Engineering, Mechanical/Aeronautical Engineering A.S. Degree - Local 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: 2025-26

Total Units: 72-76

First Year

Semester 1

17 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Maj	CHEM 400 +	General Chemistry I	5	SCC Local Area L5
Maj	ENGR 300	Introduction to Engineering	1	
Maj	MATH 400 +	Calculus I	5	SCC Local Area L2
Maj	ENGR 312 +	Engineering Graphics	3	
Elec	INDIS 313 *	Freshman Seminar	3	

+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)

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

***INDIS 313 - Freshman Seminar is specifically designed for First Time in College students. This course is a non-required elective. If you're not a First Time in College student and/or you only would like to take required courses, you do not need to take this course.**

Semester 2

16-18 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
ME	ENGR 405 / CISP 360	Engineering Problem Solving	3-4	
Maj	MATH 401 +	Calculus II	5	
Maj	PHYS 410 +	Mechanics of Solids and Fluids	5	

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 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 Sacramento City College's local AA/AS degree general education requirements – Area L1A and L1B; Area L2; Area L3; Area L4; Area L5; Area L6 – with an overall 2.0 GPA.**

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.

CAT.	COURSE	TITLE	UNIT	GE AREA
GE	ENGL C1000* / ENGWR 488H / ESLW 340	Academic Reading & Writing	3-4	SCC Local Area L1A

+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 ENGWR 80/ENGL C1000 combo course.

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		Oral Communication & Critical Thinking	3	SCC Local Area L1B

+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+	General Chemistry II	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.

Exception: Students who possess a bachelor's (BA/BS) or higher degree from a college or university accredited through a regional accrediting agency recognized by the Council for Higher Education Accreditation (CHEA) are deemed to have satisfied both the general education and graduation competency requirements for an AA/AS degree. Degrees from accredited institutions outside of the US will be evaluated on a case-by-case basis.

Placement Information

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

Important Links

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

+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

9 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
GE		Arts & Humanities	3	SCC Local Area L3
GE		Ethnic Studies	3	SCC Local Area L6
GE		Social & Behavioral Sciences	3	SCC Local Area L4

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