



Engineering Technology A.S. Degree

This program roadmap represents one possible pathway to complete the program. Please see a counselor to create an education plan that is customized to meet your needs. This roadmap is not a guarantee of course availability or financial aid applicability.

Catalog: 2025-26

GE Pattern: local AA/AS

Total Units: 60

Start Term: Fall

First Year

Semester 1 (Fall)

16 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	DESGN 300 Introduction to Design Resources	3		
Req	DESGN 301 ¹ Introduction to Computer Aided Drafting and Design (CADD)	3		
RE	PHYS 310 Conceptual Physics	3		L5
GE	MATH 373 Trigonometry for Calculus	4		L2
GE	any Area L3 (Arts & Humanities) course	3		L3

¹ Skills covered in DESGN 301 are often learned in high school drafting courses, as well as by other means. Contact the Design Technology department chair about earning credit by exam or challenging the DESGN 301 prerequisite.

Semester 2 (Spring)

15 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	DESGN 302 Technical Documentation with CADD	3	DESGN 301	
Req	DESGN 328 Engineering Modeling and Design	3	DESGN 301	
RE	CHEM 305 Introduction to Chemistry	5		
GE	ENGL C1000 Academic Reading and Writing or	3		LIA
	ENGL C1000H ^H Academic Reading and Writing - Honors	3		
GE	any Area L7A (Physical Education) course	1		L7A

Second Year

Semester 3 (Fall)

14 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	DESGN 310 Graphic Analysis and Documentation	3	DESGN 301	

CAREER PATH

Career Options:

This degree prepares students for careers as engineering technicians, working as technical assistants to engineers.

Engineering technicians are needed in the fields of manufacturing, architecture, construction, materials testing, public utilities, and many other fields.

Advising Notes:

- This degree can be completed using either the <u>local AA/AS</u> general education (GE) pattern or the <u>Cal-GETC</u> transfer GE pattern. <u>See a coun selor</u> to determine which pattern is best for you based on your academic goals.
- Students can substitute ESLW 340 for ENGL C1000/C1000H (formerly known as ENGWR 300/480).
- Elective Courses: any elective courses numbered 100-499, or having a 4-digit number starting with C.

Scheduling Notes:

- DESGN 310 and 351 are offered in the fall.
- DESGN 328, 330, and 360 are offered in the spring.
- DESGN 331 is offered during the 1st 8 weeks and DESGN 361 is offered during the 2nd 8 weeks, so they can be taken in the same semester.
- This degree can be started in the spring as well. <u>See a counselor</u> to adjust the course work.

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	DESGN 351 Surveying For Architectural Design	2	(see below)	
GE	any Area L1B (Oral Communication & Critical Thinking) course	3		L1B
GE	any Area L4 (Social & Behavioral Sciences) course	3		L4
GE	any Area L6 (Ethnic Studies) course	3		L6

DESGN 351 prerequisite: DESGN 301, and DESGN 325, DESGN 328 or HORT 329

Semester 4 (Spring)

15 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	DESGN 331 Machine Design	2	(see below)	
RE	DESGN 360 Commercial Engineering Design and Drafting 4 (see below)			
Req	DESGN 361 Commercial MEP Design	2	(see below)	
GE	DESGN 498 Work Experience in Design Technology	2		L7B
Elec	any elective course	3		
Elec	any elective course	2		

DESGN 331 prerequisite: DESGN 301, 302, 310, and 328

 $\textbf{DESGN 360 prerequisite:} \ \mathsf{DESGN 302}, \ \mathsf{and} \ \mathsf{DESGN 300} \ \mathsf{or} \ \mathsf{320}, \ \mathsf{and} \ \mathsf{DESGN 325}$

or 328

DESGN 361 prerequisite: DESGN 300, 301, 302, 310, and 328

^H honors courses

EXPLANATION OF CATEGORIES					
Req	Required Core	A course that is required for this program			
RE	Restricted Elective	A course selected from a list of elective courses specified for this program in the course list in the catalog, which can be replaced with another course from the same list			
GE	General Education	A course that fulfills a specific general education requirement for a degree, which can be replaced with another course that meets the same requirement			
Elec	Degree Elective	A degree-applicable course that is part of a degree roadmap to ensure that there is a total of at least 60 units, which is a requirement for an associate degree			

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Other Notes:

- This program is designed for students to directly enter the workforce. Students wishing to transfer to pursue a Bachelor's degree should meet with a counsel or to select the appropriate courses, because colleges vary widely in terms of their required coursework. Students should also keep a portfolio of all of their design/engineering technology projects to present for evaluation by college advisors.
- An internship (DESGN 498) is highly recommended as it opens up potential employment opportunities. Students can earn between 0.5 4.0 units for related paid or unpaid work experience including volunteer and internship positions through DESGN 498. This course also works toward satisfying GE Area L7B. See the Work Experien ce website for more information.