BS BIOMEDICAL ENGINEERING

2007-09 Cal Poly Catalog
Biomedical and General Engineering Department
Engineering Bldg. (13), Room 260
(805) 756-6400

☐ 60 units upper division  ☐ GWR
☐ 2.0 GPA  ☐ USCP
* = Satisfies General Education requirement

MAJOR COURSES

ENGR 110 Engineering Science I............................ 3
BMED 111 Biomedical Engrg Calculations .......... 3
BMED 212 Intro to Biomedical Engrg Design ....... 3
BMED 310 Biomed. Engrg Measurment/Analysis 4
BMED 410 Biomechanics..................................... 4
BMED 420 Biomaterials..................................... 4
BMED 425 Biomedical Engineering Transport ....4
BMED 430 Biomedical Modeling ......................... 4
BMED 440 Bioelectronics and Instrumentation ....4
BMED 450 Special Topics in Biomedical Engrg 4
BMED 455 Biomedical Engineering Design I....... 4
BMED 456 Biomedical Engineering Design II ...... 4
BMED 460 Engineering Physiology ..................... 4
Advisor approved technical electives (300/400)..... 14
BMED 481, 482 or ENGR 462 Senior Project ...... 4

67

SUPPORT COURSES

BIO 161 Intro to Cell & Molecular Bio (B2/B4)* 4
CHEM 124 Gen Chem for Engrg I (B3/B4)* and
CHEM 125 Gen Chem for Engrg II (Add’l Area B)* or CHEM 127, 128 (10-30-07).............. 4,4
ENGL 149 Technical Writing for Engineers (A3)* 4
MATH 141,142 Calculus I, II (B1)* ............... 4,4
MATH 143 Calculus III (Add’l Area B)* ......... 4
MATH 241 Calculus IV ..................................... 4
MATH 244 Linear Analysis I .............................. 4
PHYS 141 General Physics IA ............................ 4
PHYS 132 General Physics II ............................ 4
PHYS 133 General Physics III ........................... 4
Advisor approved math and science electives .... 16
CE 204 Mechanics of Materials I .................. 3
CSC 101 Fundamentals of Computer Science or
CSC 234 C and Unix .................................... 3
EE 201 Electric Circuit Theory ........................ 3
IME 314 Engineering Economics .................... 3
MATE 210 Materials Engineering .................... 3
ME 211 Engineering Statics ............................ 3
ME 212 Engineering Dynamics ....................... 3
ME 302 Thermodynamics ............................... 3
ME 341 Fluid Mechanics I .............................. 3

91

GENERAL EDUCATION (GE)

72 units required; 32 units are in Support.
→See page 56 for complete GE course listing.
→Minimum of 8 units required at the 300-400 level.

Area A Communication (8 units)

A1 Expository Writing ................................. 4
A2 Oral Communication ............................... 4
A3 Reasoning, Argumentation, and Writing * 4
units in Support......................................... 0

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

B1 Mathematics/Statistics * 8 units in Support.... 0
B2 Life Science *4 units in Support............... 0
B3 Physical Science* 4 units in Support .......... 0
B4 One lab taken with either a B2 or B3 course
B5 (requirement for Liberal Arts students only)
B6 Upper-division Area B * 4 units in Support .... 0
Additional Area B units * 8 units in Support ...... 0
Area C Arts and Humanities (16 units)

Area D/E Society and the Individual (16 units)

D1 The American Experience (40404) ............ 4
D2 Political Economy .................................... 4
D3 Comparative Social Institutions ............... 4
D4 Self Development (CSU Area E) ............... 4

1 For a total of 16 units:
Select one course from:
ZOO 331, ZOO 332, BIO 432, BIO 433.
Select one course from GE B6*:
MATH 344, STAT 312, PHYS 417.
Typical remaining course selections include, but are not limited to:
BIO 302 OR 303 OR 351, BIO 405, BIO 447, BIO 452; CHEM 312, CHEM 313, CHEM 444, CHEM 473, MCRO 221 OR 224,
MCRO 225, MCRO 320, MCRO 402, ZOO 426.

198