



## Civil Technology A.A.S.

Curriculum Code: 0178

Effective: Fall 2020 – Summer 2025

### Description

Civil engineering technicians apply theory and principles of civil engineering in planning, designing, and overseeing the construction and maintenance of structures and facilities in the highway system. They may work at construction or survey sites, offices or in testing labs with engineers, surveyors, supervisors, managers, or skilled trade workers. The successful civil engineering technician must have a working knowledge of college algebra and trigonometry, civil drafting, communications, construction materials, surveying, and must be computer literate. Civil engineering technicians work for construction, engineering, and architecture firms, government agencies, mapping agencies, and private petroleum and mining companies. Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

### Additional Information

Students who have completed ELTE 102, HVAC 102, METS 102 or WELD 102 with a grade of 2.0 or higher may substitute one of these courses for DCTM 102.

Students will need to talk to a program advisor before enrolling in the Civil Technology Internship.

### Contact Information

Contact the Civil Technology Program at the West Campus Building, Room M103, telephone number 517-483-5338 or Student Services West Campus, West Campus Building, Room M106, telephone number 517-267-5452.

### General Education-Applied Degree, Recommended Choices

(For the full list of options, see [General Education](#))

- English Composition – *Select one*  
ENGL 121, Composition I, 4 credits / 4 billing hours  
ENGL 124, Technical Writing, 3 credits / 3 billing hours
- English Composition (Second Course)/Communications or Applied Communication – *Select one*  
COMM 110, Communication in the Workplace, 3 credits / 3 billing hours  
COMM 120, Dynamics of Communication, 3 credits / 3 billing hours  
COMM 130, Fundamentals Public Speaking, 3 credits / 3 billing hours
- Humanities and Fine Arts/Social Sciences/Applied Social Sciences– *Select one*  
GEOG 200, World Regional Geography, 4 credits / 4 billing hours  
MGMT 234, Diversity in the Workplace, 3 credits / 3 billing hours  
SOCL 120, Introduction to Sociology, 4 credits / 4 billing hours

- Mathematics or Applied Mathematics – *Select one*  
MATH 115, Technical Math II, 4 credits / 4 billing hours
- Natural Sciences Lab or Applied Science and Technology Lab – *Select one*  
BIOL 120, Environmental Science, 4 credits / 6 billing hours  
GEOL 230, Environmental Geology, 4 credits / 6 billing hours  
ISCI 131, Integrated Physical Science, 4 credits / 6 billing hours

### Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
CIVL 101	Civil Drafting	3 / 4
CIVL 110	Density Certification	2 / 2
CIVL 120	Surveying	4 / 6
CIVL 124	Route Survey	4 / 6
CIVL 131	Traffic Technology	3 / 3
CIVL 135	Soils Technology	3 / 3
CIVL 141	Site Inspection	3 / 3
CIVL 143	Site Dsgn & Layout/Civil Techn	3 / 4
CIVL 241	Statics/Strength of Materials	4 / 5
CIVL 290	Civil Technology Internship	2 / 2
DCTM 100	Intro to the Built Environment	3 / 4
DCTM 102	Industrial/Construction Safety	2 / 3
DCTM 103	Codes and Specifications	3 / 3
GSCI 210	Global Positioning Systems	3 / 4
METS 140	Rigging	3 / 4.5

### Total Credit Hours

62-64 credits / 75.5-77.5 billing hours

### Recommended Course Sequence

Semester I - Fall	Semester II - Spring
CIVL 101	Gen Ed – English Composition
CIVL 120	Gen Ed – Mathematics or Applied Mathematics
DCTM 100	CIVL 110
DCTM 102	CIVL 124
DCTM 103	CIVL 141

Semester III – Fall	Semester IV - Spring
Gen Ed – English Comp (Second Course)/ Communications or Applied Communications	Gen Ed – Natural Sciences Lab or Applied Science and Technology Lab CIVL 135 CIVL 143

Semester III – Fall	Semester IV - Spring
Gen Ed – Humanities and Fine Arts or Social Sciences or Applied Social Sciences CIVL 131 GSCI 210 METS 140	CIVL 241

Semester V - Summer
CIVL 290