



BS DEGREE - CODE #1102

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ADVANTAGES

- Curriculum developed with Industry.
- Strong connection to the construction of civil works.

PROGRAM EDUCATIONAL OBJECTIVES

Program educational objectives were established with the assistance of the Industrial Advisory Committee and are reviewed periodically. The civil engineering technology program produces graduates who:

- Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the civil engineering technology discipline.
- Design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the civil engineering technology discipline.
- Apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
- Conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
- Function effectively as a member as well as a leader on technical teams.

OCCUPATIONAL OPPORTUNITIES

- Civil Engineer Technician
- QC/QA Engineer Technician
- Project Engineer

EMPLOYMENT STATISTICS

New program, no employment data available.

Related Programs

- [Construction Engineering Technology](#)
- [Construction Management Technology](#)
- [Survey Engineering Technology](#)
- [Survey and Geomatics Engineering Technology](#)

ENTRANCE REQUIREMENTS/RECOMMENDATIONS

Required: Algebra, Algebra 2, Geometry, Pre-Calculus

Recommended: Physics

OFFICE OF ACCESSIBILITY SERVICES

Students who believe they need a reasonable accommodation to properly participate in this program may contact Melanie Ryan in the Office of Accessibility Services. This office may be contacted by email at oas@alfredstate.edu or by phone at 607-587-4506. Please keep in mind that some accommodations may take time to implement, so students seeking accommodations are encouraged to contact OAS as early as possible.

TECHNICAL STANDARDS

Students in the civil engineering technology program must meet the following requirements:

- Students must have the ability to use industry-standard software and computers.
- Students must have the ability to traverse varying types of construction sites.

REQUIRED EQUIPMENT

A tier 2 laptop computer will be required of all students. See laptop specifications at www.alfredstate.edu/required-laptops.

CIVIL ENGINEERING TECHNOLOGY – BS

TYPICAL EIGHT-SEMESTER PROGRAM

First			
COMP	1503	Writing Studies	3
CIVL	1021	Civil Eng Tech 1st Yr Exp	1
CIVL	1204	Surveying I	4
CIVL	1024	Civil Materials	4
MATH	1054	Precalculus	4
			16
Second			
XXXX	xxx3	Gen. Ed. Elective	3
LITR	XXX3	Literature Elective	3
PHYS	1024	General Physics I	4
MATH	1063	Technical Calculus I	3
GLST	2113	Global & Diverse Perspectives	3
			16
Third			
CIVL	3214	Geodesy	4
CIVL	3313	Civil Hydraulics	3
PHYS	2023	General Physics II	3
MATH	2074	Technical Calculus II	4
MECH	3334	Statics	4
			18
Fourth			
CIVL	4013	Strengths of Material	3
CIVL	4133	Soil Mechanics	3
CIVL	4043	Construction Management	3
CIVL	4012	Civil 3D Graphics	2
SPCH	1083	Public Speaking	3
SPCH	xxx3	OR	
SPCH	xxx3	Approved GE Equivalent	3
			14

Fifth			
CIVL	6113	Environmental Tech Concepts	3
CHEM	5013	Applied Chemical Principles	3
COMP	5703	Technical Writing II	3
MATH	7113	Economic Analy for Engr Tech	3
XXXX	xxx3	Gen Ed Elective	3
			15

Sixth			
CIVL	6103	Structural Analysis	3
CIVL	6143	Transport & Highway Design	3
CIVL	4143	Contracts, Specs, & Estimating	3
XXXX	xxx3	Gen Ed Elective	3
CIVL	7103	Land Development & Design	3
			15

Seventh			
CIVL	7303	Water & Waste Water Design	3
CIVL	7203	Ground & Storm Water Hydrology	3
CIVL	7114	Geographic Information Systems	4
	OR		
CIVL	8104	Global Positioning Systems	4
CIVL	7001	Sr Seminar & Project Design I	1
XXXX	xxx3	Gen Ed Elective	3
			14

Eighth			
MATH	7123	Statistics for Engr Tech & Sci	3
CIVL	8103	Senior Capstone Design Project	3
CIVL	6212	Construction Safety	2
CIVL	5213	Reinforced Concrete	3
XXXX	xxx3	Gen Ed Elective	3
XXXX	xxx3	Gen Ed Elective - Upper	3
			17

GENERAL NOTES:

Students receiving credit for math classes shown in the typical eight-semester program may require additional LAS electives to compete degree requirements.

Must meet seven of the 10 General Education areas.

GRADUATION REQUIREMENTS

2.0 cumulative grade point average, and department requirement of 2.0 grade point average in major courses (CIVL).