



California State Polytechnic University, Pomona
Degree Curriculum Sheet

Plan (Major) **MANUFACTURING ENGINEERING**

Catalog Year **2010-2011**

Name _____

Evaluator _____

Subplan/Option _____

Minimum Units Required **198**

Student ID _____

GWT Satisfied _____ Yes _____ No _____

Required Core Courses		
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/Lab	IE 429/429L	3/1
Industrial & Manuf Engr Fundamentals	IME 112	3
Industrial & Manuf Engr Computations/Lab	IME 113/113L	2/1
Industrial Costs & Control	IME 239	3
Applications of Statistics	IME 301	3
Engineering Probability and Statistics	IME 312	3
Production Planning & Control	IME 326	3
Facilities Planning & Layout Design/Lab	IME 331/331L	3/1
Quality Control by Statistical Methods/Lab	IME 415/L	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/Lab	MFE 217/217L	2/1
Manufacturing Processes I - Material Removal/Lab	MFE 221/221L	2/1
Engineering Graphics II/Lab	MFE 226/226L	2/1
Manufacturing Processes II - Form, Cast, Join/Lab	MFE 230/230L	2/1
Measurement & Methods/Lab	MFE 320/320L	3/1
Production Engineering/Lab	MFE 326/326L	3/1
Principles of Numerical Control/Lab	MFE 250/250L	2/1
CAD/CAM/Lab	MFE 375/375L	3/1
Introduction to Computer Integrated Mfg/Lab	MFE 450/450L	3/1
Metal Work Theory & Application	MFE 465	3
Advanced Computer Aided Mfg Systems/Lab	MFE 476/476L	3/1
General Physics/Lab	PHY 132/132L	3/1
General Physics/Lab	PHY 133/133L	3/1
Total Units		103

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

Required Support Courses		
Course		Units
General Chemistry	CHM 121	3
General Chemistry Lab (B3)	CHM 121L	1
General Chemistry/Lab	CHM 122/122L	3/1
Elements of Electrical Engineering/Lab	ECE 231/231L	3/1
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
Ethical Cons. in Tech. & Appl Science (C4)	EGR 402	4
Principles of Economics (D2)	EC 201 or 202	4
Asset Alloc in Tech Decision Making (D4)	EGR 403	4
Total Units		45-46

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

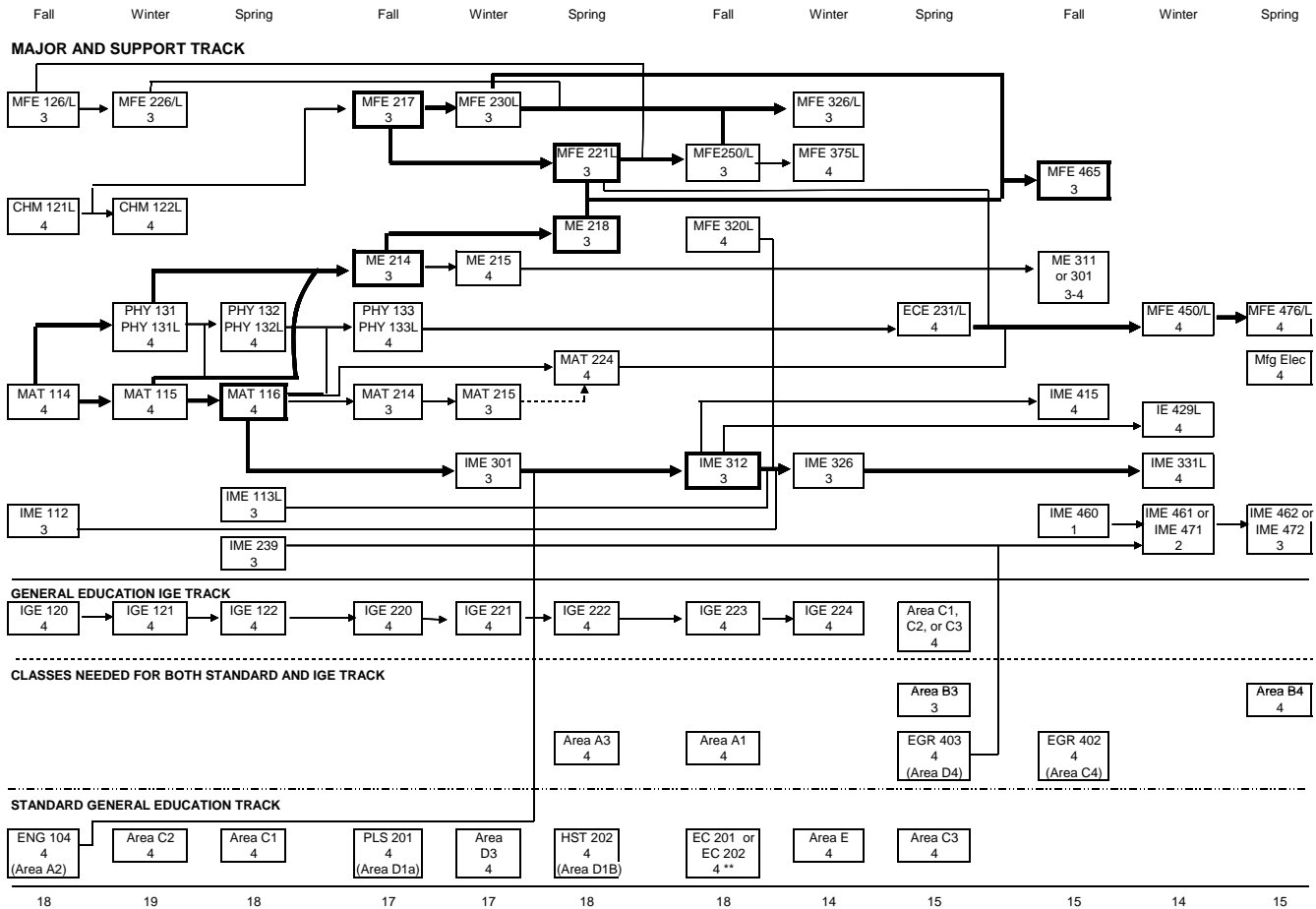
American Institutions	
Courses that satisfy this requirement may also satisfy G.E. Area D1	8

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

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/Lab	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:

Important Deadlines:

GWT Must be taken by
Evaluation must be done by
Apply to graduation by

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

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

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

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

Total Units 198

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

Arrows indicate prerequisites, dashed lines indicate recommended sequences

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

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

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