

Associate of Pre-Engineering Guidesheet 2011-12

COURSE	COURSE TITLE	CREDIT	OFFERED	PREREQUISITE
GE Courses				
ENGL 1010	Into to Academic Writing	3	F/S/M	
ENGL 2010	Intermediate Writing	3	F/S/M	ENGL 1010
LM 1010	Information Literacy	1	F/S/M	
UNIV 1000	Student Success	1	F/S	
CSIS 1040	<i>Programming with MatLab</i>	3	S	"C" in MATH 1010 or ACT of 23
MATH 1210	<i>Calculus</i>	4	F/S/M	"C" in MATH 1050/60 or pre-college 2-1/2 yrs-Alg/1 yr-Geo/1/2 yr-Trig
Math (Choose a minimum of 10 credits)				
MATH 1220	<i>Calculus II</i>	4	F/S	"C" in MATH 1210 or H.S. AP Calculus
MATH 2250	<i>Linear Algebra & Differential Equations</i>	4	F	MATH 1210 & MATH 1220
MATH 2270	<i>Linear Algebra</i>	3	F	MATH 1220
MATH 2280	<i>Differential Equations</i>	3	S	MATH 1220 & MATH 2270
Engineering Courses (choose 20 credits)				
ENGR 1010	<i>Engineering in the 21st Century</i>	3	F/S	
ENGR 1030	<i>Computer Assisted Design</i>	3	F/S	
ENGR 2010	<i>Statics</i>	3	F	ENGR 1010, MATH 1210, PHYS 2210/2215
ENGR 2030	<i>Dynamics</i>	3	S	ENGR 2010
ENGR 2140	<i>Strength of Materials</i>	3	S	ENGR 2010, Co-req ENGR 2145
ENGR 2145	<i>Strength of Materials Lab</i>	1	S	Co-req ENGR 2140
ENGR 2240	<i>Surveying & Global Positioning</i>	2	F	MATH 1060
ENGR 2245	<i>Surveying & Global Positioning Lab</i>	1	F	Co-req ENGR 2240
ENGR 2270	<i>Electric Circuits</i>	3	S	MATH 2280, PHYS 2220/25, Co-req ENGR 2275
ENGR 2275	<i>Electric Circuits Lab</i>	1	S	ENGR 2010, Co-req ENGR 2270
ENGR 3000	<i>Thermodynamics</i>	3	F	PHYS 2220, MATH 2210
ENGR 3010	<i>Material Science</i>	3	F	CHEM 1210, ENGR 2140, co-req ENGR 3015
ENGR 3015	<i>Material Science Lab</i>	1	F	Co-req ENGR 3010
Additional Science Electives (choose 15 credits)				
BIOL 1610	<i>General Biology I</i>	3	F/S/M	Co-req BIOL 1615
BIOL 1615	<i>General Biology I Lab</i>	1	F/S/M	Co-req BIOL 1610
BIOL 1620	<i>General Biology II</i>	3	F/S/M	BIOL 1610/1615
BIOL 1625	<i>General Biology II Lab</i>	1	F/S/M	
CHEM 1210	<i>Principles of Chemistry I</i>	4	F/M	Two yrs of hs algebra or MATH 1050
CHEM 1215	<i>Principles of Chemistry I Lab</i>	1	F/M	Co-req CHEM 1210
CHEM 1220	<i>Principles of Chemistry II</i>	4	S/M	Minimum of "C" or better in CHEM 1210
CHEM 1225	<i>Principles of Chemistry II Lab</i>	1	S/M	Co-req CHEM 1220
CHEM 2310	<i>Organic Chemistry</i>	4	F/M	Minimum of "C" or better in CHEM 1220
CHEM 2320	<i>Organic Chemistry II</i>	4	S/M	Minimum of "C" or better in CHEM 2310
CHEM 2325	<i>Organic Chemistry II Lab</i>	2	S/M	Co-req CHEM 2320
PHYS 2210	<i>Physics for Scientists & Engineers</i>	4	F/S	MATH 1210, Co-req PHYS 2215
PHYS 2215	<i>Physics for Scientists & Engineers Lab</i>	1	F/S	Co-req PHYS 2210
PHYS 2220	<i>Principles for Scientist & Engineers II</i>	4	F/S	PHYS 2210/15 & MATH 1220
PHYS 2225	<i>Principles for Scientist & Engineers II Lab</i>	1	F/S	Co req PHYS 2220