



Civil Technology A.A.S.

Career Community: Building and Construction Trades

Curriculum Code: 0178

Effective: Fall 2022 – Summer 2027

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.

Milestone

In addition to the required General Education courses in Math and English, completion of CIVL 101 and CIVL 120 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

Additional Information

Students who have completed ELTE 102, HVAC 102, METS 102, TECH 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 Courses

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

- English Composition or Applied English – *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 or Social Sciences or 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	Construction Safety	2 / 3
DCTM 103	Codes and Specifications	3 / 3
GSCI 210	Global Positioning Systems	3 / 4
METS 140	Rigging	3 / 4.5

Minimum Total Credit Hours

62 credits / 75.5 billing hours

Recommended Course Sequence

Semester I - Fall
CIVL 101 – Milestone course
CIVL 120 – Milestone course
DCTM 100
DCTM 102
DCTM 103

Semester II - Spring
Gen Ed – English Composition or Applied English
Gen Ed – Mathematics or Applied Mathematics
CIVL 110
CIVL 124
CIVL 141

Semester III – Fall
Gen Ed – English Comp (Second Course)/ Communications or Applied Communications
Gen Ed – Humanities and Fine Arts or Social Sciences or Applied Social Sciences
CIVL 131
GSCI 210
METS 140

Semester IV - Spring
Gen Ed – Natural Sciences Lab or Applied Science and Technology Lab
CIVL 135
CIVL 143
CIVL 241

Semester V - Summer
CIVL 290

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.