



**California State Polytechnic University, Pomona
DEGREE REQUIREMENT EVALUATION**

ELM Satisfied ___ Yes ___ No
 EPT Satisfied ___ Yes ___ No
 GWT Satisfied ___ Yes ___ No

MAJOR **MATERIALS ENGINEERING (5220)**

NAME _____
 LAST FIRST MI

TERM ADMITTED _____ YEAR: **2004-2005**

OPTION/EMPHASIS _____

EVALUATOR _____

UNITS REQUIRED **202**

STUDENT I.D. # _____

DATE _____

UPDATES _____

CORE COURSES	Units	SUPPORT COURSES	Units	IGE	GENERAL EDUCATION. Students may fulfill these requirements at Cal Poly Pomona with the General Education (GE) or the Interdisciplinary General Education (IGE) Programs. Select courses from approved lists shown in the Schedule of Classes unless specified.																																																																								
<i>Students in this major are expected to <u>maintain</u> a GPA of at least 2.00 in all core courses.</i>					<table border="1"> <thead> <tr> <th colspan="2">GENERAL EDUCATION COURSES</th> <th>Units</th> </tr> </thead> <tbody> <tr> <td colspan="3">Area A Communication and Critical Thinking–12 units</td> </tr> <tr> <td>1</td> <td>ENG 104</td> <td>4</td> </tr> <tr> <td>2</td> <td>Oral Communication</td> <td>4</td> </tr> <tr> <td>3</td> <td>Critical Thinking</td> <td>4</td> </tr> <tr> <td colspan="3">Area B Math and Natural Sciences–16 units</td> </tr> <tr> <td>1</td> <td><u>MAT 114</u></td> <td>4</td> </tr> <tr> <td>2</td> <td><u>PHY 131/131L, CHM 121L</u></td> <td>5</td> </tr> <tr> <td>3</td> <td>Biological Science</td> <td>3</td> </tr> <tr> <td>4</td> <td>EGR 481/482*</td> <td>4</td> </tr> <tr> <td colspan="3">Area C Humanities– 16 units</td> </tr> <tr> <td>1</td> <td>Fine/Performing Arts</td> <td>4</td> </tr> <tr> <td>2</td> <td>Philosophy and Civilization</td> <td>4</td> </tr> <tr> <td>3</td> <td>Literature and Foreign Language</td> <td>4</td> </tr> <tr> <td>4</td> <td>Humanities Synthesis*</td> <td>4</td> </tr> <tr> <td colspan="3">Area D Social Sciences– 20 units</td> </tr> <tr> <td>1a</td> <td>PLS 201</td> <td>4</td> </tr> <tr> <td>1b</td> <td>HST 202</td> <td>4</td> </tr> <tr> <td>2</td> <td>EC 201 or 202</td> <td>4</td> </tr> <tr> <td>3</td> <td>Elective</td> <td>4</td> </tr> <tr> <td>4</td> <td>Social Science Synthesis*</td> <td>4</td> </tr> <tr> <td colspan="3">Area E Lifelong Understanding and Self-Development–4 units</td> </tr> <tr> <td colspan="3"><u>Underlined courses</u> satisfy both major and general requirements.</td> </tr> <tr> <td colspan="3">*Department Approval Required</td> </tr> </tbody> </table>	GENERAL EDUCATION COURSES		Units	Area A Communication and Critical Thinking–12 units			1	ENG 104	4	2	Oral Communication	4	3	Critical Thinking	4	Area B Math and Natural Sciences–16 units			1	<u>MAT 114</u>	4	2	<u>PHY 131/131L, CHM 121L</u>	5	3	Biological Science	3	4	EGR 481/482*	4	Area C Humanities– 16 units			1	Fine/Performing Arts	4	2	Philosophy and Civilization	4	3	Literature and Foreign Language	4	4	Humanities Synthesis*	4	Area D Social Sciences– 20 units			1a	PLS 201	4	1b	HST 202	4	2	EC 201 or 202	4	3	Elective	4	4	Social Science Synthesis*	4	Area E Lifelong Understanding and Self-Development–4 units			<u>Underlined courses</u> satisfy both major and general requirements.			*Department Approval Required		
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Intro to CME	CHE 131L/141L	2	Gen Chemistry	CHM 121	3	IGE 120	4																																																																						
CME Engineering Analysis	CHE 132/142L	2	Gen Chemistry	CHM 122/L	4	IGE 121	4																																																																						
CME Data Analysis	CHE 133/143L	2	Gen Chemistry	CHM 123/L	4	IGE 122	4																																																																						
Stoichiometry I	CHE 201/211L	3	Physical Chem	CHM 304/A	4	IGE 220	4																																																																						
Stoichiometry II	CHE 202/212L	3	Physical Chem	CHM 305	3	IGE 221	4																																																																						
Undergrad Seminar	CHE 463	2	Elem Elec Engr	ECE 231/251L	4	IGE 222	4																																																																						
Thermo & Trans Seq (Pattern A or B)**		15	An Geom/Calculus II	MAT 115	4	IGE 223	4																																																																						
Mtl Engg in Industry	MTE 205L	1	An Geom/Calculus III	MAT 116	4	IGE 224	4																																																																						
Mtl Sci and Engr	MTE 207	3	Calc of Sev Var I	MAT 214	3	AREA 1b,c	8																																																																						
Mtl Sci and Engr Lab	MTE 317L	1	Calc of Sev Var II	MAT 215	3	EC 201/202	4																																																																						
Adv Sci of Materials	MTE 327/L	4	Diff Equations	MAT 216	4	Area B	16																																																																						
Mechanical Metallurgy	MTE 320/L	4	Vector Statics	ME 214	3	Area C4	4																																																																						
Kinetic Proc in Mtl	MTE 338	3	Strength of Materials	ME 218	3	Area D4	4																																																																						
Materials Joining/Lab	MTE 337/L	3	Str. of Mtl. Lab.	ME 220L	1																																																																								
Polymer Engr/Lab	MTE 303/L	4	Gen Physics	PHY 132/L	4																																																																								
Ceramic Mtl/Lab	MTE 407/L	4	Gen Physics	PHY 133/L	4																																																																								
Corr & Mtl Degradation	MTE 401	3	Engr Graphics	MFE 126/L	3																																																																								
Fract & Failure Analysis	MTE 422	3																																																																											
Mtl Sel & Design I	MTE 420/L	3																																																																											
Mtl Sel & Design II	MTE 430/L	3																																																																											
MTE Electives	MTE 4XX	8																																																																											
** Pattern A: Appl Math in CME CHE 301 (3) CME Thermo I CHE 302 (4) Momentum Transport CHE 311 (4) Energy Transport CHE 312/322L (4)																																																																													
**Pattern B: Vector Dynamics ME 215 (4) Thermodynamics ME 301 (4) Fluid Mechanics ME 311 (3) Heat Transfer ME 415 (4)																																																																													
SUMMARY OF ADVANCED STANDING CREDIT: Earned Hours _____ G.P.A. Hours _____ Quality Points _____ G.P.A. _____																																																																													
UNITS REQUIRED:	76	UNITS REQUIRED:	58	UNITS REQUIRED:	68																																																																								

NOT MORE THAN 105 UNITS FROM A COMMUNITY COLLEGE NOR MORE THAN 36 UNITS OF EXTENSION WORK MAY BE APPLIED TOWARD A BACHELOR'S DEGREE.
 A 2.0 CUMULATIVE GPA IS REQUIRED IN CORE COURSES INCLUDING OPTION COURSES IN ORDER TO RECEIVE A DEGREE IN THIS MAJOR.

**CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA
MATERIALS ENGINEERING**

NAME: _____

CPID: _____

CURRICULUM FLOWSHEET, 2004-2005

	FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
	FALL	WINTER	SPRING	FALL	WINTER	SPRING	FALL	WINTER	SPRING	FALL	WINTER	SPRING
	units	units	units	units	units	units	units	units	units	units	units	units
	[1] CHE 131/ CHE 141L 2	[6] CHE 132/ CHE 142L 2 [Preq: MAT 105]	[11] CHE 133 / CHE 143L 2 [Preq: MAT 105]	[16] CHE 201/ CHE 211L 3 [Preq: 9,13]	[22] CHE 202/ CHE 212L 3 [Preq: 16]	[27] CHE 301 3 [Preq: 5,22,26]	[33] CHE 302 4 [Preq: 5,19,22,32]	[37] MTE 338 3 [Preq: 23,33]		[46] CHE 463 2 [Preq: GWT & senior]	[51] MTE 420/ MTE 420L 3 [Preq: Senior,GWT, 3]	[56] MTE 430/ MTE 430L 3 [Preq: 51]
				[17] MTE 205L 1 [Preq: 8]	[23] MTE 207 3 [Preq: 7,12,14]	[28] MTE 317L 1 [Preq: 5,23]	[34] CHE 311 4 [Preq: 18,27,32]	[38] CHE 312/ CHE 322L 4 [Preq: 11,33,34]				
	[2] AREA B3 3	[7] MFE 126/ MFE 126L 3		[18] ME 214 3 [Preq: 12]	[24] ME 218 3 [Preq: 18]	[29] ME 220L 1 [Preq: 24]	[35] MTE 327/ MTE 327L 4 [Preq: 23,25,26]	[39] MTE 303/ MTE 303L 4 [Preq: 23,28,34]	[42] MTE 320/ MTE 320L 4 [Preq: 23,28,29]	[47] MTE 401 3 [Preq: 23,28,37]	[52] MTE 422 3 [Preq: 23,28]	[57] MTE 407/ MTE 407L 4 [Preq: 11,23,28,37]
			[12] PHY 131/ PHY 131L 4 [Preq: 4]/(Area B2)	[19] PHY 132/ PHY 132L 4 [Preq: 12]	[25] PHY 133/ PHY 133L 4 [Preq: 12]	[30] ECE 231/ ECE 251L 4 [Preq: 14,25]			[43] MTE UD Elective 4	[48] MTE 337/ MTE 337L 3 [Preq: 23,28]		[58] MTE UD. Elective 4
	[3] CHM 4 [Area B2]	[8] CHM 4 [Preq: 3]	[13] CHM 4 [Preq: 8]	[20] AREA A2 4		[31] AREA A3 4	[36] CHM 4 [Preq: 13,14,25]	[40] CHM 305 3 [Preq: 36]	[44] EC 201 or EC 202 4 [Area D2]		[53] EGR 481 2 [Area B4] [Preq: GWT & senior]	[59] EGR 482 2 [Area B4] [Preq: 53]
	[4] MAT 114 4 [Area B1]	[9] MAT 115 4 [Preq: 4]	[14] MAT 116 4 [Preq: 9]	[21] MAT 214 3 [Preq: 14]	[26] MAT 216 4 [Preq: 14]	[32] MAT 215 3 [Preq: 21]				[49] AREA C3 4	[54] AREA D4 4	[60] Area C4 4
IGE	IGE 120 (4)	IGE 121 (4)	IGE 122 (4)				IGE 220 (4)	IGE 221 (4)	IGE 222 (4)	IGE 223 (4)	IGE 224 (4)	
GE	[5] ENG 104 4 [Area A1]	[10] AREA C1 4	[15] AREA C2 4					[41] Area D3 4	[45] AREA E 4	[50] PLS 201 4 [Area D1a]	[55] HST 202 4 [Area D1b]	
UNITS	17	17	18	18	17	16	16	18	16	16	16	17

Refer to the University Catalog for complete prerequisite and corequisite requirements.

GWT Test available at the completion of 90 units, mandatory at 120 units

Revised: 3/3/2004 **TOTAL**
202

Classes with BOLD frame may be taken during the Junior Year or the Senior Year, and may only be offered every other year