

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	Credit Hours
First Semester		
CIVT 1011	Construction Methods and Materials 	3
CIVT 1012	Reading Construction Drawings 	1
ENGL 1110 or ENGL 1111	English Composition I (A) ¹ 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 course(s) from the Arts and Humanities Electives list		3
Credit Hours		14
Fourth Semester		
CIVT 2026	Soil and Foundations 	3

CIVT 2027	Concrete and Masonry Construction 	3
CIVT 2028	Steel and Timber Construction 	3
CIVT 2029	Environmental Technology 	3
Select course(s) from the Technical Electives list 		2
Credit Hours		14
Total Credit Hours		65

¹ 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	Credit Hours
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
Arts and Humanities Electives		
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	3
HUMX 1200	The American Experience in the Arts	3
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

Construction Management (9413)

Associate of Applied Science Degree

This program prepares students for careers in the construction field with an emphasis on residential and light commercial building construction. The curriculum blends two major content areas: building construction technologies and business management.

Professionals in this field need to have a thorough background in site development, building methods and materials, contract documents, plans and specifications, estimating, bidding, scheduling, building codes, legal principles, project administration, inspection, quality assurance, finances, sound business practices, and people skills. Graduates can enter the workforce in management positions with homebuilders, commercial builders, equipment installers, facility managers, general contractors, specialty contractors, building departments, and construction material manufacturers and retailers. Job classifications may include estimators, superintendents, project managers, inspectors, facility managers, and sales and technical support technicians.


Course	Title	Credit Hours
First Semester		
CIVT 1011	Construction Methods and Materials 	3
ENGL 1110 or ENGL 1111	English Composition I (A) ¹ 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
1st 8 weeks		
CIVT 1012	Reading Construction Drawings 	1
2nd 8 weeks		
CIVT 1019	Architectural Building Codes and Standards 	2
Credit Hours		16
Second Semester		
BUSM 1300	Introduction to Business	3
CIVT 1016	Civil Drafting 	3
CIVT 1021	Construction Materials Testing 	2
MECT 1150	Technical Communications	3
PHYS 1100 or PHYS 1610	Applied Physics Mechanics ³ or General Physics I	3-5
Credit Hours		14-16
Third Semester		
BUSM 1620	Introduction to Entrepreneurship	3
BUSM 2100	Business Law I 	3
CIVT 1410	Building Construction I 	3
CIVT 2018	Construction Estimating 	3
CIVT 2025	Safety in Construction 	2
Select course(s) from the Arts and Humanities Electives list		3
Credit Hours		17
Fourth Semester		
BUSM 1400	Professional Personal Selling	3
CIVT 2016	Scheduling and Building Information Modeling 	3
CIVT 2020	Green Building and LEED (R) Rating System 	3
CIVT 2024	Construction Administration and Inspection 	3
Select course(s) from the Social & Behavioral Sciences list		3
Credit Hours		15
Total Credit Hours		62-64

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1 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).

2 Students planning to transfer to Kent State University must take MATH 1650 College Algebra.

3 Students planning to transfer to Kent State University must take PHYS 1610 General Physics I.

 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	Credit Hours
Arts and Humanities Electives		
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	3
HUMX 1200	The American Experience in the Arts	3
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
Social and Behavioral Sciences Electives		
ANTH 1160	Introduction to Cultural Anthropology	3
ECON 1150	Basic Economics	3
ECON 2500	Principles of Macroeconomics	3
ECON 2600	Principles of Microeconomics	3
GEOG 1500	Introduction to Geography	3
GEOG 1600	World Regional Geography	3
HIST 1150	Western Civilization I: Antiquity Through the Reformation	3
HIST 1250	Western Civilization II: Age of Revolution Through the Present	3
HIST 2150	U.S. History: Colonization Through Reconstruction	3
HIST 2250	U.S. History: Reconstruction to the Present	3
POLS 1300	U.S. National Government	3
POLS 2500	Modern Political Ideologies	3
PSYC 1500	Introduction to Psychology	3
SOCY 1150	Principles of Sociology	3

Construction Management Certificate (4131)

Course	Title	Credit Hours
BUSM 2100	Business Law I	3
CIVT 1011	Construction Methods and Materials	3
CIVT 1012	Reading Construction Drawings	1
CIVT 1016	Civil Drafting	3
CIVT 1019	Architectural Building Codes and Standards	2
CIVT 1021	Construction Materials Testing	2
CIVT 2016	Scheduling and Building Information Modeling	3
CIVT 2018	Construction Estimating	3
CIVT 2020	Green Building and LEED (R) Rating System	3
CIVT 2024	Construction Administration and Inspection	3
CIVT 2025	Safety in Construction	2
ENGR 1000	Introduction to Engineering Technology	2
ENGR 2800	Engineering Co-Op Experience	1
MATH 1180	Technical Mathematics I	4
PHYS 1100	Applied Physics Mechanics	3
Total Credit Hours		38

Facility Management Certificate (4141)

Course	Title	Credit Hours
BUSM 2100	Business Law I	3
CIVT 1011	Construction Methods and Materials	3
CIVT 1012	Reading Construction Drawings	1
CIVT 1016	Civil Drafting	3
CIVT 1019	Architectural Building Codes and Standards	2
CIVT 1028	Mechanical and Electrical Systems	2
CIVT 2017	Construction Estimating and Scheduling	3
CIVT 2024	Construction Administration and Inspection	3
CIVT 2025	Safety in Construction	2
ENGR 1000	Introduction to Engineering Technology	2
ENGR 2800	Engineering Co-Op Experience	1
MATH 1180	Technical Mathematics I	4
MECT 1150	Technical Communications	3
Total Credit Hours		32