STEM Career and Academic Pathways
Program Map: Certificate of Achievement for GeoSpatial Engineering and Technologies

Total number of units: 16 units | **Top Code/Academic Plan: 957300** | **Updated on June 5, 2020**

Semester 1	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	ENG SUP 121	**Land Surveying I**	**3**	Prerequisite: Mathematics 241 or 241S.	Typically offered in Fall.
Program Course	ENG SUP 225	**Boundary Control**	**2**		Typically offered in Summer.
Program Course	ENG SUP 200	**Business Practices for Land Surveyors & Civil Engineers**	**1**		
Program Course	ENG GEN 185	**Directed Studies - General Engineering**	**1**		
		Total Units	**7**		

Semester 2	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	ENG SUP 221	**Land Surveying II**	**3**	Prerequisite: Engineering Support 121 or Civil Engineering 121.	Typically offered in Spring.
Program Course	ENG SUP 201	**Geo-Spatial Technologies I**	**2**	Prerequisite: Engineering Support 121.	Typically offered in Fall.
		Total Units	**5**		

Semester 3	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	ENG SUP 224	**Land Surveyor-in-Training Review Course**	**2**	Prerequisite: Engineering Support 221 or Civil Engineering 221.	Typically offered in Summer.
Program Course	ENG SUP 202	**Geo-Spatial Technologies II**	**2**	Prerequisite: Engineering Support 201.	Typically offered in Spring.
		Total Units	**4**		

Degree Path and Requirements:

Certificate of Achievement.

Department Advising Notes:

Prerequisite skills include a basic understanding of geometry and trigonometry, and a desire to be part of a community of practice of land surveyors and geospatial engineering technicians that enhances the profession. Professionals and technicians can be employed in a variety of settings, including private businesses and government agencies. Upon completing GSET's programs, students obtain careers as a professional land surveyor or technician, a cartographer or a photogrammetrist, or a civil engineering technician. The program offers three skills set certificates (5, 6, or 7 units), a certificate of achievement (16 units), and an associate of science degree (60 units).

Program Description

The Geospatial Engineering and Technologies (GSET) program at ELAC is structured to produce qualified geospatial engineering technicians by offering relevant technical courses and business practices primarily in land surveying, but also in civil and geospatial engineering. What sets GSET's programs apart from other similar community college programs is its state of the art equipment and its student clubs (Geo-Huskies, Engineering Surveying Society, Civil and Environmental Engineering Student Organization) to perform practical and advanced forms of design and analysis for land surveying and civil engineering land development projects. GSET's student learning outcomes include field applications and practical and advanced math topics, and the usage of technology in land surveying and civil engineering practices.

Career and Transfer Opportunities

GSET provides a preparatory course for the National Council of Examiners for Engineering and Surveying (NCEES), Fundamentals of Surveying (FS) exam, which if passed successfully, leads to an increase in the likelihood of job placement with public, private and non-profit organizations. In addition, GSET also provides a cooperative education work experience course in land surveying, civil and geospatial engineering.

Youtube Videos

Program Map

A suggested sequence of classes to complete a degree, certificate, or program of study. Students should consult an academic counselor for variations to this plan based on part-time or full-time status, transfer plans, pre-requisites needed, etc.

Milestones

Courses or specific requirement designed to keep students on course to complete.

Core Course

A course that all declared majors must complete in order to achieve a degree or certificate.

Prerequisite Course

A specific course that must be completed before advancing to the next course.

Check the online catalog at elac.edu for the latest and most accurate information.

Contact

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