

Civil Engineering Technology

PROGRAM CODE: 10-607-1



Associate Degree

**Location:** Downtown Milwaukee Campus**Start Date:** August**Admission Requirement:** High school diploma or equivalent**Academic Preparedness Requirement:** One year of high school-level algebra**Financial Aid Eligible:** Yes. Use code 003866 at fafsa.gov.

Program Description

Assist civil engineers in planning, designing, scheduling, estimating, surveying and inspecting construction projects. Also, specific elective surveying courses provide an option for a land surveying career.

Career Outlook

Civil engineering technicians and surveying technicians are needed in all phases of project development.

Program Learning Outcomes

- Utilize CAD and sketching techniques to produce engineering documents.
- Perform design and routine testing procedures related to construction materials.
- Utilize land surveying instruments to collect data necessary to produce topographic maps, establish horizontal and vertical control, and layout civil engineering projects.
- Operate computer software and hardware to solve technical problems.
- Apply elements of design to roads, subdivision layout, and storm and sanitary sewer systems.



Complete Program Details

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

COURSES

CREDITS

CIVIL-101	Civil Engineering Drawing ^	2
CIVIL-102	Introduction to AutoCAD ^	2
CIVIL-105	Computer Applications ^	2
CIVIL-135	Public Works Engineering and Estimating	3
CIVIL-155	Surveying 1 ^	2
MATH-115	College Technical Mathematics 1 ‡ ^	5
	(or) MATH-201 College Algebra ‡	
CIVIL-106	Intermediate AutoCAD ‡ ^	2
CIVIL-147	Soils and Materials Testing ‡	3
CIVIL-156	Surveying 2 ‡ ^	2
ENG-195	Written Communication ‡ ^	3
	(or) ENG-201 English 1 ‡	
MATH-116	College Technical Mathematics 2 ‡	4
	(or) MATH-202 Trigonometry 1 ‡	
CIVIL-110	Introduction to Civil 3D ‡ ^	2
CIVIL-141	Statics and Strength of Materials ‡	4
CIVIL-157	Route and Highway Surveying ‡ ^	3
ELECTIVES	(Three credits)	3
ENG-197	Technical Reporting ‡	3
	(or) Any 200-level ENG or SPEECH course	
PSYCH-199	Psychology of Human Relations	3
	(or) Any 200-level PSYCH course	
CIVIL-142	Structures ‡	3
CIVIL-148	Structural Detailing ‡	3
CIVIL-158	Land Surveying ‡	2
CIVIL-170	Sewer and Water Systems ‡	3
ELECTIVES	(Two credits)	2
SOCSCI-197	Contemporary American Society	3
	(or) Any 200-level SOCSCI or HIST course	

CREDITS

Total credits needed to complete this degree

64

‡ Prerequisite required.

^ Counts toward earning the Surveying and Mapping technical diploma.

Program curriculum requirements are subject to change.

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.

This program is approved through the Professional Land Surveyor Section of the Wisconsin Examining Board of Architects, Landscape Architects, Professional Engineers, Designers and Professional Land Surveyors; Department of Safety and Professional Services, 4822 Madison Yards Way, Madison, WI 53705; 608-266-2112; <https://dsps.wi.gov/Pages/BoardsCouncils/AE/LandSurveyor/Default.aspx>.