Civil Technology A.A.S.
Career Community: Building and Construction Trades
Curriculum Code: 0178
Effective: Fall 2023 – Summer 2028

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
If students have already completed ELTE 102, HVAC 102, METS 102, TECH 102, or WELD 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.

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)/Communication 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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit / Billing Hours</th>
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</thead>
<tbody>
<tr>
<td>CIVL 101</td>
<td>Civil Drafting</td>
<td>3 / 4</td>
</tr>
<tr>
<td>CIVL 110</td>
<td>Density Certification</td>
<td>2 / 2</td>
</tr>
<tr>
<td>CIVL 120</td>
<td>Surveying</td>
<td>4 / 6</td>
</tr>
<tr>
<td>CIVL 124</td>
<td>Route Survey</td>
<td>4 / 6</td>
</tr>
<tr>
<td>CIVL 131</td>
<td>Traffic Technology</td>
<td>3 / 3</td>
</tr>
<tr>
<td>CIVL 135</td>
<td>Soils Technology</td>
<td>3 / 3</td>
</tr>
<tr>
<td>CIVL 141</td>
<td>Site Inspection</td>
<td>3 / 3</td>
</tr>
<tr>
<td>CIVL 143</td>
<td>Site Dsgn &amp; Layout/Civil Techn</td>
<td>3 / 4</td>
</tr>
<tr>
<td>CIVL 241</td>
<td>Statics/Strength of Materials</td>
<td>4 / 5</td>
</tr>
<tr>
<td>CIVL 290</td>
<td>Civil Technology Internship</td>
<td>2 / 2</td>
</tr>
<tr>
<td>DCTM 100</td>
<td>Intro to the Built Environment</td>
<td>3 / 4</td>
</tr>
<tr>
<td>DCTM 102</td>
<td>Construction Safety</td>
<td>2 / 3</td>
</tr>
<tr>
<td>DCTM 103</td>
<td>Codes and Specifications</td>
<td>3 / 3</td>
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<tr>
<td>GSCI 210</td>
<td>Global Positioning Systems</td>
<td>3 / 4</td>
</tr>
<tr>
<td>METS 140</td>
<td>Rigging</td>
<td>3 / 4.5</td>
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</tbody>
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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)/ Communication or Applied Communication
- 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._