Associate of Science in Civil Engineering Technology

Program Mission

The mission of the Civil Engineering Technology Program is to train engineering technicians for successful entry and performance in the civil engineering field.

Program Description

The Associate of Science in Civil Engineering Technology is a course of study that prepares students to analyze construction sites, use and maintain equipment, draft plans, and write reports. Technical requirement classes are designed to provide students with fundamentals in surveying, analyzing material strength, and structural drafting and design. This course of study will provide students with an overview of technical drawing, construction management and procedures, planning, and estimating. The student learning outcomes meet the professional standards of technicians in this field.

Program Student Learning Outcomes (SLOs):

Upon successful completion of the AS in Civil Engineering Technology program, students will be able to:

1. Properly use surveying equipment and tools and perform applications accordingly.
2. Create a construction drawing set consisting of at least six sheets from a design.
3. Perform basic techniques and skills using modern engineering tools in the current civil engineering industry.
4. Sequence the steps related to the construction process in chronological order.

General Education Requirements		
Course #	**Course Name**	**Credits**
EN 110A	Freshman Composition	3
MA161A	College Algebra & Trigonometry I	4
MA 161B	College Algebra & Trigonometry II	3
SI 141	Applied Physics I	4
SI 142	Applied Physics II	4
	Total	**22**
Technical/Core Requirements		
Course #	**Course Name**	**Credits**
CE 211	Plane Surveying I	3
CE 221	Strength of Materials	3
AE 160	Computer Aided Design & Drafting (CADD) II	4
CE 213	Hydraulics	3
CE 214	Structural Design	3
Emphasis Courses (Optional)		
CE 222	Plane Surveying II	3
CE 224	Highways	3
	Total	**16-22**
Related General Education & Technical Requirements		
OR 101	Introduction to Engineering Technology	3
AE 121	Technical Engineering Drawing I	3
AE 122	Technical Engineering Drawing II	3
AE 138	Building Codes, Specifications & Construction Management	3
CE 121	Properties of Materials	3
CE 210	Statics	3
CE 215	Construction Procedures	3
CE 225	Construction Planning & Estimating	3
EN 194	Technical Communication	3
	Total	**27**
	Program Total	**65**
	Program Total (with emphasis courses)	**71**

Associate of Science in Civil Engineering Technology – Semester Breakdown

Year 1

Semester 1

Course #	Course Name	Credits
EN 110	Freshman Composition	3
MA161A	College Algebra & Trigonometry I	4
AE 121	Technical Engineering Drawing I	3
CE 121	Properties of Materials	3
	Total	**16-17**

Semester 2

Course #	Course Name	Credits
MA161B	College Algebra & Trigonometry II	4
SI141	Applied Physics I	4
AE 122	Technical Engineering Drawing II	3
CE 215	Construction Procedures	3
	Total	**13-15**

Year 1 Total	29-32

Year 2

Semester 3

Course #	Course Name	Credits
CE 211	Plane Surveying I	3
SI 142	Applied Physics II	4
AE 138	Building Codes, Specifications & Construction Management	3
CE 221	Strength of Materials	3
CE 213	Hydraulics	3
	Total	**16**

Semester 4

Course #	Course Name	Credits
OR 101	Introduction to Engineering Technology	3
AE 160	Computer Aided Design & Drafting (CADD) II	4
CE 214	Structural Design	3
CE 225	Construction Planning & Estimating	3
CE 210	Statics	3
EN 194	Technical Communication	3
	Total	**18**

Year 2 Total	34

Program Total	63-66