



Civil Engineering Technology AAS - 60 credits

Program Area: Civil Engineering (Fall 2022)

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

Program Description

This program prepares students for many career opportunities in the transportation field including: Surveying, Roadway Design, Computer Aided Design, and Construction. Coursework emphasizes practical applications of basic engineering and surveying principles with special attention on math, drafting, surveying, materials, technical engineering science, and computer-aided design. Typical employers include private surveyors, consulting engineers, state, county and municipal engineering departments, utility companies, U.S. Army Corps of Engineers, and other federal agencies.

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.

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	
MnTC General Education Requirements			
Goal Area 1	Communication (3 credit minimum)	15	
Goal Area 3 OR Goal Area 4	Natural Sciences OR Math (3 credit minimum)		
Goal Area 5 OR Goal Area 6	Social and Behavior Sciences OR Humanities (3 credit minimum)		
Goal Areas 1-10	General Education - Other		

Total Credits 60

*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.

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



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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

For more information about the Civil Engineering Technology AAS Degree including course descriptions, course prerequisites, and potential career opportunities, see the [program website](https://degrees.lsc.edu/land-surveyor/) (<https://degrees.lsc.edu/land-surveyor/>)



MINNESOTA STATE

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