Engineering 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. For counseling appointments call (916) 608-6510. **ATTENTION:** General Education requirements have changed for the 2025-2026 academic year. Please see GE guidance page for more information on the different pathways.

Total Units: 60-61

First Year

Semester 1

15-16 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
MATH 400 Calculus I	5	PreCalculus	F, S	L2
ENGL C1000 College Composition **or**	3		F, S	L1A
ENGL C1000H Honors College Composition	3		F, S	L1A
CHEM 400[1] General Chemistry I	5	See Note Below	F, S	L5
Living Skills: Life Development Skills	2-3		F, S	L7B

[1] Chem 400 pre-requisites are intermediate algebra; and a college-level Chemistry course with a lab with a "C" or better or one year in high school Chemistry with a lab with a grade of "C" or better.

Semester 2

15 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
MATH 401 Calculus II	5	MATH 400	F, S	
PHYS 411 Mechanics of Solids and Fluids	4	MATH 400 & MATH 401 Co Requsite	F, S	
Oral Communication and Critical Thinking	3		F, S	L1B
Arts and Humanities	3		F, S	L3

Notes

ATTENTION: General Education requirements have changed for the 2025-2026 academic year. Please see

GE guidance page for more information on the different pathways. For the previous academic year see

General Education requirements.

- FLC 2025-2026 AA/AS General Education requirements.
- A degree applicable elective is defined as any class with a course number between 100 and 499.
- Some English and math courses have support courses (co-requisites). See your assessment results for more details.
- Students may earn credit for College Entrance Board Advanced Placement (AP) tests with scores of 3, 4, or 5. AP scores can be used to meet Folsom Lake College associate degree general education , CSU,UC, and other 4 year University requirements --Check with your counselor to determine whether these test results will be accepted at the

Second Year

Semester 3

16 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
MATH 402 Calculus III	5	MATH 401	F, S	
PHYS 421 Electricity and Magnetism	4	MATH 401 AND PHYS 411	F, S	
Major Elective[1]	3		F, S	
Living Skills: Physical Education Activity	1		F, S	L7A
Social and Behavioral Sciences	3		F, S	L4

[1] Major Elective List: A minimum of 6 units from the following:

* This course has a prerequisite or corequisite course.

CISP 360*: Introduction to Structured Programming (4 units)

ENGR 303: Introduction to Logic Design (4 units)

ENGR 312: Engineering Graphics (3 units)

ENGR 400*: Introduction to Electrical Circuits and Devices (3 units)

ENGR 420*: Statics (3 units)

Semester 4

14 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
MATH 420 Differential Equations	4	MATH 401	F, S	
PHYS 431 Heat, Waves, Light and Modern Physics	4	PHYS 411	F, S	
Major Elective[1]	3		F, S	
Ethnic Studies	3		F, S	L6

[1] Major Elective List: A minimum of 6 units from the following:

* This course has a prerequisite or corequisite course.

CISP 360*: Introduction to Structured Programming (4 units)

ENGR 303: Introduction to Logic Design (4 units)

ENGR 312: Engineering Graphics (3 units)

ENGR 400*: Introduction to Electrical Circuits and Devices (3 units)

transfer institution of your choice.

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the Zero Textbook Costs page of the college website.

ENGR 420*: Statics (3 units)

Catalog Year: 2026-2027
Published May 09, 2026