

# COMPUTER ENGINEERING TECHNOLOGY

The B.S. in Computer Engineering Technology (CPT) provides in-depth knowledge of hardware and software design, development and maintenance. The curriculum is based on a solid foundation of intensive classroom and laboratory experiences. Students will gain a strong background in cutting-edge development using programming languages currently employed by industry. Students receive an architectural understanding of computer systems from low-level gate design to high-end microprocessors and current bus standards.

## PURSUING COMPUTER ENGINEERING TECHNOLOGY AT UK

Computer engineering technology students will learn industry-standard approaches to application software development and state-of-the-art problem-solving techniques for developing application code and firmware, including networking/web operations. The hardware focus of the curriculum is on digital systems design and development. The curriculum includes in-depth design and analysis of combinational logic, sequential logic & state machines, microcontroller systems, microprocessor systems and state-of-the-art computer technology.

## CAREER PROSPECTS IN COMPUTER ENGINEERING TECHNOLOGY

Computer engineering technologists are employed as embedded software technologists, computer support specialists, networking support specialists, automation engineers, applications engineers, telecommunications engineers, network support technical engineers and network administrators. Computer engineering

technologists are employed by industry, academia and government labs for manufacturing and analysis.

## A 2+2 PARTNERSHIP BETWEEN UK AND BCTC

Earn an Associate of Applied Science (AAS) and a Bachelor of Science (B.S.) in Computer Engineering Technology thanks to a unique partnership program between the University of Kentucky College of Engineering and the Bluegrass Community and Technical College (BCTC). The CPT program specializes in hands-on inductive learning opportunities immediately applicable to our changing workforce. A CPT degree is perfect for students who desire a four-year college degree with a unique technology pathway that features participation in extensive industrial practicums.

CPT students spend their first two years earning their AAS degree in Computer Engineering Technology at BCTC before working toward their B.S. degree at UK's main campus.

### PROGRAM FACTS

#### Toyota Engineering Technology Diversity Scholarship

Toyota is investing \$1.7 million in scholarships for underrepresented students

Karen & Stanley Pigman Engineering Technology Scholarship is also available

### GRADUATE STARTING SALARIES

Median full-time starting salary info for 2021 new college graduates  
National Association of Colleges and Employers - Summer 2022

**\$72,167**  
MEDIAN SALARY

### INDUSTRY SECTORS:

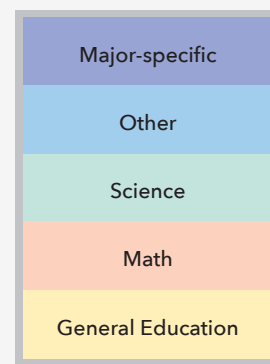
- Aerospace
- Manufacturing
- Industrial Equipment Design
- Government Agencies
- Energy and Environmental Solutions
- Aviation
- Automotive

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## Curriculum Synopsis

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

*Note: This synopsis represents one of several paths to a Computer Engineering Technology degree. Consult the departmental website for details on specific paths.*



YEAR ONE (BCTC)	YEAR TWO (BCTC)	YEAR THREE (UK)	YEAR FOUR (UK)
Computational Thinking	DC Circuits and Lab	AC Circuits and Lab	Capstone I & II
Introduction to Software and Hardware	Digital Logic and Lab	Digital System Design	Embedded Applications
General College Chemistry I	Introduction to Networks	Electronics Prototyping and Construction	Engineering Economics
Elementary Calculus and Its Applications	Introduction to Program Design Abstraction/Problem Solving	Introduction to Embedded System and Lab	Fundamentals of OSHA
Statistical Methods and Motivations	General Physics and Lab	Software Engineering Process and Methods	Signals, Systems and Transforms
Communication Course	Algebra & Trigonometry for Calculus	Wireless Communication	Project Management
Heritage (summer)	Social and Behavioral Science Course	Calculus I	Three Technical Electives
Social and Behavioral Science Course	Humanities	Technical Writing	
Writing I and II			
YEAR ONE SUMMER (BCTC)	Database Design Fundamentals		
	Introduction to Computer Programming		

### TAKING CO-OPS?

When you participate in semester co-ops, the above schedule can adjust.

Detailed Curriculum Information: [enr.uky.edu/explore/comp-engr-tech](http://enr.uky.edu/explore/comp-engr-tech)

As a new academic offering, the CPT program will be eligible to apply for accreditation following the first graduates of the program. Once accreditation is received, it will apply to any student who has gone through the program within two years of the accreditation being awarded.

**Revised August 2022.** Information subject to change. For the most up-to-date information on the UK College of Engineering, visit [www.enr.uky.edu](http://www.enr.uky.edu).