



**California State Polytechnic University, Pomona
Degree Curriculum Sheet**

Plan (Major) **INDUSTRIAL ENGINEERING**

Catalog Year **2014 - 2015**

Name _____

Subplan/Option _____

Minimum Units Required **194**

Student ID _____

Required Core Courses		
Course		Units
Required of all students. A 2.0 cumulative GPA is required in core courses in order to receive a degree in the major.		
Fundamentals of Human Factors Engineering	IE 225/225L	3/1
Systems Engineering & Lab	IE 327/327L	3/1
Operations Research I	IE 416	4
Operations Research II	IE 417	4
Discrete Systems Simulation & Lab	IE 429/429L	3/1
Operations Planning and Control & Lab	IE 436/436L	2/1
Industrial and Mfg Engr Fundamentals	IME 112	3
Industrial and Mfg Engr Comp & Lab	IME 113/113L	2/1
Work Analysis and Design & Lab	IME 224/224L	3/1
Industrial Costs and Controls	IME 239	3
Probability and Statistics in Engr & Lab	IME 314/314L	3/1
Supply Chain Planning & Control	IME 326	3
Facilities Planning and Material Handling & Lab	IME 331/331L	3/1
Statistical Quality Control & Lab	IME 415/415L	3/1
Senior Project Seminar	IME 460	1
Analytic Geometry and Calculus II	MAT 115	4
Analytic Geometry and Calculus III	MAT 116	4
Calculus of Several Variables I	MAT 214	3
Calculus of Several Variables II	MAT 215	3
Elem Linear Algebra and Diff Equations	MAT 224	4
Engineering Graphics I & Lab	MFE 126/126L	2/1
Manufacturing Systems Processes & Lab	MFE 201/201L	3/1
Intro to Computer Integrated Mfg & Lab	MFE 450/450L	3/1
General Physics & Lab	PHY 132/132L	3/1
General Physics & Lab	PHY 133/133L	3/1
Total Units		89

Elective Core Courses	
Course	Units
Industrial Engineering Electives**	10
**Select from approved list.	
Total Units	10

Required Support Courses		
Course		Units
The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.		
General Chemistry	CHM 121	3
General Chemistry Lab (B3)	CHM 121L	1
General Chemistry & Lab	CHM 122/122L	3/1
Principles of Economics (D2)	EC 201	4
or Principles of Economics (D2)	EC 202	(4)
Elements of Electrical Engr & Lab	ECE 231/231L	3/1
Engineering, Society, and You & Lab (E)	EGR 100/100L	3/1
Project Design Principles and Applications (B5)	EGR 481	2
Project Design Principles and Applications (B5)	EGR 482	2
Ethical Considerations in Tech and Applied Sci (C4)	IME 402	4
Asset Allocation in Technical Decision Making (D4)	IME 403	4
Analytic Geometry and Calculus I (B4)	MAT 114	3
Vector Statics	ME 214	3
Strength of Materials I	ME 218	3
Materials Science and Engineering	MTE 207	3
General Physics & Lab (B1, B3)	PHY 131/131L	3/1
Total Units		49

Elective Support Courses	
Course	Units
From an approved list in consultation with an advisor.	7
Engineering Science Electives	
Total Units	7

General Education Requirements	
Area	Units
Area A Communication & Critical Thinking	12
1. Oral Communication	
2. Written Communication	
3. Critical Thinking	
Area B Mathematics & Natural Sciences	16
<i>Select at least one lab course from subarea 1 or 2.</i>	
1. Physical Science	
2. Biological Science	
3. Laboratory Activity	
4. Math/Quantitative Reasoning	
5. Science & Technology Synthesis	
Area C Humanities	16
1. Visual and Performing Arts	
2. Philosophy and Civilization	
3. Literature and Foreign Language	
4. Humanities Synthesis	
Area D Social Sciences	20
1. U.S. History, Constitution, American Ideals	
a. United States History	
b. Introduction to American Government	
2. History, Economics and Political Science	
3. Sociology, Anthropology, Ethnic & Gender Studies	
4. Social Science Synthesis	
Area E Lifelong Understanding & Self Development	4
Total Units	68

American Institutions	
Courses that satisfy this requirement may also satisfy GE Area D1	8

American Cultural Perspectives Requirement	
Refer to catalog for list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	4

All persons who receive undergraduate degrees from Cal Poly Pomona must pass the Graduation Writing Test (GWT). The test must be taken by the quarter following completion of 120 units for undergraduates.