

## Course Requirements and Registration Priorities School of Engineering (Undergraduate), Fall 2017

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
<b>SEng</b>											
<b>Chemical 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 333	Separation Processes-I	3	6	ECHE 319 Chemical Engineering Thermodynamics (D and above)						
5	ECHE 369	Transport Phenomena-II	3	6							
6	ECHE 385	Research Practice	3	6							
7	ECHE 418	Capstone project 1	3	6	ECHE 323 Computational methods in Chemical Engineering-I (D and above)						
8	ECHE 419	Advanced Process Simulation	3	6	ECHE 323 Computational methods in Chemical Engineering-I (D and above)	ECHE 482 Computational Methods in Chemical Engineering-II (D and above)					
9	ECHE 481	Chemical Reaction Engineering	3	6	ECHE 126 Introduction to Chemical Engineering (D and above) AND BENG 124 Engineering Mathematics I (D and above) AND BENG 225 Engineering Mathematics II (D and above)						
10	ECHE 482	Computational Methods in Chemical Engineering-II	3	6	ECHE 319 Chemical Engineering Thermodynamics (D and above) AND ECHE 333 Separation Processes-I (D and above) AND ECHE 383 Separation Processes II (D and above) AND ECHE 481 Chemical Reaction Engineering (D and above) AND ECHE 323 Computational methods in Chemical Engineering-I (D and above)						
11	ECHE 484	Multi-Phase Flows	3	6	ECHE 319 Chemical Engineering Thermodynamics (D and above) AND ECHE 270 Transport Phenomena-I (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 (D and above)						
15	ECE 302	Civil Engineering Materials	3	6	BENG 221 Engineering Materials (D and above)						
16	ECE 307	Engineering Geology and Rock Mechanics	3	6							
17	ECE 318	Structural Design - Concrete	3	6	ECE 479 Structural Analysis II (C- and above)						
18	ECE 401	Capstone Project 1	3	6							
19	ECE 404	Construction Technologies and Processes	3	6	BENG 148 Engineering Practice (D and above) AND ECE 302 Civil Engineering Materials (D and above)						
20	ECE 405	Environmental Engineering	3	6	ECE 473 Environmental Systems (D and above) OR ECE 218 Environmental Chemistry (D and above)						
21	ECE 416	Highway Engineering	3	6	ECE 302 Civil Engineering Materials (D and above)						
22	ECE 473	Environmental Systems	3	6							
<b>Electrical and Electronic Engineering</b>											
23	EEE 212	Signals and Systems	3	6	BENG 225 Engineering Mathematics II (D and above)						
24	EEE 238	Digital Signal and Image Processing	3	6							
25	EEE 250	Microelectronic Devices and Circuits	3	6	BENG 114 Introduction to Electrical Systems (D and above)						
26	EEE 251	Electronic Engineering Design Principles	3	6	BENG 114 Introduction to Electrical Systems (D and above)						
27	EEE 342	Electromagnetics	3	6							
28	EEE 345	Power Electronics	3	6							
29	EEE 382	Antennas and Propagation	3	6							
30	EEE 384	Digital integrated circuits design	3	6	EEE 250 Microelectronic Devices and Circuits (C- and above)						
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							

37	EEE 482	Mobile Communications	3	6	EEE 239 Communication systems (C- and above)						
<b>Mechanical Engineering</b>											
38	EME 253	Computer Aided Engineering	3	6							
39	EME 254	Mechanics of Materials	3	6							
40	EME 262	Machine Dynamics I	3	6							
41	EME 354	Advanced Control Systems	3	6	BENG 219 Control Systems (D and above)						
42	EME 358	Heat Transfer	3	6							
43	EME 361	Machine Design	3	6							
44	EME 410	Aerodynamics	3	6	EME 357 Fluid Mechanics 2 (D and above)						
45	EME 412	Heating, Ventilating, and Air Conditioning	3	6							
46	EME 413	Computer Aided Geometric Design	3	6	EME 253 Computer Aided Engineering (C- and above)						
47	EME 451	Capstone project 1	3	6							
48	EME 456	Feasibility Analysis of Clean Energy Technologies	3	6							
49	EME 463	Machine Dynamics II	3	6							
50	EME 467	Vehicle Propulsion Systems	3	6			EME 456 Feasibility Analysis of Clean Energy Technologies (C- and above)				
51	EME 486	Oscillations of mechanical systems	3	6							
<b>School of Engineering</b>											
52	BENG 117	Engineering Mechanics	3	6							
53	BENG 124	Engineering Mathematics I	3	6							
54	BENG 145	Occupal & Environment Health and Safety	3	6							
55	BENG 146	Programming for Engineers	3	6							
56	BENG 215	Sensors and Actuators	3	6							
57	BENG 221	Engineering Materials	3	6							
58	BENG 228	Engineering Mathematics III	3	6	BENG 124 Engineering Mathematics I (D and above) AND BENG 225 Engineering Mathematics II (D and above)						
59	BENG 405	Project Management	3	6							