Life as a CE Student

In addition to having fun in lab classes, computer engineers are active in professional and recreational organizations, participate in a wide variety of student teams, found startup companies, and study abroad.

Entrepreneurship and Innovation

Computer engineers are among the engineers most likely to be involved in new startup ventures. To learn more about the opportunities, check out: innovateblue.umich.edu, and the Center for Entrepreneurship.

Multidisciplinary Student Teams

Many CE students participate in student teams that design and build systems to compete in national and international competitions. Other teams strive to serve the world-wide community. A few of these teams are Michigan Autonomous Aerial Vehicles, Michigan Hybrid Racing, UM::Autonomy, Solar Car, Mars Rover, BLUELab, E-MAGINE, and M-HEAL.

Students created a device to solve the Rubik’s Cube in the course, Microprocessor-based Systems.

A Few CE-Related Student Organizations

- IEEE: Student professional organization for electrical and computer engineers
- HKN: Eta Kappa Nu honor society
- gEECS: Girls in electrical engineering and computer science
A student shows off her team’s final project from the advanced embedded systems class.

Keith Porter co-founded the company A2B Bikeshare.

Researchers are ensuring the security and safety of implantable medical devices that rely on wireless communication.

Reduction of energy use in buildings is being investigated through the use of integrated pervasive sensors.

Reliability in extremely small computers is being ensured through innovative, low-cost solutions.

Very low-cost “talking books” are being developed to disseminate information in underdeveloped and remote regions.

Secure communication technologies are being developed that are resistant to monitoring and censorship.

Objects and scenes are being translated into 3D sounds for the visually impaired.

Researchers are improving the safety of our automated transportation systems, such as air traffic control and automotive collision-avoidance systems.

Digital Signal Processing (EECS 452)
Design and implement a real-time software package or hardware device. Examples include a low-cost hearing aid, a guitar autotuner, and a professional audio equalizer.

Autonomous Robotics (EECS 467)
Design and program a robotic system and learn about related topics such as embedded systems, sensors, artificial intelligence, and kinematics.

Computer Architecture (EECS 470)
Design and build a dynamically scheduled processor while exploring modern computer architecture.

Advanced Embedded Systems (EECS 473)
Design and implement the hardware and software for a modern embedded system. Students design a complete embedded system.

My favorite thing about CE is learning the layers of how a computer works. In each class, you focus on a different level of abstraction of a modern computer such as translators, medium scale integrated devices, circuitry, memory, etc.
Sanos Campos, CE Student

The Best Education Leads to the Best Jobs

The Computer Engineering program at Michigan is one of the most respected and innovative in the nation, and in 2015 was ranked #7 by US News & World Report. Our students are sought after for high-paying jobs in a wide variety of technical fields.

Impact and Innovation

Computer engineers are working to improve medical devices, consumer electronics, security, information technology, and transportation safety.

Researchers are ensuring the security and safety of implantable medical devices that rely on wireless communication.

Your Future

The Best Education Leads to the Best Jobs

Your Future

Impact and Innovation

Computer engineers are working to improve medical devices, consumer electronics, security, information technology, and transportation safety.

Major Design Experience Courses

Computer engineering students will select at least one senior-level major design experience (MDE) course. Here’s what you’ll be doing in your MDE courses in computer engineering:

VLSI Design (EECS 427)
Design and build the circuits needed to create an entire digital system, such as a microprocessor that will go into a smartphone, wearable tech, or a media player.

Digital Signal Processing (EECS 452)
Design and implement a real-time software package or hardware device. Examples include a low-cost hearing aid, a guitar autotuner, and a professional audio equalizer.

Autonomous Robotics (EECS 467)
Design and program a robotic system and learn about related topics such as embedded systems, sensors, artificial intelligence, and kinematics.

Computer Architecture (EECS 470)
Design and build a dynamically scheduled processor while exploring modern computer architecture.

Advanced Embedded Systems (EECS 473)
Design and implement the hardware and software for a modern embedded system. Students design a complete embedded system.

My favorite thing about CE is learning the layers of how a computer works. In each class, you focus on a different level of abstraction of a modern computer such as translators, medium scale integrated devices, circuitry, memory, etc.
Sanos Campos, CE Student

The Best Education Leads to the Best Jobs

The Computer Engineering program at Michigan is one of the most respected and innovative in the nation, and in 2015 was ranked #7 by US News & World Report. Our students are sought after for high-paying jobs in a wide variety of technical fields.

GRADUATE SCHOOL

Your Future

The Best Education Leads to the Best Jobs

Your Future

Impact and Innovation

Computer engineers are working to improve medical devices, consumer electronics, security, information technology, and transportation safety.

Major Design Experience Courses

Computer engineering students will select at least one senior-level major design experience (MDE) course. Here’s what you’ll be doing in your MDE courses in computer engineering:

VLSI Design (EECS 427)
Design and build the circuits needed to create an entire digital system, such as a microprocessor that will go into a smartphone, wearable tech, or a media player.

Digital Signal Processing (EECS 452)
Design and implement a real-time software package or hardware device. Examples include a low-cost hearing aid, a guitar autotuner, and a professional audio equalizer.

Autonomous Robotics (EECS 467)
Design and program a robotic system and learn about related topics such as embedded systems, sensors, artificial intelligence, and kinematics.

Computer Architecture (EECS 470)
Design and build a dynamically scheduled processor while exploring modern computer architecture.

Advanced Embedded Systems (EECS 473)
Design and implement the hardware and software for a modern embedded system. Students design a complete embedded system.

My favorite thing about CE is learning the layers of how a computer works. In each class, you focus on a different level of abstraction of a modern computer such as translators, medium scale integrated devices, circuitry, memory, etc.
Sanos Campos, CE Student

The Best Education Leads to the Best Jobs

The Computer Engineering program at Michigan is one of the most respected and innovative in the nation, and in 2015 was ranked #7 by US News & World Report. Our students are sought after for high-paying jobs in a wide variety of technical fields.

GRADUATE SCHOOL

Your Future

The Best Education Leads to the Best Jobs

Your Future

Impact and Innovation

Computer engineers are working to improve medical devices, consumer electronics, security, information technology, and transportation safety.

Major Design Experience Courses

Computer engineering students will select at least one senior-level major design experience (MDE) course. Here’s what you’ll be doing in your MDE courses in computer engineering:

VLSI Design (EECS 427)
Design and build the circuits needed to create an entire digital system, such as a microprocessor that will go into a smartphone, wearable tech, or a media player.

Digital Signal Processing (EECS 452)
Design and implement a real-time software package or hardware device. Examples include a low-cost hearing aid, a guitar autotuner, and a professional audio equalizer.

Autonomous Robotics (EECS 467)
Design and program a robotic system and learn about related topics such as embedded systems, sensors, artificial intelligence, and kinematics.

Computer Architecture (EECS 470)
Design and build a dynamically scheduled processor while exploring modern computer architecture.

Advanced Embedded Systems (EECS 473)
Design and implement the hardware and software for a modern embedded system. Students design a complete embedded system.

My favorite thing about CE is learning the layers of how a computer works. In each class, you focus on a different level of abstraction of a modern computer such as translators, medium scale integrated devices, circuitry, memory, etc.
Sanos Campos, CE Student

The Best Education Leads to the Best Jobs

The Computer Engineering program at Michigan is one of the most respected and innovative in the nation, and in 2015 was ranked #7 by US News & World Report. Our students are sought after for high-paying jobs in a wide variety of technical fields.

GRADUATE SCHOOL