CAL POLY
SAN LUIS OBISPO

B.S. in COMPUTER ENGINEERING
Suggested 4-Year Academic Flowchart

2017-2019 Catalog

FALL: CEA Madrid, Spain; CEA Paris, France

SPRING: Munich, Germany

FALL: Lucerne, Switzerland; Chalmers, Sweden; KTH, Sweden

Updated 2/23/18

FRESHMAN Fall	FRESHMAN Winter	FRESHMAN Spring	SOPHOMORE Fall	SOPHOMORE Winter	SOPHOMORE Spring	JUNIOR Fall	JUNIOR Winter	JUNIOR Spring	SENIOR Fall	SENIOR Winter	SENIOR Spring
Computer Engineering Orientation CPE 100 (1)	Fundamentals of Computer Science CPE 101 (4) * CSC	Data Structures CPE 202 (4) (CPE 101 w/min C-; MATH 141 or 221 w/min C-) CSC	Proejct-Based Object-Oriented Programming & Design CPE 203 (4) (CPE 202 w/min C- or Instr. consent) CSC	Electric Circuit Analysis & Lab II EE 211 (3) AND EE 241 (1) (EE 112. Prereq or concur: PHYS 133, Math 244)	Electric Circuit Analysis & Lab III EE 212 (3) AND EE 242 (1) (MATH 244, EE 211)	Continuous-Time Signals & Systems EE 228 (4) (BMED 355; or EE 212, 242; Recom: MATH 241)	Digital Electronics & Integrated Circuits EE 307 (3) AND EE 347 (1) (CPE 133, EE 306 & 346. Coreq: CPE 233. Concur: EE 347)	CSC	Introduction to Operating Systems CPE 453 (4) (CPE 357, CPE 225, 229, or 233)		
									Introduction to Computer Networks CPE 454 (4) (CPE 357. Recommended: STAT 312, 321, or 350)		
Introduction to Computing CPE 123 (4)[1] (Basic computer literacy) CSC	General Chemistry for Physical Science & Engineering I CHEM 124 (4)[2] (Passing ELM score or exception, or MATH 104) [B3/B4]	Digital Design CPE 133 (4)[3] (CPE 100, 101) EE	Electric Circuit Analysis I EE 112 (2)[3] (MATH 142; Recom: EE 111/151)	Computer Design and Assembly Language Programming CPE 233 (4) (CPE 133) EE	Systems Programming CPE 357 (4) * CSC Discrete Structures CSC 348 (4) (w/ min C- in CPE 102 & 103; or CPE 202 & 203; or Instr. consent)		Computer Architecture CPE 335 (4) (CPE 102 & 103; or CPE 202 & 203; & CSC 225, CPE 229 or 233)		Capstone I CPE 350 (4)[5] (CPE 329, may be concurrent)	Capstone II CPE 450 (3) (CPE 350)	Approved Technical Elective (4)[4,6] *** CPE
Electronics Manufacturing IME 156 (2) or IME 157 (4) or IME 458 (4)*		General Physics IA PHYS 141 (4)[2] [MATH 141 w/min C-; MATH 142 or 182 (or concurrent enrollment)] [Add'l Area B]	General Physics III PHYS 133 (4) (PHYS 131, or HNRS 131, or PHYS 141; MATH 142. Recom: MATH 241)	General Physics II PHYS 132 (4) (PHYS 131, or HNRS 131, or PHYS 141)	Modern Physics I PHYS 211 (4) (PHYS 132, 133, MATH 241. Recom: MATH 242 or 244)	Semiconductor Device Electronics & Lab EE 306 (3)* AND EE 346 (1)* (CHEM 124; EE 212 & 242; IME 156, 157, or 458; PHYS 211. Rec: ENGL 134)		Programmable Logic & Microprocessor-Based Systems Design CPE 329 (4) (EE 307, 347; EE 229, 269 or CPE 233) CPE	Approved Technical Elective (4)[4,6] *** CPE	Senior Project I CPE 461 (3) (CPE 350)	Senior Project II CPE 462 (2) (CPE 450)
Calculus I MATH 141 (4)[2] * [B1]	Calculus II MATH 142 (4)[2] (MATH 141 w/min C-) [B1]	Calculus III MATH 143 (4)[2] (MATH 142 w/min C-) [Add'l Area B]	Calculus IV MATH 241 (4) (MATH 143)	Linear Analysis I MATH 244 (4) (MATH 143)			Approved Elective (CSC, EE, Math or Science) (3-4)[4] **		Probability and Random Processes for Engineers STAT 350 (4)[2] (MATH 241, EE 228) [B6]	Approved Technical Elective (4)[4,6] *** CPE	
							GE (4) **				
Expository Writing ENGL 133 or 134 (4)** [A1] Can be taken anytime during Freshman Year					GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **
Oral Communication COMS 101 or 102 (4)** [A2] Can be taken anytime during Freshman Year											
	Technical Writing for Engineers ENGL 149 (4) (Completion of GE A1 with a C- or better. Recommended: Completion of GE A2) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years [A3]						Graduation Writing Requirement GWR* (Students can attempt to fulfill the requirement after 90 units; students should complete the requirement before senior year)				GE (4) **
15-17	16	16	18	16	16	16	16	15-16	16	18	14
										TOTAL:	192-195

Other summer affiliated programs

SUMMER: Munich, Germany

FALL 2nd Yr: CEA Madrid, Spain: PHYS 133, MATH 244, ME 341; GE C1 or C2
CEA Paris, France: MATH 241; GE C1 or C2, C4
SPRING 3rd Yr: Munich, Germany: Tech electives
SUMMER 3rd Yr: Munich, Germany: GE C1 or C2 and Tech electives
FALL 4th Yr: Lucerne, Switzerland: CPE 350/450, Tech Electives (2), GE C1 or C2
Chalmers, Sweden: Tech electives
KTH, Sweden: CSC 302, CSC 396, CSC 402, CSC 465, CPE 307, CPE 365, CPE 349, CPE 480, CPE 484, STAT 350, Tech Electives, GE C1 or C2

*see an advisor for other possible course options