College of Engineering & Applied Science

COMPUTER ENGINEERING

Just the Facts

Number of Students
1,600 undergraduate / 350 graduate

Number of Faculty
85 full-time, 100% doctorate

Undergraduate Degrees
Bachelor of Science in Computer Science
Bachelor of Science in Engineering
(Civil, Computer, Electrical, Industrial, Materials and Mechanical)

Minors
Computer Science, Electrical Engineering, Industrial Engineering, Materials Engineering, Mechanical Engineering, Structural Engineering

Graduate Degrees
Master of Science in Engineering
Master of Science in Computer Science
Master of Science in Engineering
Master of Urban Planning
Doctor of Philosophy in Engineering
Doctor of Philosophy in Medical Informatics
Graduate Certificate Programs

Academic Advising

Many students find that determining schedules, registering for courses, and making important academic decisions can be daunting. This is why the College of Engineering & Applied Science (CEAS) offers personal, individualized advising to all students. Academic advisors are available to support students throughout their entire stay at CEAS, acting as a liaison to other university departments and working collaboratively with faculty advisors.

Cooperative Education/Internships

The Career Services Office within CEAS provides a link between education and the real world. Because we know that relevant work experience in combination with good academics is crucial in gaining employment, we are dedicated to helping all CEAS students secure work experience before graduating. The Cooperative Education and Internship programs offer students an opportunity to gain professional employment prior to graduation. Students are able to apply the skills they are learning under the supervision and guidance of a professional engineer or computer scientist. The Career Services Office also offers a variety of services in addition to co-op/internships and job placement, including resume reviews, interview coaching, information on market trends, and how to negotiate salaries.

Undergraduate Research

To enhance the undergraduate experience, all undergraduates have the opportunity to participate in world-class research under the supervision of faculty members.

Study Abroad

CEAS collaborates with the Overseas Programs and Partnerships Office to offer unique study abroad experiences. In one such experience, CEAS students have the opportunity to study renewable energies in Germany during the winter interim session. The program includes lectures by Kassel University professors, site visits to factories and companies; and visits to a wind park and a biogas power plant. Through field trips and hands-on projects, engineering students are offered an incredible, international learning experience.

For more information about the College of Engineering & Applied Science at the University of Wisconsin-Milwaukee, please contact us.

E-mail: ceas-adv@UWM.edu Website: www.uwm.edu/CEAS Phone: (414) 229-4667

UNIVERSITY of WISCONSIN
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College of Engineering & Applied Science

COMPUTER ENGINEERING

Computer engineers are employed in every industry. Their expertise is not only needed in high-tech fields, but also in healthcare, service, financial, communications, academic and transportation. Some computer engineers will focus on research and design while others are project managers, communicating with clients to determine and satisfy their needs. They could be doing anything from designing MP3 players to studying DNA using computational methods.

Sample Course Plan

Semester 1
Calculus I
Chemistry for Engineers
Introductory Computer Programming
General Education Requirement

Semester 2
Calculus II
Physics I
Intermediate Computer Programming
Digital Logic
Professional Seminar

Semester 3
Calculus III
Physics II
Computer Organizations & Assembly Language
Programming Data Structures

Semester 4
Analytical Methods in Engineering
Electrical Circuits I
Discrete Information Structures
Ethics, Society, Profession
General Education Requirement

Semester 5
Electrical Circuitss II
Engineering Economic Analysis
Computer Architecture
Computer Networks
General Education Requirement

Semester 6
Electronics I
Signals and Systems
Microprocessors
Data Structures and Algorithms
General Education Requirement

Semester 7
Electronics II
Introduction to Software Engineering
Introduction to Operating Systems
Technical Elective
Technical Elective

Semester 8
Capstone Design Project
Digital Logic Laboratory
Technical Elective
Technical Elective
General Education Requirement

This is only a sample course plan and will vary for each student. Plans can be influenced by many factors including: the need for pre-requisite coursework, inclusion of related work experience through co-op and/or internship, and appropriate pace for individual students. Each student will develop personal course plans with their advisor.

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