

## Course Requirements and Registration Priorities School of Engineering (Undergraduate), Fall 2016

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
<b>SEDS</b>											
<b>Chemical and Materials Engineering</b>											
1	ECHE 126	Introduction to Chemical Engineering	3	6							
2	ECHE 222	Chemistry I	3	6							
3	ECHE 319	Chemical Engineering Thermodynamics	3	6							
4	ECHE 321	Chemistry II	3	6							
5	ECHE 331	Process Control and Optimization	3	6							
6	ECHE 333	Separation Processes-I	3	6	ECHE 319 Chemical Engineering Thermodynamics (1218) (D and above)						
7	ECHE 369	Transport Phenomena-II	3	6							
8	ECHE 418	Capstone project 1	3	6	ECHE 323 Computational methods in Chemical Engineering-I (1272) (D and above)						
9	ECHE 419	Advanced Process Simulation	3	6	ECHE 323 Computational methods in Chemical Engineering-I (1272) (D and above)	ECHE 482 Computational Methods in Chemical Engineering-II (1984) ( and above)					
10	ECHE 482	Computational Methods in Chemical Engineering-II	3	6	ECHE 319 Chemical Engineering Thermodynamics (1218) (D and above) AND ECHE 333 Separation Processes-I (1271) (D and above) AND ECHE 383 Separation Processes II (1982) (D and above) AND ECHE 481 Chemical Reaction Engineering (1985) (D and above) AND ECHE 323 Computational methods in Chemical Engineering-I (1272) (D and above)						
11	ECHE 484	Multi-Phase Flows	3	6	ECHE 319 Chemical Engineering Thermodynamics (1218) (D and above) AND ECHE 270 Transport Phenomena-I (735) (D and above)						
<b>Civil Engineering</b>											

12	ECE 215	Surveying	3	6							
13	ECE 216	Civil Engineering CAD	3	6							
14	ECE 217	Structural Analysis I	3	6	BENG 117 Engineering Mechanics (740) (D and above)						
15	ECE 300	Hydraulic Systems	3	6							
16	ECE 303	Construction Management and Practice	3	6	BENG 148 Engineering Practice (1073) (D and above)						
17	ECE 307	Engineering Geology and Rock Mechanics	3	6							
18	ECE 314	Structural Engineering Applications I	3	6	ECE 213 Structural Engineering Analysis (863) (D and above) OR ECE 217 Structural Analysis I (3156) (D and above)						
19	ECE 401	Capstone Project 1	3	6							
20	ECE 404	Construction Technologies and Processes	3	6	BENG 148 Engineering Practice (1073) (D and above) AND ECE 302 Civil Engineering Materials (1040) (D and above)						
21	ECE 416	Highway Engineering	3	6	ECE 302 Civil Engineering Materials (1040) (D and above)						
22	ECE 473	Environmental Systems	3	6							
<b>Electrical and Electronic Engineering</b>											
23	EEE 238	Digital Signal and Image Processing	3	6							
24	EEE 250	Microelectronic Devices and Circuits	3	6	BENG 114 Introduction to Electrical Systems (1076) (D and above)						
25	EEE 251	Electronic Engineering Design Principles	3	6	BENG 114 Introduction to Electrical Systems (1076) (D and above)						
26	EEE 341	Digital Electronic System Design	3	6							
27	EEE 342	Electromagnetics	3	6							
28	EEE 343	Embedded Microcontrollers	3	6							
29	EEE 345	Power Electronics	3	6							
30	EEE 382	Antennas and Propagation	3	6							
31	EEE 435	Digital Communications	3	6							

32	EEE 437	Capstone Project 1	3	6							
33	EEE 448	Power Transmission and Distribution plants	3	6							
34	EEE 450	RF and Microwave Circuit Design	3	6							
35	EEE 451	High Voltage Engineering	3	6							
36	EEE 452	Power Systems Protection	3	6							
<b>Mechanical Engineering</b>											
37	EME 253	Computer Aided Engineering	3	6							
38	EME 254	Mechanics of Materials	3	6							
39	EME 352	Computational Fluid Dynamics	3	6							
40	EME 357	Fluid Mechanics 2	3	6							
41	EME 358	Heat Transfer	3	6	BENG 226 Engineering Thermodynamics (1553) (D and above) AND EME 275 Fluid Mechanics I (1988) (D and above)						
42	EME 361	Machine Design	3	6							
43	EME 451	Capstone project 1	3	6							
44	EME 464	Materials and Manufacturing 1	3	6							
45	EME 467	Vehicle Propulsion Systems	3	6							
46	EME 485	Applied Statistics and Probability	3	6	EME 485 Applied Statistics and Probability (2236) (D and above)						
47	EME 486	Oscillations of mechanical systems	3	6							
<b>School of Engineering</b>											
48	BENG 117	Engineering Mechanics	3	6							
49	BENG 124	Engineering Mathematics I	3	6							
50	BENG 145	Occupal & Environment Health and Safety	3	6							
51	BENG 146	Programming for Engineers	3	6							
52	BENG 201	Engineering Economy	3	6							

53	BENG 215	Sensors and Actuators	3	6							
54	BENG 221	Engineering Materials	3	6							
55	BENG 228	Engineering Mathematics III	3	6	BENG 124 Engineering Mathematics I (101) (D and above) AND BENG 225 Engineering Mathematics II (48) (D and above)						
56	BENG 405	Project Management	3	6							