## **Civil Engineering Technology (9410)**

## **Associate of Applied Science Degree**

The Civil Engineering Technology program (9410) is designed to prepare students for immediate employment with architectural firms, engineering consulting firms, construction management firms, surveyors, contracting firms, residential builders, and with federal, state, county, and city governments. The diverse curriculum allows for students to gain specialized training for careers in architecture, construction, facility management, and surveying. Graduates may also transfer directly to a bachelor's degree program in civil engineering technology, construction technology, surveying, or architecture.

The Department of Civil Engineering Technology's mission is to provide a quality learning opportunity within the civil engineering technology department and to prepare students to further their education at a four-year institution and/or employment in the field of engineering technology. Graduates will be able to:

- 1. Solve technical problems typical of those encountered in civil engineering technology careers using creativity, current technology and the principles of mathematics and applied science;
- 2. perform and evaluate standard field testing and laboratory experiments, interpret and report on the results, and make recommendations for improvement in methods or materials;
- 3. work and communicate effectively in a diverse multi-disciplinary team in an industrial or academic setting; and
- 4. understand the need to pursue lifelong learning for personal and professional growth.

## Certificates are also available.

Course	Title	<b>Credit Hours</b>	
First Semester			
CIVT 1011	Construction Methods and Materials	3	
CIVT 1012	Reading Construction Drawings	1	
ENGL 1110 or ENGL 1111	English Composition I (A) <sup>1</sup> or English Composition I (B)	3	
ENGR 1000	Introduction to Engineering Technology	2	
FYEX 1000	First Year Experience	1	
MATH 1180	Technical Mathematics I	4	
PHYS 1200	Applied Physics Heat and Thermodynamics	3	
	Credit Hours	17	
Second Semester			
CIVT 1016	Civil Drafting 🎓	3	
MATH 1280	Technical Mathematics II	4	
MECT 1150	Technical Communications	3	
MECT 2110	Engineering Mechanics I	3	
PHYS 1100	Applied Physics Mechanics	3	
	Credit Hours	16	
Summer			
CIVT 2111	Surveying I 📚	2	
CIVT 2112	Surveying II 🎓	2	
	Credit Hours	4	
Third Semester			
CIVT 1021	Construction Materials Testing 📚	2	
CIVT 2017	Construction Estimating and Scheduling	3	
CIVT 2019	Applied Hydraulics	3	
MECT 2230	Strength of Materials	3	
Select courses(s) from the Arts and Humanities Electives list			
	Credit Hours	14	
Fourth Semester			
CIVT 2026	Soil and Foundations 🎓	3	



	Total Credit Hours	65
	Credit Hours	14
Select courses(s) from the Technical Electives list 😂		
CIVT 2029	Environmental Technology 😂	3
CIVT 2028	Steel and Timber Construction 🞓	3
CIVT 2027	Concrete and Masonry Construction	3

English course selection is based on placement test results (ENGL 1111 English Composition I (B) is 4 credits, only 3 credits apply to the degree).

This course is designated as a technical course in the program. Students must earn a "C" grade or higher in the course to fulfill the college's graduation requirements policy.

## **Electives**

Course	Title	<b>Credit Hours</b>
Technical Electives		
BUSM 2100	Business Law I	3
CIVT 1019	Architectural Building Codes and Standards 😂	2
CIVT 1025	Architectural Design 📚	3
CIVT 1028	Mechanical and Electrical Systems	2
CIVT 2020	Green Building and LEED (R) Rating System	3
CIVT 2024	Construction Administration and Inspection	3
CIVT 2025	Safety in Construction	2
CIVT 2030	Introduction to GPS Satellite Surveying	2
ENGR 2800	Engineering Co-Op Experience	2
GEOG 1700	Map Design and Interpretation	3
GEOG 2700	Geographic Information Science	3
<b>Arts and Humanities Electives</b>		
ARTS 1120	Art Appreciation	3
ARTS 2220	Survey of Art I	3
ARTS 2230	Survey of Art II	3
ENGL 2250	Survey of American Literature I	3
ENGL 2260	Survey of American Literature II	3
ENGL 2280	Survey of British Literature I	3
ENGL 2290	Survey of British Literature II	3
HUMX 1100	Introduction to Humanities	
MUSC 1200	Music Appreciation	3
MUSC 1215	World Music	3
MUSC 1800	Popular Music: Rock, Jazz, Country, and Hip-Hop	3
MUSC 2200	Music History and Literature I	3
MUSC 2250	Music History and Literature II	3
PHIL 1500	Introduction to Philosophy	3
PHIL 2000	Comparative Religion	3
PHOT 1000	History of Photography	3

