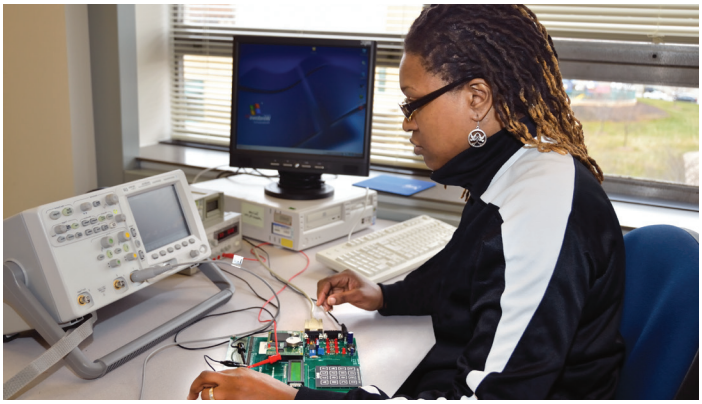
STEM Academic & Career Pathway

Electronic Technology – Automation

PROGRAM CODE: **10-605-1**

AD
Associate Degree



Location: Downtown Milwaukee Campus

Start Dates: August and January

Admission Requirement: High school diploma or GED, one year of high school-level geometry and one year of high school-level algebra, or equivalent

Transfer: Will transfer to one or more four-year institutions

Financial Aid Eligible: Yes.
Apply at fafsa.gov. Use School Code 003866.

Program Description

This program features industry-relevant hands-on labs and is designed to prepare students for a variety of occupations in the field of electronics.

Career Outlook

Electronic technology is a rapidly changing field, which creates great opportunities. Skills acquired from this program provide a strong foundation to keep pace with the technology.

Program Learning Outcomes

- Apply electronic theory to practice.
- Operate test equipment.
- Build electronic circuits and systems.
- Evaluate the operation of electronic circuits or systems.
- Communicate technical information.

COURSE		CREDITS
QETECH-200	Fundamentals of Engineering	3
ELCTEC-110	DC/AC Electronics 1 ‡ ^	4
ELCTEC-130	Digital Electronics ‡ ^	3
ENG-195	Written Communication ‡ (or) ENG-201 English 1 ‡	3
MATH-115	College Technical Mathematics 1 ‡ ^	5
ELCTEC-111	DC/AC Electronics 2 ‡ ^	3
ELCTEC-120	Electronic Devices ‡ ^	4
ELCTEC-140	Microprocessors ‡ ^	3
ELCTEC-186	Fabrication Techniques ‡	1
MATH-116	College Technical Mathematics 2 ‡	4
ELCTEC-150	Data Communications and Networking ‡	3
ELCTEC-173	Computing With C ‡	3
ELCTEC-195	Motor Controls ‡	4
ELCTEC-196	PLC Systems Basic ‡	3
ENG-197	Technical Reporting ‡	3
ELCTEC-192	Fluid Power ‡	2
ELCTEC-198	PLC Systems Advanced ‡	3
ELCTEC-199	Automated Systems ‡	3
ELECTIVE	(One credit) Any 100-, 200- and/or 300-level courses in any subject. ELCTEC-100 and ELCTEC-101 are suggested	1
PSYCH-199	Psychology of Human Relations (or) PSYCH-231 Introductory Psychology	3
SOCSCI-197	Contemporary American Society (or) SOCSCI-203 Introduction to Sociology	3

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.

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

Official Wisconsin Technical College System program title: Electronics.

Complete Program Details

QUESTIONS? 414-297-6319 or stempathway@matc.edu

MATC is an Affirmative Action/Equal Opportunity Institution and complies with all requirements of the Americans With Disabilities Act. MATC is accredited by the Higher Learning Commission, Commission on Institutions of Higher Education, the national standard in accrediting colleges and schools for distinction in academics and student services. **2024-25**

WISCONSIN TECHNICAL COLLEGE SYSTEM — MEMBER COLLEGE