

# SCHOOL OF ENGINEERING

## A Message from the Dean

The four graduate programs in the School of Engineering – Master of Science degrees in Management of Technology, in Software Engineering, in Electrical and Computer Engineering, and in Mechanical Engineering – are driven by the needs of the School's constituencies, the students, and their employers, who establish multifaceted requirements for current knowledge and skills at the workplace.

The Management of Technology program includes some courses from the MBA program in the Dolan School of Business. In further response to workplace needs, the School has also instituted pathways to five-year dual-degree BS/MS programs in Software Engineering, Mechanical Engineering, Electrical and Computer Engineering, and Management of Technology. Finally, the School offers graduate certificate programs, each comprised of a sequence of four courses, to benefit practicing engineers who are in need of specialized knowledge and skills in Database Management, Information Security, Network Technologies, or Web Application Development strategies.

The engineering programs are inherently dynamic and responsive to industry and business. Their capacity to change, and so remain current, originates with the faculty in the School of Engineering who are leading-edge professionals in their areas of expertise and in instruction and mentoring. It is also prompted by maintaining close contacts and open lines of communication with the industry and business sectors that are the main beneficiaries of the School's Master degree graduates.

Located in Fairfield County, Fairfield University is in the middle of a high-density concentration of hardware and software industries and businesses; nearly 40 Fortune 500 companies are headquartered within 50 miles of the campus. This environment provides opportunities for studies of real-world problems in courses and in the capstone professional project required by the graduate programs, and for advancement and employment of Fairfield graduates. Our various programs offer many opportunities for our students to pursue their special interests and grow professionally and personally.

I would like to extend a warm welcome to all who choose to undertake the exciting adventure of graduate education in the School of Engineering at Fairfield University.

**Dr. Bruce W. Berdanier, PE, PS**  
Dean, School of Engineering

## School Overview

The School of Engineering has laboratories, classrooms, administrative offices, and faculty offices in the Rudolph F. Bannow Science Center. The school's laboratories and classrooms are served by the Fairfield University computer network.

The School continuously assesses evaluates and improves its academic programs and facilities. This process includes identifying the constituencies and stakeholders of the engineering programs, determining which learning goals and program objectives are compatible with the needs of those constituencies, crafting curriculum content, and developing resources to satisfy student learning and development in accord with those needs.

The School of Engineering maintains an appropriate balance of faculty in each discipline within the School, and strives to create an environment

conducive to faculty development and consistent with achieving excellence in pedagogy and professional advancement. The School also maintains a close working relationship with industry through its Advisory Board and other conduits, to better understand the needs of the engineering workplace, and draws from its network of practitioners in the engineering disciplines for assistance in program development and assessment.

## Mission

The Fairfield University School of Engineering is dedicated to providing quality educational opportunities in engineering and computer science to a diverse student population. The School emphasizes whole-person development (*cura personalis*) through its commitment to a unique integration of expertise in innovative technical areas with a strong liberal arts core preparing graduates well for professional practice and graduate education.

## Vision

As an integral component of a comprehensive Jesuit university, the School of Engineering is committed to providing a student-oriented classroom and laboratory environment enhanced by research that enables graduates to become leaders in the quest to solve society's greatest challenges in service to others.

## Degrees

- Master of Science in Electrical and Computer Engineering (<https://catalog.fairfield.edu/graduate/engineering/programs/msece>)
- Master of Science in Management of Technology (<https://catalog.fairfield.edu/graduate/engineering/programs/msmot>)
- Master of Science in Mechanical Engineering (<https://catalog.fairfield.edu/graduate/engineering/programs/msme>)
- Master of Science in Software Engineering (<https://catalog.fairfield.edu/graduate/engineering/programs/msse>)
- Graduate Certificate Programs (<https://catalog.fairfield.edu/graduate/engineering/programs/graduate-certificate>)
  - Database Management
  - Information Security
  - Network Technology
  - Web Application Development