



# Science, Technology, Engineering, and Mathematics Career and Academic Pathways (CAPs) Program Map: Skills Certificate for 3D Modeling for Building Information Modeling (BIM) Applications

Total number of units: 5 units

Top Code/Academic Plan: 0957.30

Updated on September 20, 2021

Fall Semester	Course Code	Course	Units	Notes	Advising Notes
Program Course	ENG SUP 121	<b>Land Surveying I</b>	<b>3</b>	Offered every fall semester and is offered using a hybrid schedule (online lecture and face to face field work). This course also prepares you for the FE, FS, PE and PLS State of CA examination. Course offers several field activities and software demonstrations. Prerequisite includes MATH 241 (trigonometry); can be waived if student has field and office experience.	This course is scheduled during the late afternoon to allow students who are currently employed to complete the course after work hours.
Program Course	ARC 164	<b>Design Software for Architecture</b>	<b>2</b>	No Prerequisites. This course is college transferable at CSU level. This course teaches fundamentals in Building Information Modeling using Autodesk REVIT. Good course for drafters, civil engineers, and architects.	This course is being taught online.

**Total Units 5**

## Degree Path and Requirements:

Skills Certificate requirements is 7 units. Note that the prerequisite course for ENG SUP 121 is MATH 241. This can be waived if a student has field and office experience.

This map is a suggested term-by-term sequence of courses to complete the program in a recommended time frame. This is an efficient and recommended plan, but actual plans may vary by individual student need. This map cannot replace a meeting with [counselors](#).

## Department Advising Notes:

Contact Mr. Humberto A. Gallegos for further information regarding transfer requirements for an academic educational plan in geospatial engineering and technologies and information regarding career technician career pathways. In addition, please set up an appointment with a [STEM counselor](#) to obtain further information regarding the General Education requirements to transfer to schools with a geospatial engineering and technologies program.

## Program Description

The Geo-Spatial Engineering & Technologies (GSET) mission is to enhance student's hands on skill sets, networking opportunities, and offer advanced forms of training regarding field equipment and software used in land development and research-oriented projects in civil and geomatics engineering and technologies. GSET offers several certificates of achievements, skill sets, and associate of science degrees in land surveying, geospatial engineering and technologies, and flood mapping. GSET is also structured to offer articulated courses in civil engineering.

## Career and Transfer Opportunities

Please refer to the [careers videos](#) using the department of labor's occupational titles for the architecture and engineering sector.

In addition, you can utilize ELAC's [career coach website](#) to discover majors and in-demand careers and education based on your interests.

Visit the [Transfer Center](#) for transfer information, which varies based on transfer college. Make an appointment with a [counselor](#). Students can visit [Career and Job Services](#) for career counseling and further exploration.

## Youtube Videos

[GSET's marking video](#)

[E&T's video collection](#) (motivational, lessons learned, for entrepreneurs, calculator tips and tricks, and others)

## 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.

## Prerequisite Course

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

Check the online catalog at [elac.edu](http://elac.edu) for the latest and most accurate information.

## Contact

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