

BS ELECTRICAL ENGINEERING**2015-2017**updated
10.04.16**Units Required 192**

NOTE: This document can be used as a compact display of courses and other curricular requirements at the time of the publication of the 2015-2017 catalog. The Degree Progress Report must be used to track students' progress in all degree requirements, throughout their Cal Poly career.

Note: No major or support courses may be selected as credit/no credit.

MAJOR COURSES (85)	<i>Units</i>
CPE/EE 133 Digital Design	4
CPE/EE 233 Comp Design & Assem Lang Prog	4
EE 111 Intro to Electrical Engineering	1
EE 151 Intro to Electrical Engineering Lab	1
EE 112 Electric Circuit Analysis I	2
EE 211 Electric Circuit Analysis II	3
EE 241 Electric Circuit Analysis Lab II	1
EE 212 Electric Circuit Analysis III	3
EE 242 Electric Circuit Analysis Lab III	1
EE 228 Continuous-Time Signals and Systems	4
EE 255 Energy Conv Electromag	3
EE 295 Energy Conv Electromag Lab	1
EE 302 Classical Control Syst	3
EE 342 Classical Control Syst Lab	1
EE 306 Semiconduc Dev Elect	3
EE 346 Semiconduc Dev Elect Lab	1
EE 307 Digital Elec & Integ Circ	3
EE 347 Digital Elec & Integ Circ Lab	1
EE 308 Analog Elec & Integ Circ	3
EE 348 Analog Elec & Integ Circ Lab	1
EE 314 Intro to Communications Syst	3
EE 328 Discrete Time Signals & Syst	3
EE 368 Signals & Systems Lab	1
EE/CPE 329 Prog Logic & Micropro-Based Sys <i>or</i> EE 336 Microprocessor System Design	4
EE 335 Electromag Fields & Trans	4
EE 375 Electromag Fields & Trans Lab	1
EE 402 Electromag Waves	4
EE 409 Electronic Design	3
EE 449 Electronic Design Lab	1
EE 460 Senior Project Prep	2
EE 461 Senior Project I <i>or</i> EE 463 Senior Project Design Lab I	2 <i>or</i>
EE 462 Senior Project II <i>or</i> EE 464 Senior Project Design Lab II	2 <i>or</i>
Technical Electives ^{1,6} <i>A minimum of 2 EE senior design lectures and 2 EE senior design laboratories (See list on reverse.)</i>	11

SUPPORT COURSES (67)

BIO 213 <i>and</i> BMED 213 (B2) ⁵	2
CHEM 124 General Chem for Engineering I (B3/B4) ⁵	4
CSC/CPE 101 Fundamentals of Computer Science I	4
ENGL 149 Technical Writing for Engineers (A3) ⁵	4
IME 156 <i>or</i> IME 157	2
MATH 141 Calculus I (B1) ⁵	4

MATH 142 Calculus II (B1) ⁵	4
MATH 143 Calculus III (Add'l Area B) ⁵	4
MATH 241 Calculus IV	4
MATH 244 Linear Analysis I	4
PHYS 141 General Physics IA (Add'l Area B) ⁵	4
PHYS 132 General Physics II	4
PHYS 133 General Physics III	4
PHYS 211 Modern Physics I	4
STAT 350 Prob & Random Processes for Engrs (B6) ⁵	4
Approved engineering support electives ^{1,6,7} Select from the following: BIO 111; BMED 212, 310, 450, 460; CHEM 125, 212, 216, 313; CPE 290; CSC/CPE 102, 103, 315; CSC 341, 348; IME 142, 143, 301, 305, 314; MATE 210, 215, 232, 340, MATE 430/BMED 434, MATE/BMED 435; MATH 206, 304, 306, 406, 408, 409, 412, 413, 414, 418, 451, 452, 453; ME 211, 212, 302, 341, 350; PHYS 212, 310, 313, 315, 317, 322, 323, 340, 341, 342, 403, 405, 406, 408, 409, 412, 417, 423, 424, 452; STAT 426, 427	9

GENERAL EDUCATION (GE)**40**

72 units required, 32 of which are specified 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 Communication****8**

- A1 Expository Writing 4
A2 Oral Communication 4
A3 Reasoning, Argu & Writing (4 units in Support)⁵

Area B Science and Mathematics (no add'l units req'd)

28 units are listed in Support

Area C Arts and Humanities**16**

- C1 Literature 4
C2 Philosophy 4
C3 Fine/Performing Arts 4
C4 Upper-division elective..... 4

Area D/E Society and the Individual**16**

- D1 The American Exp (40404) 4
D2 Political Economy 4
D3 Comp Social Institutions 4
D4 Self Dev (CSU Area E) 4

FREE ELECTIVES 0**OTHER DEGREE REQUIREMENTS:**

- Cal Poly, Higher Ed, and Major GPA must all be at least 2.00
- For students admitted Fall 2016 and after, a grade of C- or higher is required in GE A1, A2, A3, and one GE B1 course

All students must complete:

- United States Cultural Pluralism Requirement
- Graduation Writing Requirement
- 60 units Upper Division (any 300-400 level classes)
- Upper Division units in the Major: 27
- Residency Requirements: See Degree Progress Report for details

TECHNICAL ELECTIVES^{1,6}

Select from the following: ²

EE Senior Design Lecture/Laboratory Electives:

EE 410, 411, 413, 417, 420, 424, 433, 434, 495³, 516;

EE/CPE 428, 439, 521, 522, 523;

EE 431/ CPE 441

EE Senior Design Lecture Electives:

EE 400⁴, 403, 405, 406, 407, 412, 415, 416, 418, 419, EE 423/BMED
434/MATE 430, 425, 440, 470, 502, 509, 511, 513, 514, 515, 518, 519,
520, 524, 526, 527, 528, 529, 530, 533, 570;

EE/CPE 432

EE Senior Design Laboratory Electives:

EE 400⁴, EE/PHYS 422, 443, 444, 445, 452, 455, 456, 458, 459, 471,

EE/CPE 472, 480, 541, 544;

Non-EE Electives:

BMED 410, 420, 425, 430, BMED/MATE 435, 440, 445;

BUS 311;

CHEM 313;

CPE 482;

CSC 341;

CSC/CPE 315, 416, 453, 454, 458, 464, 471;

ECON 330, 337, 403, 413;

ENVE 331;

IME 301, 303, 305, 319, IME/MATE/HNRS 322, 326, 401, 427, 435,
457, IME/MATE 458/CPE 488;

MATE 340;

MATH 304, 306, 406, 408, 409, 412, 413, 414, 418, 451, 452, 453;

ME 302, 318, 326, 350, 405, 415, 423, 450, 488;

MU 311, 312, 411;

PHYS 302, 303, 310, 313, 317, 322, 340, 341, 342, 403, 405, 406, 408,
409, 412, 417, 423, 424, 452;

STAT 426, 427

¹ Consultation with advisor is recommended prior to selecting technical electives or approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.

² A minimum of 2 EE senior design lectures and 2 EE senior design laboratories.

³ Taken Fall 2009 or later; max 4 units.

⁴ Four units max may count toward technical electives. One unit max, with approval of department chair, may count towards Senior Design Lab Elective.

⁵ Required in Support; also satisfies GE

⁶ No course may be used to simultaneously satisfy both engineering support and technical elective requirements.

⁷ The number of units given for transfer credit will not exceed the number of units of the Cal Poly course.