# **Surveying and Mapping**

PROGRAM CODE: 30-607-1



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.

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



**Complete Program Details** 

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



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