

# ENGINEERING TECHNOLOGY

Specialization: Medical Technology and Healthcare Systems



## ABOUT THIS PROGRAM

### IS THIS PROGRAM FOR YOU?

If you are interested in understanding the design of medical equipment and developing the skills needed to maintain the devices used in hospitals and clinics related to patient care, then this program is for you.

### A PROGRAM TO FUEL YOUR FUTURE

Explore the technology that powers medical equipment and enables access to healthcare systems. Students will learn about medical instrumentation with principles of biomedical devices used in healthcare systems and medical imaging technologies. You'll have the opportunity to immerse yourself in the Internet of Things (IoT) world and obtain hands-on experience with IoT, cloud, software and security technologies and systems.

### CAREER OPPORTUNITIES

Graduates of DeVry's [Engineering Technology associate degree program with a specialization in Medical Technology and Healthcare Systems](#) may consider, but are not limited to, the following careers:

- Biomedical Technician
- Biomedical Engineering Technician
- Computer User Support Specialist
- Electrical and Electronic Engineering Technologists and Technicians
- Electro-Mechanical and Mechatronics Technologists and Technicians
- Engineering Technologist General
- Engineering Technologist and Technicians, Except Drafters, All Other
- Field Service Technician
- Industrial Engineering Technologists and Technicians
- Medical Equipment Repairer
- Repair Technician

## WHAT YOU'LL LEARN

### ESSENTIALS

- Communicate methods and findings
- Collaborate in a dynamic work environment
- Solve complex problems
- Analyze numerical data
- Apply appropriate technologies

### TECH CORE

- Illustrate the basics of computing and explain the value of data and troubleshooting
- Install and configure operating systems using Command Line Interface (CLI)
- Solve technical problems using an algorithmic approach and basic programming and coding methods.
- Network, secure, and deploy digital devices and sensors into the internet of things ecosystem

### PROGRAM

- Design and analyze circuits ensuring proper construction, voltage and currents
- Understand the essential components of control systems designs and how to apply ladder logic to debug or maintain applications

### SPECIALIZED

- Learn basic medical terminology, human body structure and processes
- Understand the design, function and features of common medical devices and healthcare systems
- Understand the basic components of various imaging systems and how to maintain/troubleshoot them to ensure image quality
- Transfer and manipulate medical record and device information over networks

## QUICK FACTS

**64**  
CREDIT HOURS  
minimum credit hours  
required for graduation

**21**  
COURSES

### ACCREDITATION MATTERS

ETAC of ABET accredits postsecondary, degree-granting programs that meet their global standards for technical education. This is a global mark of quality that is respected by employers and professional associations within the Engineering Technology field. The Associate in Engineering Technology degree program is accredited by The Engineering Technology Accreditation Commission of ABET (ETAC of ABET) [www.abet.org](http://www.abet.org).



### CERTIFICATION EXAM ALIGNED CURRICULUM

Experience elements of our technology curriculum focused on real-world industry standards and prepare for certification opportunities to help validate your knowledge and skills, such as:

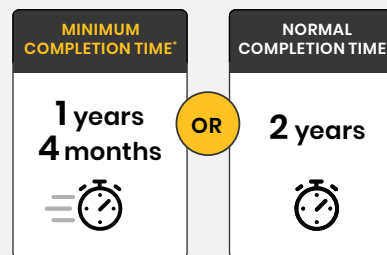
- CompTIA Linux+
- CompTIA A+
- CompTIA ITF+
- PCEP Certified Entry-Level Python Programmer

**SKILLS  
FOCUSED**

### ACCELERATE ON YOUR SCHEDULE

Choose the schedule that best fits your goals and commitments. You can earn your **Associate Degree** in as little as **1 years 4 months**.

Or, follow a normal schedule and complete your program in 2 years.



\* Minimum completion time does not include breaks and assumes 3 semesters of year-round, full-time enrollment in 15-17 credit hours a semester per 12-month period.

\*\* Normal completion time includes breaks and assumes 2 semesters of enrollment in 15-17 credit hours per semester per 12-month period.

# Engineering Technology – Medical Technology and Healthcare Systems

## ESSENTIALS

**26**  
CREDIT HOURS

### COMMUNICATION SKILLS

ENGL112 Composition

*Select one*

SPCH275 Public Speaking

SPCH276 Intercultural Communication ☼

### HUMANITIES

*Select one*

ETHC232 Ethical and Legal Issues in the Professions

ETHC334 Diversity, Equity and Inclusion in the Workplace ☼

### SOCIAL SCIENCES

SOCS185 Culture and Society ☼

### MATHEMATICS AND NATURAL SCIENCES

MATH114 Algebra for College Students

TECH204 Everyday Physics

### PERSONAL AND PROFESSIONAL DEVELOPMENT

CARD205 Career Development

COLL148 Critical Thinking and Problem-Solving

### BE AN ACTIVE PART OF AN INCLUSIVE FUTURE



Customize your curriculum by choosing Diversity, Equity and Inclusion (DE&I) course alternates for your Communication Skills, Humanities and Social Science courses. These course options – denoted by this icon ☼ – highlight relevant topics to help empower you to promote an inclusive workplace.

## TECH CORE

**12**  
CREDIT HOURS

### TECH CORE

CEIS101 Introduction to Technology and Information Systems

CEIS106 Introduction to Operating Systems

CEIS110 Introduction to Programming

CEIS114 Introduction to Digital Devices

## SPECIALIZED

**10**  
CREDIT HOURS

### MEDICAL TECHNOLOGY AND HEALTHCARE SYSTEMS

BIOS105 Fundamentals of Human Anatomy and Physiology

*Select two*

BMET314 Medical Instrumentation

BMET316 Medical Imaging Technology

BMET318 Telemedicine

## PROGRAM

**16**  
CREDIT HOURS

### PROGRAM FOCUS

ECT226 Electronic Device and System Foundations

ECT286 Automation and Control

*Three of:*

ECT308 Introduction to Computer-Aided Design

ECT313 Generative Design

ECT315 Industrial IoT

ECT320 Manufacturing Processes and System

ECT325 Electromechanical Systems

NETW191 Fundamentals of Information Technology and Networking

NETW212 Introduction to Cloud Computing

SEC285 Fundamentals of Information System Security

TECH301 Design of Experiments

### CAREER PREPARATION

CEIS298 Introduction to Technical Project Management

**Earn a credential at every step.**

**ASSOCIATE**

64

  
CREDIT HOURS

**BACHELOR'S**

+62  
CREDIT HOURS  
REMAINING

126

  
TOTAL

**HOW DO CREDENTIALS STACK?**

This Associate in Engineering Technology with a specialization in Medical Technology and Healthcare Systems can serve as a steppingstone to our Engineering Technology bachelor's degree. If you choose to continue on with your education, all credits apply to this credential. Build your confidence – and your resume – when you start your journey at DeVry.\*

\*The figures displayed represent the minimum credit hours required for graduation. Additional coursework may be necessary to complete program requirements. At the time of application to the next credential level, an evaluation of qualifying credits will occur and the most beneficial outcome will be applied. Future programmatic changes could impact the application of credits to a future program. Refer to the academic catalog for details.

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