Engineering, Electrical/Computer 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: 2026-27

Total Units: 60-64

First Year

Semester 1

14-15 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
GE	ENGL C1000 ** / 488 H+ / ESLW 340 +	Academic Reading & Writing	3-4	SCC Local Area L1A

+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.

**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

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**

Semester 2

16-17 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Maj	MATH 401+	Calculus II	5	
Maj	PHYS 410+^	Mechanics of Solids and Fluids	5	
GE		Arts & Humanities	3	SCC Local Area L3
ME	ENGR 405+ / CISP 360+	Major Elective	3-4	

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

^Corequisite for PHYS 410: Concurrent enrollment in MATH 401

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

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

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	
GE		Ethnic Studies	3	SCC Local Area L6
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: MATH 401 & PHYS 410 with grades of "C" or better

Semester 4

14-16 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Maj	ENGR 400+	Introduction to Electrical Circuits and Devices	3	
Maj	MATH 420+	Differential Equations	4	

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.

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 the general education 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.

ADT Requirements

Transfer degrees require the following:

CAT.	COURSE	TITLE	UNIT	GE AREA
ME	MATH 410+ / PHYS 430+ / CISP 400+ / 430+^ / 440+ / ENGR 412+	*Major Elective	3-5	
GE		Social & Behavioral Sciences	3	SCC Local Area L4
Elec		**Elective	1	

+Prerequisite for ENGR 400: MATH 420 and PHYS 420 with grades of "C" or better; students may be enrolled in MATH 420 concurrently

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

*Major Elective - One course from this group is required to earn an AS degree. For students transferring in Electrical/Computer 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 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

+Prerequisite for CISP 400: CISP 360 with a grade of "C" or better

+Prerequisite for CISP 430: CISP 400 or 401 with a grade of "C" or better

+Prerequisite for CISP 440: CISP 400 or 401 & MATH 372 with a grade of "C" or better

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

^CISP 430 is typically only offered during the spring semester.

Electives may include any courses numbered 100-499. **Meet with a counselor to discuss potential elective course options.

1. **Complete all required courses for a major with a grade of "C" or better.**
2. **Complete 60 CSU-transferable units. At least 12 of the 60 units must be earned within the Los Rios Community College District.**
3. **Complete the Cal-GET C transfer general education pattern.**

Important Links

- SCC General Counseling
- Engineering - Electrical/Computer Engineering
- Science, Math, & Engineering Meta Majors

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