

College of Engineering

Dean

- Harriet Nembhard

Associate Dean, Academic Programs

- Nicole M. Grosland

Interim Associate Dean, Graduate Programs and Research

- H.S. Udaykumar

Undergraduate degree: B.S.E.

Undergraduate certificates: artificial intelligence, modeling and simulation in engineering; naval science and technology; technological entrepreneurship

Graduate degrees: M.S.; Ph.D.

Graduate certificates: artificial intelligence, modeling and simulation in engineering; sustainable water development

Website: <https://engineering.uiowa.edu/>

Programs

Undergraduate Programs of Study

The College of Engineering offers the Bachelor of Science in Engineering (B.S.E.) with majors in biomedical, chemical, civil, computer science and engineering, electrical, environmental, industrial, and mechanical engineering. For information about each B.S.E. major, see the Catalog's College of Engineering department sections.

The college also offers combined undergraduate degree programs with the College of Liberal Arts and Sciences and the Tippie College of Business; a dual degree with the University of Northern Iowa; a combined B.S.E./master's degree program in each engineering discipline; and combined B.S.E./master's degrees with the Department of Computer Science, the Department of Occupational and Environmental Health, and the School of Planning and Public Affairs (also see the graduate Certificate in Transportation Planning in the Graduate College). For additional information, see "Combined and Dual Degrees" in the Bachelor of Science in Engineering, B.S.E. section of the Catalog.

In addition, the College of Engineering offers the undergraduate Certificate in Artificial Intelligence, Modeling and Simulation in Engineering, a Certificate in Naval Science and Technology, and partners with the Tippie College of Business to offer a Certificate in Technological Entrepreneurship for undergraduate engineering students.

Graduate Programs of Study

The College of Engineering offers graduate degree programs, the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.), in biomedical engineering, chemical and biochemical engineering, civil and environmental engineering, electrical and computer engineering, industrial engineering, and mechanical engineering. See the College of Engineering Graduate Studies website for an overview, and the departmental sections in the Catalog for information about specific areas of research and study, admission and

degree requirements, and financial support for the graduate programs. The College of Engineering also offers the graduate Certificate in Artificial Intelligence, Modeling and Simulation in Engineering, and a graduate Certificate in Sustainable Water Development.

High School Program of Study

FIRST Tech Challenge

For Inspiration and Recognition of Science and Technology (FIRST) gives students the opportunity for real-world application of science, technology, engineering, and math (STEM) concepts. Students participate in an atmosphere that encourages team building, entrepreneurship, and sportsmanship. FIRST Tech Challenge (FTC) allows teams of students to be responsible for designing, building, and programming robots to compete in an alliance format against other teams. Teams are required to develop strategy and build robots based on sound engineering principles. Students learn about working in a team environment, effective communication skills, the ability to fail and succeed at the same time, and competing fairly while being supportive of their competition.