



Civil Technology A.A.S.

Career Community: Building and Construction Trades

Curriculum Code: 0178

Effective: Fall 2026 – Summer 2031

Purpose of the Major

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

If students have already completed TECH 102 with a grade of 2.0 or higher, that will satisfy the DCTM 102 requirement.

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

Contact Information

For further information, including career options, course substitutions and waivers, etc., 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.

Major Required Courses - *A minimum grade of 2.0 is required for General Education courses.*

Course Code	Course Title	Credit / Billing Hours
ACAD 100	First-Year Experience	1 / 1
CIVL 101	Civil Drafting	3 / 4

Course Code	Course Title	Credit / Billing Hours
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
COMM 110 or COMM 120 or COMM 130 or COMM 200 or COMM 240 or COMM 260 or ENGL 122 or ENGL 132	Communication in the Workplace Dynamics of Communication Fundamentals Public Speaking Small Group Communication Interpersonal Communication Nonverbal Communication Composition II Honors Composition II	3 / 3 3 / 3 3 / 3 3 / 3 3 / 3 3 / 3 4 / 4 4 / 4
DCTM 100	Intro to the Built Environment	3 / 4
DCTM 102	Industrial/Construction Safety	2 / 3
DCTM 103	Codes and Specifications	3 / 3
ENGL 121 or ENGL 124 or ENGL 127 or ENGL 131	Composition I Technical Writing Business Writing Honors Composition I	4 / 4 3 / 3 3 / 3 4 / 4
GSCI 210	Global Positioning Systems	3 / 4
MATH 115 or MATH 119 or MATH 120 or MATH 126 or MATH 141 or MATH 151 or STAT 170	Technical Mathematics Math – Applications for Living College Algebra Precalculus Calculus with Applications Calculus I Introduction to Statistics	4 / 4 4 / 4 4 / 4 5 / 5 4 / 4 4 / 4 4 / 4
METS 140	Rigging	3 / 4.5

Notes:

ACAD 100 may be waived when students meet one of the following College-approved waiver criteria:

- Completion of 12 college-level credits with minimum grades of 2.0 shown on the LCC transcript (including transfer, if applicable), or
- Employment in the field of, or a field related to, the degree being sought, or
- For Health Careers students, successful completion of CHSE 100.

Students wishing to waive ACAD 100 should contact their advisor.

Students considering future transfer, choose MATH 119, MATH 120, MATH 126, or STAT 170.

Major Required Courses, Limited Choice – Humanities and Fine Arts or Social Sciences or Applied Social Sciences - *Select one as recommended or select one from [LCC General Education Applied Degrees](#): Humanities and Fine Arts or Social Sciences or Applied Social Sciences. A minimum grade of 2.0 is required for General Education courses.*

Course Code	Course Title	Credit / Billing Hours
GEOG 200	World Regional Geography	4 / 4
MGMT 234	Diversity in the Workplace	3 / 3
SOCL 120	Introduction to Sociology	4 / 4

Note: Students considering future transfer, choose GEOG 200 or SOCL 120.

Major Required Courses, Limited Choice – Natural Sciences or Applied Sciences and Technology Lab - *Select one lab course as recommended or select one from [LCC General Education Applied Degrees](#): Natural Sciences or Applied Sciences and Technology Lab. A minimum grade of 2.0 is required for General Education courses.*

Course Code	Course Title	Credit / Billing Hours
BIOL 120	Environmental Science	4 / 6
CHEM 135	Chemistry in Society	4 / 5
PHYS 120	The Art of Physics	4 / 5
PHYS 200	Intro to Applied Physics	4 / 5
PHYS 221	Introductory Physics I	4 / 6

General Education-Applied Degrees

- English Composition or Applied English
Major Required Courses will meet this requirement.
- English Composition (second course)/Communication or Applied Communication
Major Required Courses will meet this requirement.
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences
Major Required Limited Choice Courses will meet this requirement.
- Mathematics or Applied Mathematics
Major Required Courses will meet this requirement.
- Natural Sciences or Applied Science and Technology Lab
Major Required Limited Choice Courses will meet this requirement.

Additional Credits

After completing the course and credit requirements as noted on this pathway, students who fall short of the 60-credit minimum required for an Associate Degree may select any course(s) needed to reach 60 credits, except those courses noted in number 7 in the [Graduation](#)

[Requirements for Associate Degrees](#). Students are encouraged to use Degree Works and meet with an Advisor to ensure all requirements are met and for course recommendations.

Minimum Total Credit Hours

62 credits / 74.5 billing hours

Recommended Course Sequence

Semester I - Fall
ACAD 100
CIVL 101 – Milestone course
CIVL 120 – Milestone course
DCTM 100
DCTM 102
DCTM 103
Semester II - Spring
CIVL 110
CIVL 124
CIVL 141
ENGL 121 or ENGL 124 or ENGL 127 or ENGL 131
MATH 115 or MATH 119 or MATH 120 or MATH 126 or MATH 141 or MATH 151 or STAT 170
Semester III – Fall
CIVL 131
COMM 110 or COMM 120 or COMM 130 or COMM 200 or COMM 240 or COMM 260 or ENGL 122 or ENGL 132
GSCI 210
METS 140
Limited Choice – Humanities and Fine Arts or Social Sciences or Applied Social Sciences
Semester IV - Spring
CIVL 135
CIVL 143
CIVL 241
Limited Choice – Natural Sciences Lab or Applied Sciences and Technology Lab
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 titles, and make course

changes as needed, without prior notice. The College also reserves the right to discontinue programs when warranted.