Civil Engineering Technology • *Associate in Applied Science*

Why Choose Civil Engineering Technology?

The Civil Engineering Technology program at Ferris emphasizes instruction in soil and material testing, highway technology, engineering, design and the construction process. The technician needs a background in mathematics and physical science plus a thorough knowledge of construction materials, methods and equipment.

The program includes general education courses in English, mathematics and physics as well as related courses in soil and materials testing, surveying, estimating, plans and specifications, basic computer skills, hydrology, highway design and computer-aided design.

Graduates of the associate degree program may choose employment with construction companies or continue study toward a bachelor of science degree in the ACCE-accredited Construction Management program at Ferris.

Prepare for a Great Career

As part of a construction team, the civil engineering technician may assist the engineer in project layout, soil and material testing, cost estimating and supervision and inspection of heavy construction projects. Projects include buildings, airports, dams, powerhouses, bridges, highways, pipelines and railroads.

Precision, accuracy and clarity are important qualities for the technician. Civil engineering work requires familiarity with materials and soils and a knowledge of surveying principles, hydrology, engineering design and the construction process.

Employment in the highway/heavy construction field is expected to increase faster than the average for other occupations. Job opportunities exist with consulting engineers, material testing firms, general contractors and governmental agencies.

Admission Requirements

Admission to the College of Technology is open to high school graduates who demonstrate academic preparedness, maturity and seriousness of purpose with backgrounds appropriate to their chosen program of studies. Among first-time students in our technical programs, the average high school GPA is 2.8, and the average ACT composite score is 20.

Students entering the Civil Engineering Technology program must have a high school diploma with a 'C' average or better and be fully prepared to enroll in all required courses including mathematics and English. An ACT math subscore of 19 or better is required. Fully prepared students enter the program in the fall semester. Students not fully prepared who complete the preparatory courses during the fall semester may enter the program sequence in the winter semester, following a modified course sequence.

Graduation Requirements

The Civil Engineering Technology program at Ferris leads to an associate in applied science degree. Graduation requires a minimum 2.0 GPA in core classes, in the major and overall. Students must complete all general education requirements as outlined on the General Education website.

Required Courses		Credit Hours
General Education		
ENGL 150	English 1	3
ENGL 211	Industrial and Career Writing	3
MATH 115	Intermediate Algebra	3
MATH 120	Trigonometry	3
PHYS 211	Introductory Physics 1	4
Electives:	Cultural Enrichment	3
	Social Awareness	3
ISYS 105	Intro Micro Systems-Software	3
Major		
CETM 214	Adv Mat'ls Properties-Testing	3
CETM 215	Construction Equipment-Operat	3
CETM 226	Highway Technology	3
CETM 230	MDOT Certification Preparation	1
CETM 327	Hydraulics and Hydrology	3
CONM 111	Construction Practices	3
CONM 112	Plans and Specifications	3
CONM 116	Construction Graphics	2
CONM 121	Materials Properties-Testing	3
CONM 122	Const Surveying-Layout	3
CONM 211	Const Quantity Estimating	3
CONM 212	Soils and Foundations	3
CONM 221	Statics and Structures	3
CONM 222	Construction Administration	3
Minimum credit hours required for A.A.S. degree:		63/64

More Information
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