ENGINEERING TECHNOLOGY PROGRAMS

Benefits of a Career in Engineering Technology

- Immediate job openings
- Higher than average earnings
- Diverse opportunities
- Career progression

tri-c.edu/engineering
ENGINEERING TECHNOLOGY

OVERVIEW

Cuyahoga Community College (Tri-C®) offers a wide selection of engineering technology programs to meet your career goals. Graduates of the Associate of Applied Science degree programs are equipped to start a technical career immediately or continue their education at a four-year college. One-year certificates of proficiency are available to enhance skills or learn a new trade. Many of our engineering technology programs are ABET-accredited. Small class sizes, faculty with broad industrial experience, open labs and tutoring support help ensure successful program completion.

BIOMEDICAL ENGINEERING TECHNOLOGY

Associate of Applied Science degree in Electrical/Electronic Engineering Technology • tri-c.edu/BET

This lab-based program focuses on physical sciences, mathematics and communications, with a strong emphasis on electronics, electrical devices and biomedical engineering technology. Students learn how to operate and troubleshoot biomedical devices — including clinical application principles, safety, calibration and preventive maintenance protocols — and complete an internship to gain experience in a clinical engineering environment. Graduates are prepared for careers as biomedical equipment technicians, ensuring the safe and effective delivery of medical services as part of a health care team.

Accreditation
Cuyahoga Community College’s Biomedical Engineering Technology program is accredited by ABET’s Engineering Technology Accreditation Commission of ABET, www.abet.org.

ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY

Associate of Applied Science degree • tri-c.edu/EEET

This program offers comprehensive training in one of today’s most exciting and versatile disciplines. Students begin by exploring electrical circuit analysis, digital fundamentals, basic electronics and engineering computer applications. Advanced courses focus on the specialized areas of signal analysis, industrial electronics, instrumentation and control, microprocessors and computer technology. Labs are equipped with professional-quality test equipment that allows students to build projects, test performance and verify results using cutting-edge simulation software.

Accreditation
MANUFACTURING/INDUSTRIAL ENGINEERING TECHNOLOGY
Associate of Applied Science degree • tri-c.edu/MIET

This program prepares students for employment in both traditional and contemporary manufacturing enterprises. Students develop the skills and knowledge required to apply modern manufacturing technologies to manage and control elements of manufacturing processes and to enhance and sustain process efficiency and productivity. Coursework covers principles of product development and deployment in addition to various computer applications essential for the implementation of subtractive and additive manufacturing processes such as 3D printing, solid modeling, CAD/CAM and CNC. Hands-on learning opportunities provide an authentic reference for career exploration in a modern manufacturing environment.

Accreditation

ENGINEERING MANAGEMENT
Associate of Applied Science degree in Operations Engineering Technology • tri-c.edu/OET

This program prepares students to become effective supervisors or managers in a manufacturing/production setting. Production, logistics, basic design principles and basic business practices are covered. Graduates may choose to transfer earned credits to various four-year bachelor’s degree programs aimed at production management.

Graduates will learn how to apply knowledge of regulated environments and understand various industry standards, documentation and report writing. Curriculum also includes basic lean concepts and tools, and introductory Six Sigma concepts and methods for identifying and eliminating waste.

CONSTRUCTION ENGINEERING TECHNOLOGY
Associate of Applied Science degree • tri-c.edu/CNST

This program prepares students for technical and leadership roles in the construction industry. Coursework covers contract documents, construction methods, scheduling and estimating for residential and light commercial building. Students utilize modern, industry-based software and field instruments in a laboratory environment. Co-op positions may be available with local contractors and architectural/engineering firms.

Graduates are prepared to work as technical liaisons between design professionals and the construction trades and may be employed by construction contractors, architectural/engineering firms or public building agencies. They may also choose to continue their education in construction engineering or construction management at a four-year college or university.

MECHANICAL ENGINEERING TECHNOLOGY
Associate of Applied Science degree • tri-c.edu/MET

This program addresses the design, development, manufacturing, installation, measurement, testing, operation and control, maintenance and sales of mechanical devices and systems. With emphasis on hands-on learning and the use of current computer-aided techniques, students learn to create and interpret engineering drawings and study manufacturing practices and procedures, as well as product design principles.

Graduates are employed in a variety of industries — including automotive, manufacturing, aerospace, construction, transportation, power generation and petrochemical — as well as in research and development laboratories.

Accreditation
Associate of Applied Science Degree Options

• Automated Manufacturing
• Biomedical Engineering Technology
• Construction Engineering Technology
• Digital Communications Engineering Technology
• Electrical/Electronic Engineering Technology
• Engineering Management
• Integrated Systems Engineering Technology
• Manufacturing Industrial Engineering Technology
• Mechanical Engineering Technology
• Operations Engineering Technology

Certificate Programs

• 3D Digital Design and Manufacturing Technology
• Computer-Aided Drafting
• Computer Integrated Manufacturing
• Construction Project Management
• Electronic Technician
• Industrial Management Technology
• Machine Tools Operation
• Quality Control

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