op experiences at corrosion companies around the world, giving them hands-on practice solving real-world problems. Co-Op is the best way for students to gain practical knowledge, make professional connections, and ultimately secure a full-time career.

Faculty

Corrosion Engineering faculty are engaging, knowledgeable, and industry-trained. Class sizes are kept small resulting in better opportunities to know professors and to participate in class discussions.

Professional Networking & Vocational Training

The Corrosion Squad student organization, an official NACE International student chapter (National Association of Corrosion Engineers), hosts activities throughout the year that connect students to the professional corrosion community. Students regularly attend professional conferences, take field trips, and learn from experts in the field. Certificate and hands-on training opportunities are offered on campus to provide industry credentials to interested students.

Scholarships

Corrosion engineering students have special opportunities to support their education. Corrosion Ambassadors earn a financial award for participating in outreach activities in the freshman and sophomore years. Additionally, beginning in the sophomore year, students are eligible to apply for industry-funded scholarships available only to corrosion engineering students at The University of Akron.

Research

Corrosion engineering students are able to participate in faculty-led research groups doing government and industry-funded laboratory experiments for paid part-time work. Students may also gain course credit through senior laboratory projects and practical class experiences in courses like Project Management and Teamwork and Corrosion Management.
THE COLLEGE OF ENGINEERING
Since 1914, The University of Akron has been preparing future engineers to make lasting contributions to the wellbeing of society. The co-op program, the fifth oldest in the nation, provides real-world experience before graduation. Degrees are offered at UA in corrosion engineering and aerospace systems engineering – both unique in the U.S. – as well as biomedical, chemical, civil, computer, electrical and mechanical engineering. uakron.edu/engineering

THE UNIVERSITY OF AKRON
The University of Akron offers more than 300 associate, bachelor’s, master’s, doctorate and law degree programs, with accreditations by 26 professional agencies. With approximately 27,000 students and $65 million in research expenditures, UA is among the nation’s strongest public universities focused on innovation, entrepreneurship, and investment in community and economic growth. The distinctive Akron Experience enhances post-graduate success through internships and co-ops, academic research (both undergraduate and graduate), study abroad, on-campus student employment, and service projects.

THE CITY OF AKRON
As Ohio’s fifth-largest city, Akron offers University of Akron students a vibrant downtown, serene parks, events and venues that appeal to almost every interest. It’s also close to a variety of attractions around Northeast Ohio. akronohio.gov

Nick D’Angelo corrosion engineering major
Hometown: Kent, Ohio
UA Experience: Honors Student, Emerging Leader, Corrosion Ambassador, Residence Assistant, Corrosion Lab Researcher

“Selecting Corrosion Engineering as my major was the best decision I could have made. UA has given me the opportunity to interact with industry professionals and government officials who deal with corrosion problems every day which has made my coursework more exciting and relevant to the real world. I really want to make a difference, and the corrosion engineering degree and my Akron Experience are giving me the tools to make it happen.”

ADMISSIONS INFORMATION
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Office of Admissions
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