

BS GENERAL ENGINEERING

2020-2021

updated
1.11.20

Units Required 186

NAME _____
STUDENT ID _____
CONCENTRATION _____
MINOR _____



CAL POLY

Cal Poly, Higher Ed, and Major GPA at least 2.00 [] YES [] NO
US Cultural Pluralism Met [] YES [] NO
60 Units Upper Division Met Taken/Remaining [] YES [] NO
GWR Met [] YES [] NO
Upper Div GE Met Taken/Remaining [] YES [] NO
Free Electives Met [] YES [] NO
C- or higher in A1, A2, A3, and B4 [] YES [] NO
Residency Requirements Met [] YES [] NO

NOTE: This is a snapshot of the curriculum as originally published in the catalog. The Degree Progress Report (DPR) reflects updates to the published catalog. The DPR will be used to award your degree and calculate your EAP.

Note: No major, support or concentration courses may be taken as credit/no credit.

MAJOR COURSES (86)	Units	Grade	Grd Pts
CE 204 Mechanics of Materials I	3		
CSC/CPE 101 Fundamentals of Comp Sci I ¹	4		
EE 201 Electric Circuit Theory	3		
EE 251 Electric Circuits Laboratory	1		
ENGR 110 Intro to Engineering	2		
IME 144 Intro to Design & Manufacturing	4		
IME 314 Engineering Economics or IME 315 Financial Decision Making for Eng.	3		
MATE 210 Materials Engineering	3		
MATE 215 Materials Lab I	1		
ME 211 Engineering Statics	3		
ME 212 Engineering Dynamics	3		
ME 302 Thermodynamics I	3		
ME 341 Fluid Mechanics I	3		
ME 350 or MATE 325/326/327 + 1 unit of upper division tech elective	4		
ENGR 459 Senior Design Project I <i>and</i> ENGR 460 Senior Design Project II <i>and</i> ENGR 461 Senior Design Project III or Sr. Project-appropriate engineering discipline	6		
General Curriculum or ICS (<i>see reverse</i>) ²	40		

GENERAL EDUCATION (GE) 40

72 units required, 32 of which are in Support
Refer to current schedule or <http://www.ge.calpoly.edu> to choose GE courses.
You will **not** receive credit for courses not on the approved lists.

Minimum of 8 units required at the 300 level.

Area A English Language Comm & Critical Thinking 8

A1 Oral Communication	4
A2 Written Communication	4
A3 Critical Thinking	

Area B Scientific Inquiry & Quantitative Reasoning

28 units are listed in Support³

Area C Arts and Humanities 16

Lower-division courses in Area C must come from three different prefixes

C1 Arts ⁵	4
C2 Humanities ⁵	4
Lower-Division C Elective: C1 or C2 ⁵	4
Upper-Division C	4

Area D Social Sciences 12

D1 American Institutions (Title 5, Sec. 40404)	4
D2 Lower-Division D	4
Area D Elective:	4
<i>Select either an additional lower-division D2 or an upper-division D course</i>	

Area E Lifelong Learning and Self-Development 4

Lower- Division E	4
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FREE ELECTIVES 0

SUPPORT COURSES (60)

BIO 213 Life Science for Engineers (B2) ³	2
BMED/BRAE 213 Bioengineering Fundamentals (B2) ³	2
CHEM 124 and 125 (B1/B3) ³ or CHEM 127 and 128 (B1/B3) ³	8
ENGL 149 Technical Writing for Engineers (A3) ³	4
MATH 141 Calculus I (B4) ³	4
MATH 142 Calculus II (B4) ³	4
MATH 143 Calculus III (Add'l Area B) ³	4
MATH 241 Calculus IV	4
MATH 244 Linear Analysis I	4
Select from the following: MATH 344; STAT 312, 350 (UD-B) ³	4
PHYS 141 General Physics IA (Add'l Area B) ³	4
PHYS 132 General Physics II	4
PHYS 133 General Physics III	4
Physical Science Electives ⁴ <i>Select from the following:</i> CHEM 126 or 129, 216, 217, 220 or 221, 312, 313; GEOL 102, 201, 205, 241, 305; PHYS 107, 211, 212, 323, 417	8

¹ Students with an approved individualized course of study may substitute CSC/ CPE 101 with CSC 231 (2 units) plus an additional 2 units of other advisor approved coursework. Thus, ICS units must be increased from 40 to 42 units.
² The individualized course of study consists of 40 units of technical electives with a minimum of 33 units at the 300-400 level.
³ Required in Support; also satisfies GE.
⁴ Students in the general curriculum in General Engineering should choose a minimum of 3 units of 300-400 level physical science electives in order to meet 60 units of upper division required for the degree.
⁵ C1, C2, and C elective must come from three different subject prefixes

**General Curriculum or Individualized Course of Study
(Select One)**

General Curriculum (40)

CE 207 Mechanics of Materials II	2
CPE/CSC 202 Fundamentals of Computer Science III	4
CPE/EE 133 Digital Design	4
CPE/EE 329 Prog Logic and Microprocessor-Based Systems Design or IME 356 Manufacturing Automation or ME 305 Introduction to Mechatronics	4
EE 321 Electronics	3
EE 361 Electronics Laboratory	1
IME 418 Product-Process Design	4
Approved Electives (300-level or higher)	18

Individualized Course of Study (40)

Available to students who have completed their Sophomore year in any engineering major. This program is for directed, highly motivated students. Permits students to pursue a course of study which meets their individual needs and interests. The individualized course of study consists of 40 units of technical electives with a minimum of 33 units at the 300-400 level. Courses are selected by the student with the advice and approval of the student's academic advisor and department chair.