

# Civil Engineering Technology Program

## OVERVIEW OF THE PROGRAM:

The Civil Engineering Technology program at Fairmont State University prepares graduates to participate in the planning, analysis, design, construction, operation and maintenance of roadways, airports, tunnels, bridges, water supply and distribution systems and waste collection and treatment systems.

The curriculum is a highly flexible 2 + 2 curriculum. Once the two-year degree is earned, graduates may choose to enter the workforce or continue their education with two years at the baccalaureate level.

The Associate of Science degree in Civil Engineering Technology provides technical courses in the fundamentals of engineering technology, surveying, construction materials and methods, computer graphics, civil engineering graphics, construction estimating, structures, and environmental engineering technology. Most of the technical courses provide a combination of lecture and laboratory experiences. In addition, technical courses are underpinned with instruction in mathematics and science, written and oral communication skills, which are utilized subsequently in the technical courses.

The Bachelor of Science degree provides students a greater emphasis on analysis and design with specialized classes in hydraulics and hydrology, soil mechanics and foundation design, structural analysis and design, water and wastewater systems, and construction management, coupled with additional classes in science and mathematics, and attributes in Fine Arts, Health & well being, citizenship & social sciences.

## EMPLOYMENT OPPORTUNITIES:

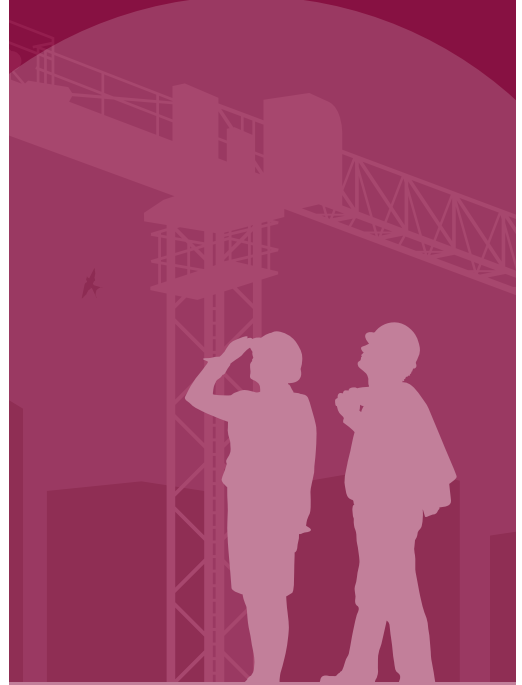
Graduates with the Associate of Science degree are qualified for entry-level technical positions in construction, surveying, engineering and architectural firms; local, state and national government, environmental and public health agencies; state departments of transportation and highways; and private business and industry. Specific job titles include materials technician (soils, concrete, and aggregate), surveying crew chief assistant, drafter/detailer, construction or field inspector, office technician, CAD operator, construction technician or estimator.

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**FAIRMONT STATE  
UNIVERSITY™**

**College of Science and  
Technology**



## CONTACT INFORMATION

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Department of Technology

301A Engineering Technology

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Graduates with the Bachelor of Science degree are qualified for an entry-level position as a Civil Engineering Technologist in construction, surveying, engineering, and architectural firms; local, state, and national government, environmental and public health agencies; state departments of transportation and highways; and private business and industry. Specific job titles include transportation technologist, highway technologist, engineer-in-training, materials supervisor, surveying crew chief, civil engineering detailer/designer, office engineer, construction estimator or planner, engineering assistant, project engineer, and assistant project manager. Baccalaureate graduates are eligible to sit for the Fundamentals of Engineering Exam (FE) the first step in becoming a registered professional engineer (PE).

The annual median wage of a Civil Engineer is \$71,710.00.

### ASCE STUDENT CHAPTER:

FSU has received national recognition for its involvement as an ASCE student chapter every year since 2001 and has consistently been ranked in the top one third of all student chapters internationally. The FSU ASCE student chapter has also been runner up to the association's top award, the Ridgeway Award, three times and has received the Zone IV Governors award three times.

FSU has been awarded top honors in the Regional Concrete Canoe Competition for the past 14 consecutive years, competing against all Engineering and Engineering Technology programs in WV, VA, and Washington D.C. (14 universities). Regional wins secure FSU's invitation to compete in the National Concrete Canoe Competition (NCCC), held in June of each year. The chapter has traveled throughout the U.S. for the NCCC, competing against the top ranked schools in the country.

### For information about Fairmont State's ASCE student chapter contact:

Tia Como, PE, Professor  
Tia.como@fairmontstate.edu, or

Tabitha Lafferre, Temporary Assistant Professor  
Tabitha.lafferre@fairmontstate.edu

## BACHELOR OF SCIENCE IN CIVIL ENGINEERING TECHNOLOGY:

### MODEL SCHEDULE

#### FRESHMAN FIRST SEMESTER

CIVL 2210	LIGHT CONSTRUCTION	4
MATH 1510	APPLIED TECHNICAL MATH I	3
CIVL 1100	INTRO TO CIVIL ENGINEERING TECH	1
TECH 1108	ENGINEERING GRAPHICS	3
ENGL 1101	WRITTEN ENGLISH I	3
		14

#### FRESHMAN SECOND SEMESTER

CIVL 2200	INTRODUCTION TO SURVEYING	3
ENGL 1103	TECHNICAL REPORT WRITING	3
MATH 1520	APPLIED TECHNICAL MATH II	3
CIVL 2220	CONSTRUCTION MATERIALS	4
MECH 1100	STATICS	3
		16

#### SOPHOMORE FIRST SEMESTER

CIVL 2240	LAND & ROUTE SURVEYING	3
CHEM 1101	GENERAL CHEMISTRY I	4
TECH 2290	ENGINEERING ANALYSIS I	4
MECH 2200	STRENGTH OF MATERIALS	4
		15

#### SOPHOMORE SECOND SEMESTER

CIVL 2230	CONSTRUCTION ESTIMATING	3
CIVL 2280	ENVIRONMENTAL ENGINEERING TECHNOLOGY I	3
CIVL 2290	INTRODUCTION TO STRUCTURES	3
CIVL 2275	CIVIL ENGINEERING GRAPHICS	3
COMM 2202	COMMUNICATION IN THE WORLD OF WORK	3
		15

#### JUNIOR FIRST SEMESTER

CIVL 3305	HYDRAULICS & HYDROLOGY	3
TECH 3300	ENGINEERING ANALYSIS II	4
PHYS 1101	INTRODUCTION TO PHYSICS I	4
CIVL 3340	SOIL MECHANICS	4
		15

#### JUNIOR SECOND SEMESTER

CIVL 4470	ADV. SOILS/FOUNDATIONS	3
CIVL 4440	STRUCTURAL DESIGN	3
CHEM 1102	GENERAL CHEMISTRY II	4
BSBA 2200	ECONOMICS	3
	TECHNICAL ELECTIVE	3
		16

#### SENIOR FIRST SEMESTER

CIVL 4410	ADVANCED STRUCTURAL ANALYSIS	3
CIVL 4460	ENVIRONMENTAL ENGINEERING TECHNOLOGY II	3
GEOG 2210	INTRO TO GEOGRAPHY	3
	GENERAL STUDIES – FINE ARTS ELECTIVE	3
MECH 3320	DYNAMICS	3
		15

#### SENIOR SECOND SEMESTER

CIVL 4420	CONSTRUCTION PLANNING & ADMINISTRATION	3
	HEALTH AND WELL BEING ELECTIVE	2
HIST 1107	US HISTORY I	3
CIVL 4400	HIGHWAY DESIGN AND TRANSPORTATION	4
	FREE ELECTIVE	2
		14