COMPUTER ENGINEERING

CALIFORNIA STATE UNIVERSITY, FRESNO

2025-2026 CATALOG

The suggested program of study on this page is for general information and academic planning purposes and is not a substitute for the University Catalog. Consult the 2025-2026 University Catalog for more detailed information.

	FIRST SEMESTER	Units		SECOND SEMESTER	Units
ENGR 1	Introduction to Engineering	1	ECE 1	Intro to EE and CompE	1
Area 1A	ENGL 10 Composition or 5A&B	3	ECE 72	Intro to Elec/Comp Engr Tools	2
Area 1C	COMM 3, 7, or 8	3	MATH 76	Calculus II	4
Area 2	MATH 75 Calculus I	4	PHYS 4A	Mechanics and Wave Motion	3
Area 5B	BIO 10 Life Science	3	PLSI 2	(Graduation Requirement)	3
			Area 3B	PHIL 1, 2, 10, or 20	3
	Total First Semester Units:	14		Total Second Semester Units:	16

THIRD SEMESTER	Units	FOURTH SEMESTER	Units
ECE 71 or CSI 40 Intro to Programming	4	CSCI 41 Data Structures	4
ECE 85 Digital Logic Design	3	ECE 90 Principles of Electrical Circuits	3
ECE 85L Digital Logic Design Lab	1	ECE 90L Principles of Elect Circuits Lab	1
MATH 77 Calculus III	4	ECE 106 Switching Theory	3
PHYS 4B Electricity, Magnetism, and Heat	3	ECE 118 Microprocessor Arch and Prog	3
PHYS 4BLElectricity, Magnetism, Heat Lab	1	ECE 118L Microcontroller Lab	1
		MATH 81 / ENGR 101	3
Total Third Semester Units:	16	Total Fourth Semester Units:	14

FIFTH SEMESTER	Units	SIXTH SEMESTER	Units
ECE 102 Advanced Circuit Analysis	3	ECE 125 Probabilistic Engr Sys Analysis	3
ECE 128 Electronics I	3	ECE 146 Computer Networks	3
ECE 128L Electronics I Lab	1	ECE 144 Embedded OS	3
ECE 141 Algorithmic Computations	3	ECE 176 Adv Digital Design	3
ECE 141L Algorithmic Computations Lab	1	Technical Area Course ¹	3
Area 5A CHEM 3A General Chemistry	4	ECE 103E Professional Dev Skills	1
Total Fifth Semester Units:	15	Total Sixth Semester Units:	16

	SEVENTH SEMESTER	Units		EIGHTH SEMESTER	Units
ECE 186A	Senior Design I	1	ECE 174	Computer Architecture	3
ECE 178	Embedded Systems	4	ECE 186	3 Senior Design II	3
	Technical Area Course ¹	3		Technical Area Course ²	3
	Technical Area Course ¹	3	Area 6	Ethnic Studies	3
Area 4A	HIST 11, 12	3			
Area 4B	ECON 40 Micro/ECON 50 Macro	3			
	Total Seventh Semester Units:	17		Total Eighth Semester Units:	12

Total units for the program: 124

- 1. Select from the list of Technical Area Courses, including labs
- 2. Upper division writing requirement can be fulfilled by any W course

General Education

Area 1A: ENGL 10 or ENGL 5A & 5B

Area 1B: Exempt

Area 1C: COMM 3, 7, or 8

Area 2: MATH 75

Area 3A: Exempt

Area 3B: PHIL 1, 2, 10, or 20

Area 4A: HIST 11 or 12 Area 4B: ECON 40 or 50

Area 5A: CHEM 3A
Area 5B: BIO 10 or 1A
Area 5C: PHYS 4BL

Area 6: Any upper or lower division GE area F

Area UD 3: Exempt
Area UD 4: ECE 118
Area UD 5: ECE 186B

Additional Fresno State Graduation Requirements

US & CA Gov: PLSI 2
A/H: Exempt
L/S: Exempt
M/I: Exempt