# **COMPUTER ENGINEERING**

CALIFORNIA STATE UNIVERSITY, FRESNO

#### 2021-2022 CATALOG

This sheet is for general information and is not by any means a substitute for the University Catalog. You must consult the 2021-2022 University Catalog for more detailed information

## FIRST SEMESTER

ECE 1	Intro to EE and CompE
Area A1	Comm 3, 7, 8
Area A2	Engl. 10 Comp. or 5A&B
Area B4	Math 75 Math. Analysis I
Area B2	Biol 10 (life science)

### THIRD SEMESTER

CSCI 41	Data Structures	4
ECE 85	Digital Logic Design	3
ECE 85L	Digital Logic Design Lab	1
Math 77	Mathematical Analysis III	4
Phys 4B	Elect., Magn. and Heat	3
Phys 4BL	Elect., Magn. and Heat Lab	1
ECE 103	Professional Dev. Skills	2
		18

#### FIFTH SEMESTER

ECE 124	Signals and Systems	3
ECE 128	Electronics I	3
ECE 118	Microp. Arch. And Prog.	3
ECE 118L	Microcontroller Lab	1
ECE 128L	Electronics I lab.	1
ECE 144	Embedded OS	3
		14

# SEVENTH SEMESTER

ECE 186A	A Senior Design I	1
ECE 176	CAE in Digital Design	3
ECE 178	Embedded Systems	4
	Technical Area Course <sup>1</sup>	3
Econ 40 or 50 3		
Area D1	Hist 11, 12	3
		1'

#### Total units for the program

17

# SECOND SEMESTER

ECE71/or CS	Sci 40 Intro. to Programing	3
Math 76 M	Iathematical Analysis II	4
Phys 4A M	Iechanics	3
Area C2 P	hil <sup>3</sup>	3
Area D2 P	1 Sci 2	3
		16

## FOURTH SEMESTER

ECE 72	Intro to EE/CompE Tools	2
ECE 90	Prin. of Electrical Circuits	3
ECE 90L	Prin. of Elect. Circuits Lab	1
ECE 106	Advanced Digital design	3
ECE 141	Advanced Algorithm Design	3
ECE 141L	Algorithm Design Lab	1
Math 81/E	ngr 101	3
		16

### SIXTH SEMESTER

ECE 125	Probabilistic Engr. Sys. Analy.	3
ECE 146	Computer Networks.	3
	Technical Area Course <sup>1</sup>	3
	Technical Area Course <sup>1</sup>	3
Area B1	Chem. 3A General Chem.	4
		16

# EIGHTH SEMESTER

ECE 174 Computer Architecture	3
Area IB ECE 186B Senior Design II	3
Technical Area Course <sup>1</sup>	3
Area $F^2$ – Ethnic Studies	3
ECE Lab elective <sup>4</sup>	1
	13

#### 124

1 Upper Division ECE and CSCI courses (maximum 6 CSCI units).

2 Interdisciplinary and comparative study of race and ethnicity- Foundation, Breath, and Integration - Lower division GE

3 Area C2: Phil1 or 10 or 20 or 25 or 45

<sup>4</sup> Select from: ECE 122L, 155L, ECE 119L, ECE 121L; ECE 134L, ECE 136L

# **General Education**

	Communication 3, 7, or 8 Engl 10 or Engl 5A and 5B Exempt
Area B3:	Chem 3A Bio 10 or 1A Phys 4BL Math 75 ( <i>A student who has earned 15 units will get a warning pop-up if not passed or not registered in the B4 course.</i> <i>A student who has earned 30 units and has not passed or not registered in the B4 course will get the hold pop-up at the time of registration.</i> )
Area C1: Area C2:	<b>Exempt</b> Phil 1 or 10 or 20 or 25 or 45
Area D1: Area D2:	Hist 11 or 12 PISci 2
Area E: Area F:	Exempt Any upper or lower division GE area F
Area IC:	Exempt/ECE 186B Exempt Exempt/ECE 118