

# Biomedical Electronics Technology

PROGRAM CODE: 10-605-6



Associate Degree

**Location:** Downtown Milwaukee Campus**Start Dates:** August and January**Admission Requirements:** High school diploma or equivalent, criminal background check, 10-panel drug test, health exam, immunizations**Academic Preparedness Requirement:** One year of high school-level algebra**Financial Aid Eligible:** Yes. Use code 003866 at fafsa.gov.

## Program Description

Through coursework and lab work focused on electrical safety, medical gas safety and the clinical application of electronics and electromechanical devices, you will prepare for a technical career in the healthcare field.

## Career Outlook

Jobs are competitive in the Milwaukee area. Employment opportunities include hospitals, equipment manufacturers and independent service organizations.

## Program Learning Outcomes

- Manage medical equipment and systems.
- Identify the function and operation of various types of imaging equipment.
- Problem-solve electronic circuits and systems.
- Demonstrate a competency with computers and networks used in medical equipment.
- Apply principles of anatomy, physiology and medical terminology.
- Demonstrate safety precautions and practices with medical equipment.

**Complete Program Details****QUESTIONS?** 414-297-6319 or [stempathway@matc.edu](mailto:stempathway@matc.edu)

COURSES	CREDITS
QETECH-200 Fundamentals of Engineering .....	3
ELCTEC-110 DC/AC Electronics 1 ‡ ^ .....	4
ELCTEC-130 Digital Electronics ‡ ^ .....	3
ENG-195 Written Communication ‡ .....	3
(or) ENG-201 English 1 ‡	
MATH-115 College Technical Mathematics 1 ‡ ^ .....	5
(or) take MATH-113 College Technical Mathematics 1A and MATH-114 College Technical Mathematics 1B	
BIOSCI-189 Basic Anatomy .....	3
ELCTEC-111 DC/AC Electronics 2 ‡ ^ .....	3
ELCTEC-120 Electronic Devices ‡ ^ .....	4
ELCTEC-186 Fabrication Techniques ‡ .....	1
ENG-197 Technical Reporting ‡ .....	3
(or) Any 200-level ENG or SPEECH course	
MATH-116 College Technical Mathematics 2 ‡ .....	4
ELCTEC-134 Biomedical Instrumentation ‡ .....	4
ELCTEC-137 Biomedical Electronics Technician Practicum 1 ‡ .....	2
ELCTEC-140 Microprocessors ‡ ^ .....	3
ELCTEC-150 Data Communications and Networking ‡ .....	3
SOCSCI-197 Contemporary American Society .....	3
(or) Any 200-level HIST or SOCSCI course	
ELCTEC-133 Medical Imaging Equipment ‡ .....	4
ELCTEC-138 Biomedical Electronics Technician Practicum 2 ‡ .....	2
ELCTEC-139 Advanced Biomedical Electronics ‡ .....	3
ELECTIVE (One credit) .....	1
PSYCH-199 Psychology of Human Relations .....	3
(or) Any 200-level PSYCH course	

## CREDITS

Total credits needed to complete this degree

64

‡ Prerequisite required.

^ Counts toward earning the Electronics Technician Fundamentals technical diploma.

Program curriculum requirements are subject to change.

Official Wisconsin Technical College System program title: Bio-Medical Electronics.

Current MATC students should consult their Academic Program Plan for specific curriculum requirements.

MATC courses are offered in person, entirely online or partially online. Check each course's delivery options in Self-Service at [selfservice.matc.edu](https://selfservice.matc.edu).