

Bachelor of Science in Integrated Engineering composite — Worksheet & Pre-requisites— 08-09

Name _____ T# _____

Course #	Course title	Credits	Of'rd	Pre-requisites
CORE				
MATH 1220	Calculus II	4	F/S	"C" in MATH 1210 or H.S. AP Calculus
MATH 2210	Calculus III	4	F/S	"C" in MATH 1220
MATH 2270	Linear Algebra	3	F/S	MATH 1210 & either MATH 1220 or 1100
MATH 2280	Differential Equations	3	S	MATH 1220 & MATH 2270
CCET 1040	Computer Aided Design	3		
ENGR 2010	Statics	3	F/S	ENGR 1010, MATH 1210 & PHYS 2010 (or PHYS 2210)
ENGR 2030	Dynamics	3	S	ENGR 2010
ENGR 2140	Strength of Materials	3	S	ENGR 2010
ENGR 2145	Strength of Materials lab	1	S	Co-req ENGR 2140
ENGR 3000	Thermodynamics	3	F	pre-req: PHYS 2220 & co-req: MATH 2210
ENGR 3010	Material Science Engineering	3	F	CHEM 1210, ENGR 2140 & co-req: ENGR 3015
ENGR 3015	Material Science Engineering lab	1	F	co-req: ENGR 3010
ENGR 3045	Engineering Design Lab I	2	F	ENGR 1030, ENGR 2140, and CSIS 1040
ENGR 3050	Fluid Mechanics	3	S	ENGR 3000
ENGR 3055	Fluid Mechanics Lab	1	S	Co-req ENGR 3050
ENGR 2270	Electro Mechanical Systems	3	S	MATH 1220 & PHYS 2220/25
ENGR 2275	Electro Mechanical Systems Lab	1	S	Co-req ENGR 2270
ENGR 3095	Engineering Design Lab II	3	S	ENGR 3045
ENGR 4000	Mechatronics	3	S	ENGR 2030, MATH 2280 & ENGR 4030/40
ENGR 4010	Heat Transfer	3	F	MATH 2280 & ENGR 3050
ENGR 4025	Integrated Engineering Design Lab I	3	F	ENGR 3010, 3020, 3095, 4000 & 4050
ENGR 4030	Electronics	3	F	ENGR 2270
ENGR 4035	Electronics Lab	1	F	Co-req ENGR 4030
ENGR 4050	Structural Analysis	3	F	ENGR 2140
ENGR 4060	Manufacturing	3	F	ENGR 3030 & 4000
ENGR 4070	Facilities & Infrastructure	3	S	ENGR 4010 & 4050
ENGR 4085	Integrated Engineering Design Lab II	3	S	ENGR 4025
PHYS 2210	Physics for Scientists & Engineers I	4	S	MATH 1210 Co-req
PHYS 2215	Physics for Scientists & Engineers I Lab	1	S	Co-req PHYS 2210
PHYS 2220	Physics for Scientists & Engineers II	4	F	PHYS 2210/15 & MATH 1220
PHYS 2225	Physics for Scientists & Engineers II Lab	1	F	Co-req PHYS 2220
GENERAL EDUCATION				
ENGL 1010	Intro to Academic Writing	3		
ENGL 2010	Intermediate Writing	3		
MATH 1210	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
LM 1010	Information Literacy	1		
UNIV 1000	First-Year Seminar	1		
American Institution		3		
CSIS 1040	Intro to Programming with MatLab	3	S	"C" in MATH 1010 or ACT of 23
FINE ARTS:		3		
INTERDISC. ENGR 1010	Engineering in the 21 st Century	3		
HUMANITIES		3		
SOCIAL SCIENCE		3		
LIFE SCIENCE		3		
PHYS SCI: Chem 1210/15	Principles of Chemistry I/Lab	5	F/M	MATH 1050 or H.S. chemistry
Total General Education				
Total credits				