



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

Plan (Major) MANUFACTURING ENGINEERING  
Subplan/Option \_\_\_\_\_

Catalog Year 2011-2012  
Minimum Units Required 198

Name \_\_\_\_\_  
Student ID \_\_\_\_\_

Evaluator \_\_\_\_\_  
GWT Satisfied \_\_\_\_\_ Yes \_\_\_\_\_ No

<b>Required Core Courses</b>		
Course		Units
<i>Students in this major are expected to maintain a GPA of at least 2.00 in all core courses.</i>		
Discrete Systems Simulation	IE 429/429L	3/1
Industrial & Manuf Engr Fundamentals	IME 112	3
Industrial & Manuf Engr Computations	IME 113/113L	2/1
Industrial Costs & Control	IME 239	3
Applications of Statistics	IME 301	3
Engineering Probability and Statistics	IME 312	3
Supply Chain Planning & Control	IME 326	3
Facilities Planning & Layout Design	IME 331/331L	3/1
Quality Control by Statistical Methods	IME 415/415L	3/1
Senior Project Seminar	IME 460	1
Senior Project	IME 471 or IME 461	2
Senior Project	IME 472 or IME 462	3
Analytic Geometry/Calculus II	MAT 115	4
Analytic Geometry/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	MFE 126/126L	2/1
Manufacturing Processes - Materials, Metrology & Treatment	MFE 217/217L	2/1
Manufacturing Processes I - Material Removal	MFE 221/221L	2/1
Engineering Graphics II	MFE 226/226L	2/1
Manufacturing Processes II - Form, Cast, Join	MFE 230/230L	2/1
Measurement & Methods	MFE 320/320L	3/1
Design for Manufacturing	MFE 326/326L	3/1
Principles of Numerical Control	MFE 250/250L	2/1
CAD/CAM	MFE 375/375L	3/1
Introduction to Computer Integrated Mfg	MFE 450/450L	3/1
Metal Work Theory & Application	MFE 465	3
Advanced Computer Aided Mfg Systems	MFE 476/476L	3/1
General Physics	PHY 132/132L	3/1
General Physics	PHY 133/133L	3/1
<b>Total Units</b>		<b>103</b>

<b>Elective Core Courses</b>	
Course	Units
Manufacturing Electives (Select with advisor approval)	3-4
<b>Total Units</b>	<b>3-4</b>

<b>Required Support Courses</b>		
Course		Units
General Chemistry	CHM 121	3
General Chemistry Lab (B3)	CHM 121L	1
General Chemistry	CHM 122/122L	3/1
Principles of Economics (D2)	EC 201	4
or Principles of Economics (D2)	EC 202	(4)
Elements of Electrical Engineering	ECE 231/231L	3/1
Ethical Cons. in Tech. & Appl Science (C4)	EGR 402	4
Asset Alloc in Tech Decision Making (D4)	EGR 403	4
Analytic Geometry/Calculus I (B4)	MAT 114	4
Vector Statics	ME 214	3
Vector Dynamics	ME 215	4
Strength Materials	ME 218	3
Fluid Mechanics	ME 311	3
or Thermodynamics	ME 301	(4)
General Physics/Lab (B1, B3)	PHY 131/131L	3/1
<b>Total Units</b>		<b>45-46</b>

<b>General Education Requirements</b>		IGE (G.E. Alternative)
Area	Units	
<b>Area A Communication &amp; Critical Thinking</b>	<b>12</b>	IGE 120 4 IGE 121 4 IGE 122 4 IGE 220 4 IGE 221 4 IGE 222 4 IGE 223 4
<b>Area B Mathematics &amp; Natural Sciences</b>	<b>16</b>	IGE 222 4 IGE 223 4 or EC 201 or EC 202 IGE 224 4 Area A1 4 Area A3 4 Area B 16 Area C1, C2, or C3 4 Area C4 4 Area D4 4
<b>Area C Humanities</b>	<b>16</b>	Area C1, C2, or C3 4 Area C4 4 Area D4 4
<b>Area D Social Sciences</b>	<b>20</b>	See University Catalog for information on how IGE meets G.E. requirements.
<b>Area E Lifelong Understanding &amp; Self Development</b>	<b>4</b>	
<b>Total Units</b>	<b>68</b>	

<b>American Institutions</b>	
Courses that satisfy this requirement may also satisfy G.E. Area D1	8

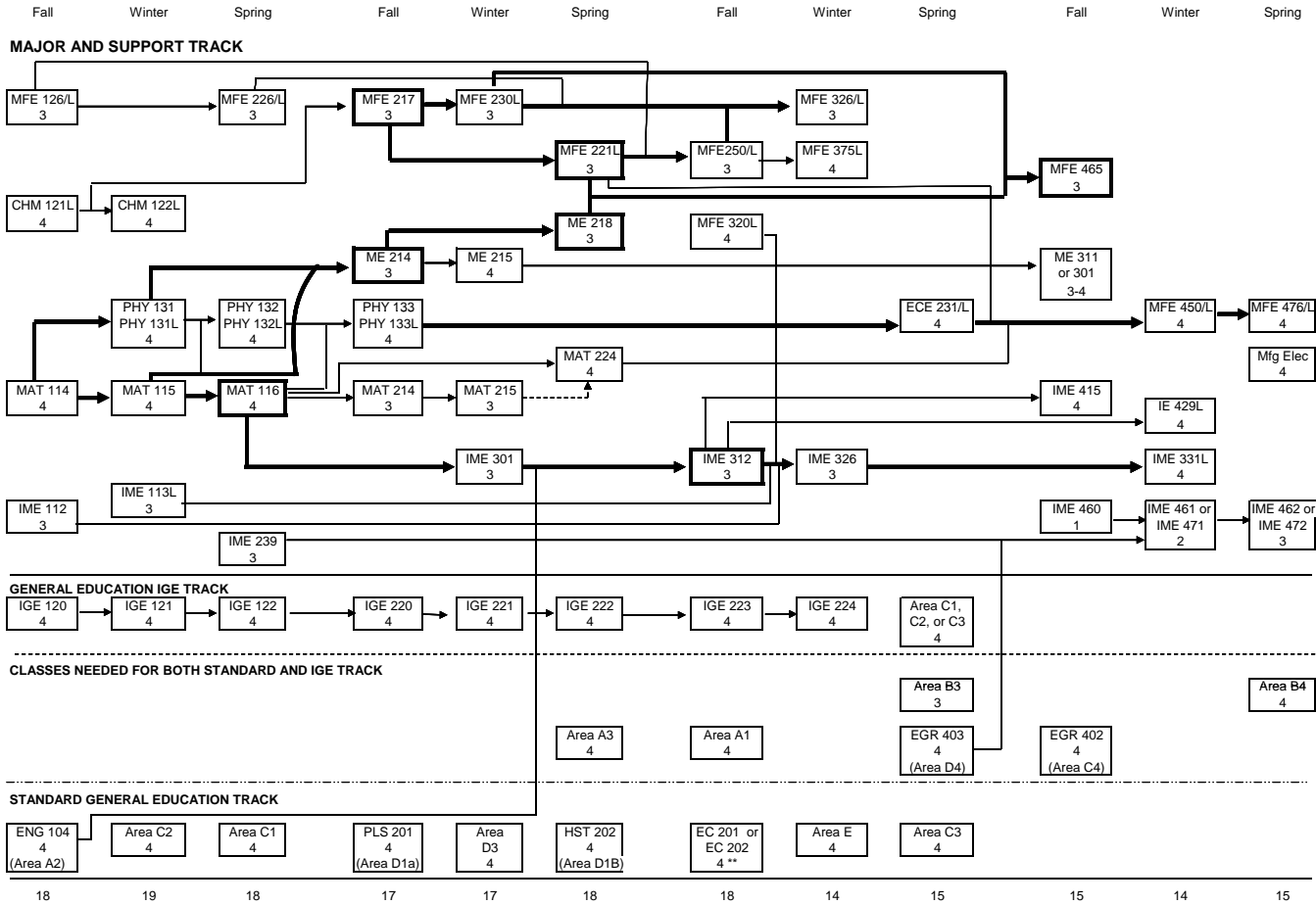
<b>American Cultural Perspectives Requirement</b>	
Refer to catalog for list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	4

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.

Course	GE Area
General Physics	PHY 131/131L B1, B3
and General Chemistry Lab	CHM 121L B3
Analytic Geometry/Calculus I	MAT 114 B4
Ethical Considerations in Tech. & Appl Science	EGR 402 C4
Principles of Economics	EC 201 or 202 D2
Asset Alloc in Tech Decision Making	EGR 403 D4

The remaining GE requirements may be satisfied by any course approved for that area.

No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree.  
A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.



Notes:

Total Units 198

Important Deadlines:  
 GWT Must be taken by  
 Evaluation must be done by  
 Apply to graduation by

Students in the IGE general education program take all classes above this line

Students in the Standard general education program take all classes below this line

To optimize time here select the classes with bold squares as soon as possible and follow the bold paths.

Arrows indicate prerequisites, dashed lines indicate recommended sequences

Try to balance workload to the level of units you can handle per quarter, and in the proper mix of difficulty for you.

It is recommended that students take companion activities for ME 214 and ME 215

In general, try to take only one MATH or ME course at a time

Note that most MFE courses and many IME courses are offered only once a year

**THE COURSES LISTED ABOVE INDICATE INTENT OF OFFERING QUARTER, ACTUAL OFFERINGS MAY VARY**

\*\* Note: Students with GE certification or in GE track have already satisfied this requirement