MAJOR COURSES

BS INDUSTRIAL ENGINEERING

Industrial & Manufacturing Engineering

2011-13 Cal Poly Catalog

College of Engineering

197

MAJOR COURSES

IME 101 Intro Industrial & Manufacturing Engr ..... 1
IME 140 Graphics Communication and Modeling 2
IME 141 Manufacturing Processes: Net Shape ..... 1
IME 144 Intro Design and Manufacturing ........... 4
IME 146 Basic Electronics Manufacturing or IME 2
IME 223 Process Improvement Fundamentals ...... 4
IME 293 Industrial Costs and Controls ............. 3
IME 301 Operations Research I ..................... 4
IME 303 Project Organization and Management ..... 4
IME 312 Data Management and System Design .... 4
IME 314 Engineering Economics ..................... 3
IME 319 Human Factors Engineering ............... 3
IME 326 Engineering Test Design and Analysis..... 4
IME 405 Operations Research II .................... 4
IME 410 Production Planning/Control Systems ... 4
IME 417 Supply Chain and Logistics Management 4
IME 420 Simulation ..................................... 4
IME 421 Manufacturing Organizations .............. 3
IME 429 Ergonomics Lab ................................ 1
IME 430 Quality Engineering .......................... 4
IME 443 Facilities Planning and Design .......... 4
IME 481, 482 Sr Project Design Laboratory I, II ... 2,3

Select 14 units from the following. At least 6 units must be upper level (300-level or above)

- engineering courses (AERO, BMED, CE, EE, IME, MATE, ME):  
  - CE 204, 207;
  - BUS 310, 311, 346, 382, 402, 404, 488;
  - BUS 361;  
  - IME/AERO 510, 511;
  - IME/MATE 458/CPE 488;
  - IT 341, 406;
  - ME 302, 305, 328, 341;
  - MATE 210, 215;
  - MATH 344, 350;
  - PSY 350, 494

Effective Spring 2012

SUPPORT COURSES

BIO 213 and ENGR/BRAE 213 (B2)* .................... 2,2
CE 204 Mech Materials I/ME 341 Fluid Mech I ..... 3
CHEM 124 Gen Chem for Engineering (B3/B4)* 4
CSC 232 Computer Programming/Scientists/Engrs 3
EE 201, 251 Electric Circuits Theory and Lab ...... 3,1
EE 321 Electronics ..................................... 3
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
ME 211 Engineering Statics ............................ 3
ME 212 Engineering Dynamics ........................ 3
ME 302 Thermodynamics I or MATE 210 Mitering and MATE 215 Materials Lab I 3
PHYS 141 General Physics IA (Add'l Area B)* .... 4
PHYS 132, 133 General Physics II, III ............ 4,4
PSY 201/202 General Psychology (D4)* ............ 4
STAT 321 Prob/Stats for Engrs/Scientists (B6)* ... 4

GENERAL EDUCATION (GE)

72 units required, 36 of which are specified in Support.  
See page 39 for complete GE course listing.
Minimum of 8 units required at the 300 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 addl units reqd)

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 (not required for Engineering students)
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

1 IME 400 and IME 500 require a course substitution form and no more than 4 total units are allowed.
2 The courses selected to satisfy this requirement may not be used to satisfy other major, support, or general education requirements (no double counting of coursework).
3 A maximum of 4 units of technical electives may be taken outside of the College of Engineering. (10/20/11)
4 Consultation with advisor is recommended prior to selecting technical electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.
5 An additional 3 units of technical electives may substitute. (1/13/14)
<table>
<thead>
<tr>
<th>Area D/E Society and the Individual (12 units)</th>
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<tbody>
<tr>
<td>D1 The American Experience (40404) ..........</td>
<td>4</td>
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<tr>
<td>D2 Political Economy</td>
<td>4</td>
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<td>D3 Comparative Social Institutions ..........</td>
<td>4</td>
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<td>D4 Self Development (CSU Area E) * 4 units in Support</td>
<td>0</td>
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<tr>
<td>FREE ELECTIVES</td>
<td>0</td>
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<td>196</td>
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