



## Civil Engineering Technology Diploma - 51 credits

Program Area: Civil Engineering (Fall 2023)

\*\*\*REMEMBER TO REGISTER EARLY\*\*\*

### Program Description

In the Civil Engineering Technology program, students learn skills they can use in a career assisting Civil Engineers and Land Surveyors. The student will find a wide range of opportunities in all phases of construction, design, and surveying. The course of instruction includes route surveying, property descriptions, quantity calculations, material testings and CAD (Computer Aided Design) to design roads, building sites, and property subdivisions.

This 51-credit Diploma seamlessly transfers to the Civil Engineering Technology AAS (60 credits).

### Program Outcomes

- Determine accuracy of their surveying level work
- Verify the accuracy of their total station data
- Perform standard survey calculations
- Develop Site and Highway plan sets
- Research related information in both print and electronic formats
- Set-up and create drawings using CAD

### Pre-program Requirements

Successful entry into this program requires a specific level of skill in the areas of English, mathematics, and reading. Program entry will depend, in part, on meeting the prerequisites listed below:

#### English/Reading:

- Eligible for ENGL 1106 – College Composition I, or
- Completion of ENGL/READ 0950/0955 (or equivalent or higher). ENGL/READ 0950/0955 may be taken concurrently with Semester I coursework.

#### Mathematics:

- Eligible for MATH 0970 - Intermediate Algebra, or
- Completion of MATH 0950/0955 (or equivalent or higher). MATH 0950/0955 may be taken concurrently with Semester I coursework.

There are other ways to qualify. Visit [Course Placement](https://lsc.edu/course-placement) (lsc.edu/course-placement) to find out more.

### Required Courses

Number	Name	Credits	Term
CETT 1400*	Introduction to Civil Engineering Technology	3	
CETT 1402*	Introduction to Surveying	3	
CETT 1410*	Introduction to Material Testing**	3	
CETT 1450*	Engineering Graphics	4	
CETT 1420*	Route Survey	3	
CETT 1430*	Civil CAD Applications	4	
CETT 1440*	Engineering Problem Solving	2	
CETT 2440*	Civil Estimating	3	
CETT 2407*	Engineering Technology Internship	1-3	
CETT 2400*	Intermediate Survey	3	
CETT 2410*	Stormwater Management	4	
CETT 2430*	Site Development	3	
CETT 2420	Land Survey Systems	3	
CETT 2450*	Highway Design	3	
CETT 2460*	Advanced Survey	3	
<b>MnTC General Education Requirements</b>			
Goal Area 1	Communication (3 credit minimum)		
Goal Area 3 OR Goal Area 4	Natural Sciences OR Math (3 credit minimum)	6	

### Total Credits

**51**

\*Requires a prerequisite or a concurrent course

\*\*Taking three of the following four MnDOT certification courses can be substituted for CETT 1410: CETT 2600 Aggregate Production I; CETT 2610 Grading and Base I; CETT 2630 Bituminous Street I; CETT 2650 Concrete Field I.



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For interpretation of test results and selection of appropriate coursework; or general information about the program, admissions, financial aid, and getting started at LSC, contact the professional advising team at: [professional advising team](mailto:advising@lsc.edu) (advising@lsc.edu) or 218-733-7601

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For more information about the Civil Engineering Technology Diploma including course descriptions, course prerequisites, the program report, and potential career opportunities, see the [program website](https://degrees.lsc.edu/civil-engineer-technician/) (https://degrees.lsc.edu/civil-engineer-technician/)



MINNESOTA STATE

CIP Code: 15.0201  
Minnesota State Program ID: 1023  
LSC Major ID: 5391

Created: 3/1/05  
AASC Approval: 2/12/15  
Updated: 2/1/23

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