

# Civil Engineering Technology

PROGRAM CODE: 10-607-1



Associate Degree



COURSE	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

**Location:** Downtown Milwaukee Campus

**Start Dates:** August

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

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

**Financial Aid Eligible:** Yes.

Apply at [fafsa.gov](https://fafsa.gov). Use School Code 003866.

### 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](mailto:stempathway@matc.edu)

### 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.**

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, P.O. Box 8366, Madison, WI 53708-8366; 608-266-2112; <https://dsps.wi.gov/Pages/BoardsCouncils/AE/LandSurveyor/Default.aspx>.