BS MATERIALS ENGINEERING

2007-09 Cal Poly Catalog

Materials Engineering Department
Air Conditioning Engrg Bldg. (12), Rm 107-H
(805) 756-2568 FAX: (805) 756-2299
email: matedept@calpoly.edu

- 60 units upper division
- GWR
- 2.0 GPA
- USCP

* = Satisfies General Education requirement

MAJOR COURSES

MATE 110 Intro to Materials Engrg Design I .......... 1
MATE 120 Intro to Materials Engrg Design II ....... 1
MATE 130 Intro to Materials Engrg Design III ...... 1
MATE 210 Materials Engineering and MATE 215 Materials Laboratory I ................................. 3,1
MATE 222 Materials Selection for the Life Cycle and MATE 225 Materials Laboratory II ........... 4,1
MATE 232 Nanotechnology, Human Biology, Ethics & Society and MATE 235 Mats Lab III 4,1
MATE 310 Noncrystalline Materials Systems ........ 4
MATE 330 Hybrid Materials Systems ................. 4
MATE 340 Electronic Materials Systems ............ 4
MATE 350 Structural Materials Systems ............ 4
MATE 360 Metallurgical Materials Systems ........ 4
MATE 370 Process Design .................................. 4
MATE 481 Corporate Culture ................................ 1
MATE 482, 483, 484 Senior Project I, II, III ...... 1,2,2
Select at least 3 courses from the following: ...... 12
BMED 530
Technical breadth electives ............................. 8
See listing of approved courses on department website, http://mate.calpoly.edu

Science elective to be selected from any 200-500 level course in BIO, BOT, CHEM, MCRO, PHYS, ASTR, GEOI, ZOO or any course in College of Engineering (6-28-07) .................. 4

SUPPORT COURSES

CE 204 Mechanics of Materials I ..................... 3
CHEM 127 General Chemistry (B3/B4)* .......... 4
CHEM 128 General Chemistry ...................... 4
CHEM 305 Physical Chemistry ...................... 4
CPE/CSC 101 Fundamentals of Computer Sci. I
or CSC 234 (3) & Tech Breadth Elective (1)
or CSC 231 (2) & Tech Breadth Elec (2)
(10-30-07) ................................................. 4
EE 201, 251 Electric Circuits Theory and Lab ...... 3,1
ENGL 149 Technical Writing for Engineers (A3)* 4
IME 314 Engineering Economics (or IME 326)..... 3
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
ME 211 Engineering Statics ......................... 3
ME 343 Heat Transfer or ME 302 Thermodyn. ..... 3
PHYS 141 General Physics IA (Add’l Area B)* ... 4
PHYS 132, 133 General Physics II, III .............. 4,4
STAT 312 Statistical Methods for Engineers (B6)* 4

1 Engineering Drawing and Manufacturing elective..

GENERAL EDUCATION (GE)

72 units required; 28 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 (4 units)

B1 Mathematics/Statistics * 8 units in Support.... 0
B2 Life Science .................................................. 4
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)

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

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

44

ELECTIVES......................................................... 0

191

1 Choose either IME 144 or a combination of ME 151 and one of IME 141, 142, 143, or IT 341.