BS Industrial Technology and Packaging

Program Learning Objectives
1. Demonstrate fundamental knowledge and skills to solve management, technology and applied engineering problems.
2. Recognize the ethical responsibilities as they apply to applications of technology.
3. Demonstrate knowledge of sustainability practices in industry.
4. Act upon decision tools and methods and explain the action taken.
5. Demonstrate effective participation and leadership in teams.
6. Demonstrate effective writing and speaking skills.

Degree Requirements and Curriculum

In addition to the program requirements listed on this page, students must also satisfy requirements outlined in more detail in the Minimum Requirements for Graduation (http://catalog.calpoly.edu/generalrequirementsbachelorsdegree/#generaleducationtext) section of this catalog, including:

• 60 units of upper division courses
• 2.0 GPA
• Graduation Writing Requirement (GWR)
• U.S. Cultural Pluralism (USCP)

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

MAJOR COURSES

IT 150 Electrical and Mechanical Power Systems 4
IT 233 Product Design with CAD 4
IT 260 Manufacturing Processes and Materials 4
IT 303 Lean Six Sigma Green Belt 4
IT 311 Industrial Safety and Quality Program Leadership 4
IT 326 Product Design and Development 4
IT 330 Packaging Fundamentals (Area F) 4
IT 341 Packaging Polymers and Processing 4
IT 390 Industrial Automation 4
IT 402 Developing and Presenting New Enterprise Strategies 4
or IT 406 Industrial Sales 4
IT 407 Applied Business Operations 4
IT 461 Senior Project I 2
IT 462 Senior Project II 2

Emphasis Areas
Select emphasis area in Industrial Technology or Packaging 20

Technology:

Industrial Technology (IT)
BUS 215 Managerial Accounting
IT 371 Supply Chain Management in Manufacturing and Services
IT 403 Quality Systems Management

Packaging Technology (PT)
IT 408 Paper and Paperboard Packaging
IT 409 Packaging Machinery and Processes
IT 430 Healthcare Packaging
IT 435 Packaging Development
IT 475 Packaging Performance Testing

Approved electives
Select from the following: 20

Any upper division 300-400 level IT courses
BUS 304 Establishing International Supply Chains
BUS 310 Introduction to Entrepreneurship

SUPPORT COURSES

BUS 214 Financial Accounting 4
BUS 346 Principles of Marketing 4
BUS 391 Information Systems 4
CHEM 110 World of Chemistry (B3 & B4) 4-5
or CHEM 111 Survey of Chemistry
ECON 201 Survey of Economics (D2) 4
MATH 141 Calculus I (B1) 4
or MATH 221 Calculus for Business and Economics
PHYS 121 College Physics I 4
PHYS 123 College Physics III 4
STAT 217 Introduction to Statistical Concepts and Methods (B1) 4
or STAT 218 Applied Statistics for the Life Sciences

GENERAL EDUCATION (GE)
(See GE program requirements below.) 52

FREE ELECTIVES

Free Electives 3-4

Total units 180

1 Required in Major/Support; also satisfies GE
2 Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.
3 If a course is taken to meet the emphasis area requirement, it cannot be double-counted as an approved elective.

General Education (GE) Requirements

• 72 units required, 20 of which are specified in Major and/or Support.
• See the complete GE course listing (http://catalog.calpoly.edu/generalrequirementsbachelorsdegree/#generaleducationtext).
• Minimum of 12 units required at the 300 level.

Area A Communication
A1 Expository Writing 4
A2 Oral Communication 4
A3 Reasoning, Argumentation and Writing 4

Area B Science and Mathematics
B1 Mathematics/Statistics (8 units in Support) 0
B2 Life Science 4
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B3</td>
<td>Physical Science (4 units in Support)</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B4</td>
<td>One lab taken with either a B2 or B3 course</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area C</strong></td>
<td><strong>Arts and Humanities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>Literature</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td>Philosophy</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3</td>
<td>Fine/Performing Arts</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C4</td>
<td>Upper-division elective</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area C elective</td>
<td>(Choose one course from C1-C5)</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area D/E</strong></td>
<td><strong>Society and the Individual</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>The American Experience (Title 5, Section 40404 requirement)</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>Political Economy (4 units in Support)</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3</td>
<td>Comparative Social Institutions</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D4</td>
<td>Self Development (CSU Area E)</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D5</td>
<td>Upper-division elective</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area F</strong></td>
<td><strong>Technology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Upper-division elective (4 units in Major)</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total units</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>52</strong></td>
<td></td>
</tr>
</tbody>
</table>

1 Required in Major/Support; also satisfies GE