



# Mechatronics 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: Spring

## First Year

## Semester 1 (Spring)

8 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	ET 302 Principles of Electricity and Electronics	4		
Req	ET 193 Introduction to Robotics and Sensors	4		

### Semester 2 (Fall)

7 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	ET 197 Introduction to Mechatronics	4	ET 302	
Req	DESGN 301 Introduction to Computer Aided Drafting and Design (CADD)	3		

## Second Year

### Semester 3 (Spring)

9 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
RE	DESGN 302 <sup>1</sup> Technical Documentation with CADD	3	DESGN 301	
Req	WELD 300 Introduction to Welding	3		
Elec	any elective course	3		

<sup>&</sup>lt;sup>1</sup> or ENGR 312

## Semester 4 (Fall)

6 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	ET 253 Industrial Communication Systems Support	4	ET 302	
GE	any Area L7B (Life Development Skills) course	2		L7B

## **Third Year**

### Semester 5 (Spring)

9 Units

#### CAREER PATH

## Career Options:

This degree prepares students for the following careers: industrial mechanical/ electrical systems technician, food processing machine service technician, facilities systems technician, waste water systems technician, manufacturing coordinator, field service technician, and mechanical electrical machine systems installer.

## **Advising Notes:**

- This degree can be completed using either the <u>local AA/AS</u> general education (GE) pattern or the <u>Cal-G</u> <u>ETC</u> transfer GE pattern. <u>See a coun</u> <u>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:

- ET 193 is offered days in the spring semester.
- ET 197 is offered days in the fall semester.
- ET 253 is offered every semester, alternating day and night schedules.
- Due to the scheduling of ET 193 and 197, this map is designed for students starting in the spring.

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
GE	ENGL C1000 Academic Reading and Writing or	3		LìA
	<b>ENGL C1000H</b> <sup>H</sup> Academic Reading and Writing - Honors	3		
GE	any Area L3 (Arts & Humanities) course	3		L3
Elec	any elective course	3		

## Semester 6 (Fall)

7 Units

CAT	. COURSE	UNIT	PREREQUISITES	GE AREA
GE	STAT C1000 Introduction to Statistics or	4		L2
	STAT C1000H <sup>H</sup> Introduction to Statistics - Honors	4		
GE	any Area L5 (Natural Sciences) course	3		L5

## Fourth Year

## Semester 7 (Spring)

7 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
GE	any Area L1B (Oral Communication & Critical Thinking) course	3		L1B
GE	any Area L4 (Social & Behavioral Sciences) course	3		L4
GE	any Area L7A (Physical Education) course	1		L7A

## Semester 8 (Fall)

7 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
GE	any Area L6 (Ethnic Studies) course	3		L6
Elec	any elective course	3		
Elec	any elective course	1		

<sup>&</sup>lt;sup>H</sup> honors courses

		EXPLANATION OF CATEGORIES					
Req Required A course that is required for this 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				
	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				
	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				

 This degree can be started in the fall. <u>See a counselor</u> to adjust the coursework.

### Other Notes:

- At the end of semester 2, students qualify for the **Robotics certificate**.
- At the end of semester 3, students qualify for the Basic Mechatronics certificate.
- At the end of semester 4, students qualify for the Mechatronics certificate.
- An internship (ET 298) 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 ET 298. This course also works toward satisfying GE Area L7B. See the Work Experien ce website for more information.