



Science, Technology, Engineering, and Mathematics

Career and Academic Pathways (CAPs)

Program Map: Associate in Science Degree for Engineering Graphics and Design Technology

Total number of units: 55-79 units

Top Code/Academic Plan: 0953.00

Updated on 9/30/2021

Semester1	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	EGD TEK 101 OR EGD TEK 102	Engineering Graphics with Geometric Dimensioning and Tolerancing OR Engineering Graphics with Introduction to GD&T and 2-D CAD	3	Advisory: Consult with academic counselor regarding prerequisite required for these course.	Offered regularly.
Program Course	EGD TEK 111	2-D Computer-Aided Drafting with AutoCAD	3	Consult with academic counselor regarding prerequisite required for these course.	
GE Course	LACCD	Section A: Natural Science	3		
GE Course	LACCD	Section B1: American institution	3		

Total Units 12

Intersession	Course Code	Course	Units	Notes	Notes for Part-time students
GE Course	LACCD	Section B2: Social and Behavioral Science and American Institution	3	Your choice IGETC 3 or 4.	

Total Units 3

Semester 2	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	EGD TEK 121	3-D Computer-Aided Design with SolidWorks	2	Consult with academic counselor regarding prerequisite required for these course.	
Program Course	ENG TEK 221	CAD-Advanced Applications 3-D	2	Consult with academic counselor regarding prerequisite (math) required for these course.	
Program Course	ENG GEN 212	Introduction to Engineering Design	3	Advisory: Consult with academic counselor regarding prerequisite required for these course.	
GE Course	LACCD	General Chemistry 1	3		
GE Course	LACCD	English 102 OR 103	3		

Total Units 13

Intersession	Course Code	Course	Units	Notes	Notes for Part-time students
GE Course	LACCD	Section D2: Communication and Analytical Thinking	3		

Total Units 3

Semester 3	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	IND TEK 103	Technical Writing and Communication	2	No prerequisite or advisory for this course.	

Semester 3	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	IND TEK 104	Print Reading with GD & T	2	Consult with academic counselor regarding prerequisite required for these course.	
Program Course	IND TEK 106	Shop Math and Measurement	2	No prerequisite or advisory for this course.	
Program Course	MIT 201	Manufacture and Processes	3	Advisory: Consult with academic counselor regarding prerequisite required for these course.	
Program Course	Restircted Elective (17 total Units Required)		2 TO 6	Meet with academic counselor to match program elective courses requirments with career choice.	
GE Course	LACCD	Physics for Engineering and Scientists	3		

Total Units 14 to 18

Intersession	Course Code	Course	Units	Notes	Notes for Part-time students
GE Course	LACCD	Section E2: One Physical Education Activity	1		

Total Units 1

Semester 4	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	Restircted Elective (17 total Units Required)		2 TO 6	Meet with academic counselor to match program elective courses requirments with career choice.	
Program Course	Restircted Elective (17 total Units Required)		2 TO 6	Meet with academic counselor to match program elective courses requirments with career choice.	
Program Course	Restircted Elective (17 total Units Required)		2 TO 6	Meet with academic counselor to match program elective courses requirments with career choice.	
Program Course	Restircted Elective (17 total Units Required)		2 TO 6	Meet with academic counselor to match program elective courses requirments with career choice.	

Total Units 8 to 24

Intersession	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	Restircted Elective (17 total Units Required)		2 TO 6	Meet with academic counselor to match program elective courses requirments with career choice.	

Total Units 2 to 6

Degree Path and Requirements:

Upon completion of the Certificate of Achievement with at least 2.0 GPA, students should take 2 additional major courses ENG GEN 212 and MIT 201 as well as 17 more units of general electives as listed below.

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](#). Students can apply for certificates as soon as the necessary courses are completed. Meet with a counselor and the financial aid office to ensure continued financial aid. Check with [financial aid](#) for eligibility.

Department Advising Notes:

We recommend that students meet with an academic counselor as well as with a career counselor before deciding on which elective courses to take for this degree. Please take note of the prerequisite courses that are required for the courses in this degree.

Program Description

The Engineering & Technologies Department offers an Associate in Science Degree in Engineering Graphics & Design Technology. In addition to major courses, students should fulfill the general education graduation requirements to total 60 units. In addition to enhancement of employment or promotion within industry, this AS degree prepares students for 4-year programs.

Career and Transfer Opportunities

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. For additional resources, students pursuing a certificate can visit the [American Job Center of California](#) on ELAC main campus.

Youtube Videos

[You Belong at East Los Angeles College](#)

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 for the latest and most accurate information.

Contact

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