2013-2015

updated 07.13.13

**Units Required 192** 

**NOTE:** This document can be used as a compact display of courses and other curricular requirements. 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 (55)	Units
BMED 101 Intro to the BMED Major	1
BMED 102 Intro to BMED Engineering Analysis	1
BMED 212 Intro to BMED	3
BMED 310 BMED Engr Measurement & Analysis	4
BMED 410 Biomechanics	4
BMED 420 Principles of Biomaterials Design	4
BMED 425 Biomedical Engineering Transport	4
BMED 430 Biomedical Modeling and Simulation	2
BMED 440 Bioelectronics and Instrumentation	4
BMED 450 or ENGR 451	4
BMED 455 BMED Engr Design I	4
BMED 456 BMED Engr Design II: Senior Project	4
BMED 460 Engineering Physiology	4
Approved Technical Electives (300/400-level) <sup>2</sup>	12
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#### **SUPPORT COURSES (97)**

SULLOKIC	OURSES (31)	
BIO 161	Intro to Cell & Molecular Biology (B2/B4) <sup>1</sup>	4
CE 204	Mechanics of Materials I	3
CHEM 124	(B3/B4) <sup>1</sup> & 125 <i>or</i>	4
	27 (add'l Area B) <sup>1</sup> & 128	4
CE 207 Mechanics of Materials II		2
or EE 32	1 Electronics	3
CSC 231	Programming for Engineering Students	2
EE 201	Electric Circuit Theory	3
ENGL 149	Technical Writing for Engineers (A3) <sup>1</sup>	4
MATE 210	Materials Engineering	3
MATH 141	Calculus I (B1) <sup>1</sup>	4
MATH 142	Calculus II (B1) <sup>1</sup>	4
MATH 143		4
MATH 241		4
MATH 244	Linear Analysis I	4
ME 211	Engineering Statics	3
ME 212	Engineering Dynamics	3
ME 228	Engineering Design Communication	2
ME 302	Thermodynamics I	3
ME 341	Fluid Mechanics I	3
PHYS 141	General Physics IA	4
PHYS 132	General Physics II	4
PHYS 133	General Physics III	4
STAT 312	Statistical Methods for Engineers (B6) <sup>1</sup>	4
ZOO 331 or	ZOO 332 Human Anat/Phys I or II	5

# Approved Support Electives<sup>2</sup>

12

Typical remaining course selections include, but are not limited to: BIO 302 or BIO 303 or BIO 351, BIO 405, BIO 426, BIO 441, BIO 452; CE 207; CHEM 216, CHEM 217, CHEM 218, CHEM 312, CHEM 313, CHEM 444, CHEM 446, CSC 448; EE 251, EE 321, EE 361; MCRO 221 or MCRO 224, MCRO 225, MCRO 320, MCRO 402.

## GENERAL EDUCATION (GE)

40

72 units required, 32 of which are in Major/Support

Refer to <u>current schedule</u> or <u>http://www.ge.calpoly.edu</u> to choose GE courses.
You will <u>not</u> 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) <sup>1</sup>	
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

# <sup>1</sup> Required in Support; also satisfies GE

FREE ELECTIVES .....

#### OTHER DEGREE REQUIREMENTS:

 Cal Poly, Higher Ed, and Major GPA must all be at least 2.00

## 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

<sup>&</sup>lt;sup>2</sup> Consultation with advisor is recommended prior to selecting approved support electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.