Engineering, Mechanical/Aeronautical Engineering A.S. Degree - Cal-GETC GE

This program map represents one possible path for completing this program. **Please see a counselor** to create an educational plan that is customized to meet your needs. This path is not a guarantee of course availability or financial aid applicability.

Catalog: 2026-27

Total Units: 81-85

First Year

Semester 1

17 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Maj	CHEM 400+	General Chemistry I	5	Cal-GETC Area 5A/Cal-GETC Area 5C
Maj	ENGR 300	Introduction to Engineering	1	
Maj	MATH 400+*	Calculus I	5	Cal-GETC Area 2
Maj	ENGR 312+	Engineering Graphics	3	
GE		Humanities	3	Cal-GETC Area 3B

+Prerequisite for CHEM 400: CHEM 300 with a grade of "C" or better completed within one year prior to enrollment in CHEM 400 or placement through the assessment process (ACS California Chemistry Diagnostic Exam) completed within one year prior to enrollment in CHEM 400 AND Intermediate Algebra or equivalent (Integrated Math 3) with a grade of "C-" or better

+Prerequisite for MATH 400: MATH 372 & MATH 373; or MATH 375 with a grade of "C" or better; or through the placement process (check your eServices account)

*Students who do not place directly into MATH 400 (check your eServices account) must complete the prerequisite or take MATHS 60/MATH 400 combo course. Options depend on STEM placement and prior math preparation. Meet with a counselor for guidance.

+Prerequisite for ENGR 312: MATH 373 with a grade of "C" or better

Semester 2

16-18 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
ME	ENGR 405+ / CISP 360+	Major Elective	3-4	

Legend

- **(H)** - Honors
- **Elec** - Elective
- **GE** - General Education
- **Maj** - Required Core
- **ME** - Major Elective

Disclaimer

Every effort has been made to ensure that what is listed in the SCC Program Paths are accurate. The courses, the course sequencing, and the programs are subject to change without notice by the administration of the Los Rios Community College District and Sacramento City College at the discretion of the district and Sacramento City College. Further, Sacramento City College reserves the right to amend any course or program.

PLEASE SEE AN SCC COUNSELOR.

AA/AS Requirements

This Associate Degree requires the following:

1. **Completion of a minimum of 60 degree-applicable units with an overall grade point average (GPA) of 2.0 ("C" average). A minimum of 12 units must be completed within the Los**

CAT.	COURSE	TITLE	UNIT	GE AREA
Maj	MATH 401+	Calculus II	5	
Maj	PHYS 410+	Mechanics of Solids and Fluids	5	
GE	ENGL C1000* / 488H+ / ESLW 340+	Academic Reading & Writing	3-4	Cal-GETC Area 1A

+Prerequisite for ENGR 405: MATH 401 with a grade of "C" or better or concurrent enrollment

+Prerequisite for CIPS 360: CISP 301 with a grade of "C" or better

+Prerequisite for MATH 401 & PHYS 410: MATH 400 with grades of "C" or better.

^Corequisite for PHYS 410: Concurrent enrollment in MATH 401.

*If you don't place directly in ENGL C1000 (check your eServices account), you will need to take ENGL 80/ENGL C1000 combo course.

+Prerequisite for ENGL 488: ESL 325 with a grade of "C" or better, or placement through the assessment process

+Prerequisite for ESLW 340: ESL 325 with a grade of "C" or better; or, for students not previously enrolled in ESL writing courses within the Los Rios district, placement through the Los Rios assessment process

Summer Term

6 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
GE		Arts	3	Cal-GETC Area 3A
GE		Social & Behavioral Sciences	3	Cal-GETC Area 4

Second Year

Semester 3

16 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Maj	MATH 402+	Calculus III	5	
Maj	PHYS 420+	Electricity and Magnetism	5	
Maj	ENGR 422+	Engineering Mechanics, Statics	3	
GE		Critical Thinking and Composition	3	Cal-GETC Area 1B

Rios Community College District.

2. **Completion of each required course with a grade of "C" or better for a major offered at Sacramento City College.**
3. **Completion of the Californi a General Education Transf er Curriculum (Cal-GETC). Areas 1 through 6 must be completed with a grade of "C" or better.**

Students with Advanced Placement (AP) and International Baccalaureate Credit (IB) test scores should notify their Counselor to learn more about how test scores may be used for credit.

Placement Information

Check your eServices account under "Academic Records" to determine your Math and English placements.

Important Links

- SCC General Counseling
- Engineering - Mechanical/Aero nautical Engineering
- Science, Math, & Engineering Meta Majors

+Prerequisite for MATH 402: MATH 401 with a grade of "C" or better

+Prerequisite for PHYS 420 & ENGR 422: MATH 401 & PHYS 410 with grades of "C" or better

Semester 4

14-16 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Maj	ENGR 412+	Properties of Materials	4	
Maj	MATH 420+	Differential Equations	4	
Maj	ENGR 400+^	Introduction to Electrical Circuits and Devices	3	
ME	CHEM 401+ / MATH 410+ / PHYS 430+	*Major Elective	3-5	

+Prerequisite for ENGR 412: CHEM 400 & PHYS 410 with grades of "C" or better

+Prerequisite for MATH 420: MATH 401 with a grade of "C" or better.

+Prerequisite for ENGR 400: PHYS 420 with a grade if "C" or better

^Corequisite for ENGR 400: Concurrent enrollment in MATH 420

*Major Elective - One course from this group is required to earn an AS degree. For students transferring in Mechanical/Aeronautical Engineering to a four-year institution, all courses from this group may be required by the desired transfer institution; please see a counselor to determine which of these courses are required for successful transfer.

+Prerequisite for CHEM 401: CHEM 400 with a grade of "C" or better

+Prerequisite for MATH 410: MATH 401 with a grade of "C" or better

+Prerequisite for PHYS 430: MATH 401 & PHYS 410 with grades of "C" or better

Third Year

Semester 5

12 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
GE		*Social & Behavioral Sciences	3	Cal-GETC Area 4
GE		Biological Science	3	Cal-GETC Area 5B
GE		Oral Communication	3	Cal-GETC Area 1C

CAT.	COURSE	TITLE	UNIT	GE AREA
GE		Ethnic Studies	3	Cal-GETC Area 6

*Cal-GETC Area 4 requires 2 courses from different disciplines. Select a course from Cal-GETC Area 4 from a different discipline than the previously completed Cal-GETC Area 4 course.

Published October 02, 2026