

Surveying and Mapping

PROGRAM CODE: 30-607-1

TD

Technical Diploma



Location: Downtown Milwaukee Campus

Start Dates: August and January

Admission Requirement: High school diploma or equivalent

Academic Preparedness Requirement: One year of high school-level algebra (grade C or higher)

Financial Aid Eligible: Yes. Use code 003866 at fafsa.gov.

Program Description

As a surveying technician, graduates of this program typically work under the direction of an engineer or surveyor to operate surveying equipment, record measurements and produce drawings showing boundaries, key locations, elevations and other terrain features.

Career Outlook

Surveying and mapping technicians are needed in all phases of construction, and employer demand is good in the current job market.

Program Learning Outcomes

- Operate surveying instruments to collect data on location.
- Operate Trimble data collection systems, GPS receivers and robotic total stations.
- Draft and analyze traverse field data using Autodesk Civil 3D software.
- Illustrate basic drawings of circular horizontal curves, vertical curves, plans, profiles and cross-sections.



Complete Program Details

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

COURSES

COURSES	CREDITS
CIVIL-101 Civil Engineering Drawing.....	2
CIVIL-102 Introduction to AutoCAD.....	2
CIVIL-105 Computer Applications	2
CIVIL-155 Surveying 1	2
MATH-115 College Technical Mathematics 1 ‡	5
(or) MATH-201 College Algebra ‡	
CIVIL-106 Intermediate AutoCAD ‡	2
CIVIL-156 Surveying 2 ‡	2
ENG-195 Written Communication ‡	3
(or) ENG-201 English 1 ‡	
CIVIL-110 Introduction to Civil 3D ‡	2
CIVIL-157 Route and Highway Surveying ‡	3

CREDITS

Total credits needed to complete this diploma

25

‡ Prerequisite required.

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