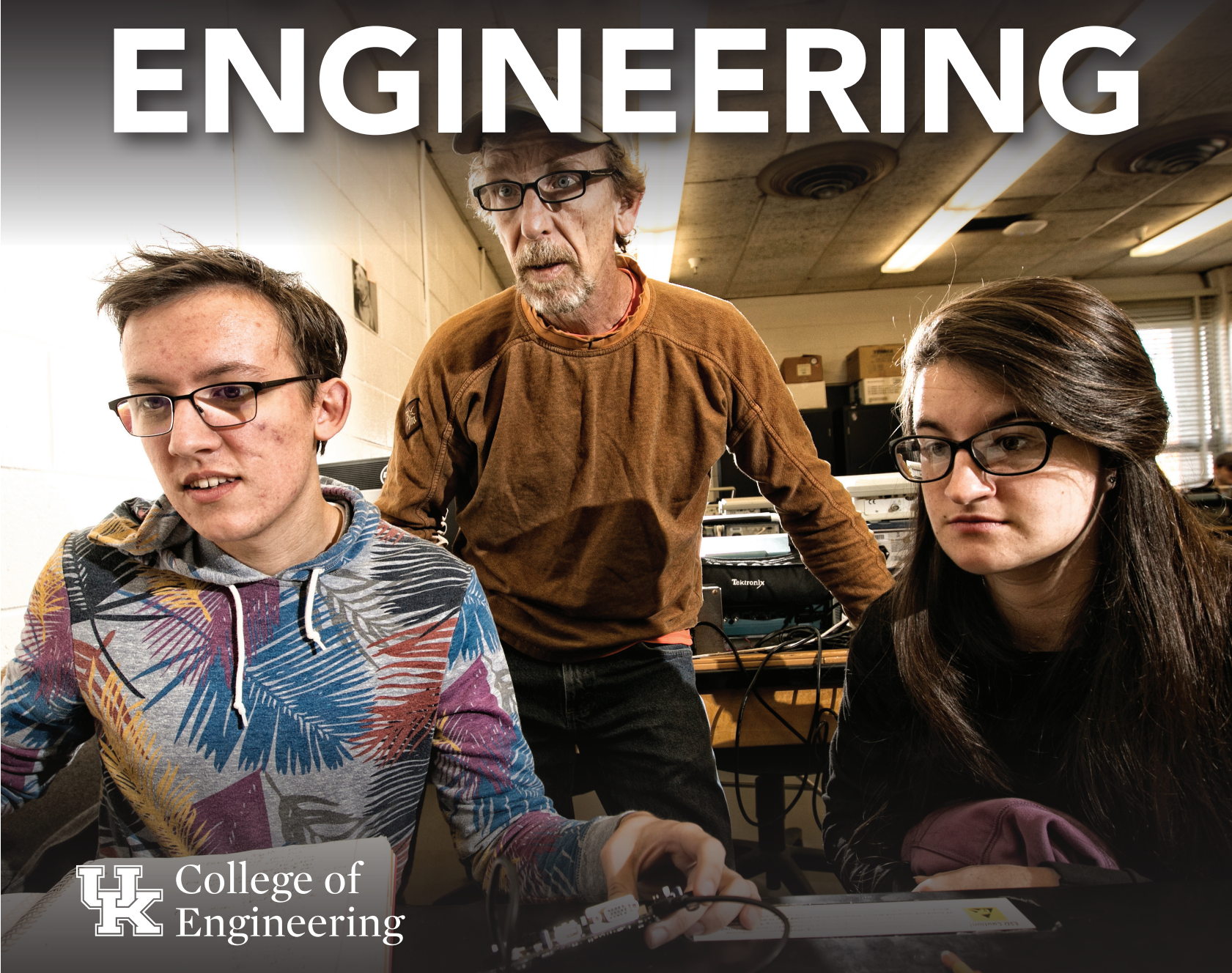


COMPUTER ENGINEERING



Computer engineers design computer systems, both hardware and software, to create new technology and meet new societal needs. The field of computer engineering covers a wide range of topics including computer architecture, operating systems, communications, computer networks, robotics, artificial intelligence, supercomputers, computer-aided design and neural nets. Computer engineers work at the frontier of high technology and are involved in research, the creation of new ideas and the design and development of new products, manufacturing and marketing activities.

FOR MORE INFORMATION, VISIT THESE WEBSITES:

Computer Engineering: www.engr.uky.edu/ece
University of Kentucky: www.uky.edu

College of Engineering: www.engr.uky.edu
Admissions: www.uky.edu/admissions

Visit Engineering: www.engr.uky.edu/visit
Scholarships: www.uky.edu/scholarships

Computer Engineering Curriculum Sample

This is a sample list of classes a student will take to pursue a degree in computer engineering. As part of the computer engineering curriculum, students must complete the pre-engineering requirements, major requirements and general education coursework, called UK Core.

Note: This sample represents one of several paths to a College of Engineering degree. Consult the departmental website for details on specific paths.

Freshman Year

Engineering Exploration I and II	3
Fundamentals of Engineering Computing	2
Calculus I and II	8
Composition & Communication I and II	6
Chemistry I and Physics I and Lab	9
Introduction to Program Design	4
Total hours	32

Sophomore Year

Calculus III and IV	7
Physics II and lab	5
Intro to Software Engineering Techniques	3
Digital Logic Design	4
Discrete Mathematics	4
Circuits I	4
Intro to Embedded Systems	4
Systems Programming	3
Computer Engineering Sophomore Seminar	1
Total hours	35

Junior Year

AC Circuits	4
Algorithm Design and Analysis	3
Computer Organization	3
Engineering Statistics	3
Signals and Systems	3
Intro to Electronics	3
Advanced Computer Architecture	3
Technical Elective	3
UK Core Courses	6
Total hours	31

Senior Year

Capstone Design I and II	6
Computer Engineering Electives	9
Technical Elective	3
Hardware Elective	3
Software Elective	3
UK Core Courses	6
Total hours	30

Pursuing Computer Engineering at UK

Why UK? One great reason is the University of Kentucky's reputation for strong academics combined with a great success rate for job placement and alumni success. Students who enroll as computer engineering students at UK study at Kentucky's flagship research institution, meaning you'll be learning from top-flight people looking to make the next big breakthroughs in their field. The Department of Electrical and Computer Engineering faculty are readily accessible both inside and outside the classroom and students have the chance to grow personally and professionally.

Career Prospects in Computer Engineering

Computer engineers work in every industry you can think of: film and television, aerospace, automotive, business machines, professional and scientific equipment, computers and electronics, communications and medical technology. They work in public utilities, at NASA, the National Institutes of Health and the Department of Defense. As researchers, they study everything from fuel cells to nanotechnology. If it's got an on/off switch, these engineers have studied it, designed it or produced it.

Undergraduate Research in Computer Engineering

Computer engineering undergraduates participate in state-of-the-art research related to supercomputers, computer architecture, embedded systems and machine learning. Recent student projects have included development of virtual reality systems, new methods for computational photography and deep learning methods for image processing.

The University of Kentucky's computer engineering program is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

Revised August 2018. Information subject to change. For the most up-to-date information on the UK College of Engineering, visit www.engr.uky.edu.