Course Requirements and Registration Priorities
School of Engineering, Fall 2016

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
SEDS											
Chemical Engineering											
1	MCHE 613	Physical Chemistry of Oil & Gas	1.5	3							
2	MCHE 614	Applied Chemical Engineering Thermodynamics	1.5	3							
3	MCHE 615	Advanced Unit Operations	1.5	3							
4	MCHE 616	Advanced Chemical Reactor Engineering	1.5	3	ECHE 481 Chemical Reaction Engineering (1985) (D and above)						
5	MCHE 618	Plant Economics and Planning	1.5	3							
6	MCHE 619	Safety Engineering and Loss Prevention	1.5	3							
Chemical and Materials Engineering											
7	ECHE 126	Introduction to Chemical Engineering	3	6							
8	ECHE 222	Chemistry I	3	6							
9	ECHE 319	Chemical Engineering Thermodynamics	3	6							
10	ECHE 321	Chemistry II	3	6							
11	ECHE 331	Process Control and Optimization	3	6							
12	ECHE 333	Separation Processes-I	3	6	ECHE 319 Chemical Engineering Thermodynamics (1218) (D and above)						
13	ECHE 369	Transport Phenomena-II	3	6							
14	ECHE 418	Capstone project 1	3	6	ECHE 323 Computational methods in Chemical Engineering-I (1272) (D and above)						

15	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)					
16	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)						
17	ECHE 484	Multi-Phase Flows	3	6	ECHE 319 Chemical Engineering Thermodynamics (1218) (D and above) AND ECHE 270 Transport Phenomena-l (735) (D and above)						
Civil Engineering											
18	ECE 215	Surveying	3	6							
19	ECE 216	Civil Engineering CAD	3	6							
20	ECE 217	Structural Analysis I	3	6	BENG 117 Engineering Mechanics (740) (D and above)						
21	ECE 300	Hydraulic Systems	3	6							
22	ECE 303	Construction Management and Practice	3	6	BENG 148 Engineering Practice (1073) (D and above)						
23	ECE 307	Engineering Geology and Rock Mechanics	3	6							
24	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)						
25	ECE 401	Capstone Project 1	3	6							

26	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)						
27	ECE 416	Highway Engineering	3	6	ECE 302 Civil Engineering Materials (1040) (D and above)						
28	ECE 473	Environmental Systems	3	6							
29	EMEM 502	Decision Models	1.5	3							
30	EMEM 505	Operations Management	1.5	3							
31	EMEM 507	Project Management	3	6							
32	EMEM 509	Systems Engineering	3	6							
33	EMEM 513	Entrepreneurship	2	4							
34	EMEM 519	Product Development	1.5	3							
35	EMEM 522	Quality Management	1.5	3							
36	EMEM 523	Supply Chain Management	3	6							
37	EMEM 528	Information Systems Mananegement	1.5	3							
38	EMEM 530	Technology Assessment	1.5	3							
39	EMEM 533	Engineering Management and Engineering Economy	3	6							
40	MCE 601	Sustainable Development	3	6							
41	MCE 604	Advanced Project Management	3	6							
42	MCE 606	Environmental Impacts and Assessments	3	6							
43	MSC 615	Advanced Statistics and Probability	3	6							
44	MSC 616	Research Methods	3	6							
Electrical and Electronic Engineering											
45	EEE 238	Digital Signal and Image Processing	3	6							

46	EEE 250	Microelectronic Devices and Circuits	3	6	BENG 114 Introduction to Electrical Systems (1076) (D and above)						
47	EEE 251	Electronic Engineering Design Principles	3	6	BENG 114 Introduction to Electrical Systems (1076) (D and above)						
48	EEE 341	Digital Electronic System Design	3	6							
49	EEE 342	Electromagnetics	3	6							
50	EEE 343	Embedded Microcontrollers	3	6							
51	EEE 345	Power Electronics	3	6							
52	EEE 382	Antennas and Propagation	3	6							
53	EEE 435	Digital Communications	3	6							
54	EEE 437	Capstone Project 1	3	6							
55	EEE 448	Power Transmission and Distribution plants	3	6							
56	EEE 450	RF and Microwave Circuit Design	3	6							
57	EEE 451	High Voltage Engineering	3	6							
58	EEE 452	Power Systems Protection	3	6							
59	MEE 600	MSc Thesis in Electrical and Electronics Engineering	15	30							
60	MEE 607	Statistical Signal Processing	3	6							
61	MEE 608	Special Topics in Circuits Theory	3	6							
Information and Communication Technologies											
62	EICT 754	Information Theory for Communications	3	6							
Mechanical Engineering											
63	EME 253	Computer Aided Engineering	3	6							
64	EME 254	Mechanics of Materials	3	6							
65	EME 352	Computational Fluid Dynamics	3	6							
66	EME 357	Fluid Mechanics 2	3	6							

67	EME 358	Heat Transfer	3	6	BENG 226 Engineering Thermodynamics (1553) (D and above) AND EME 275 Fluid Mechanics I (1988) (D and above)						
68	EME 361	Machine Design	3	6							
69	EME 451	Capstone project 1	3	6							
70	EME 464	Materials and Manufacturing 1	3	6							
71	EME 467	Vehicle Propulsion Systems	3	6							
72	EME 485	Applied Statistics and Probability	3	6	EME 485 Applied Statistics and Probability (2236) (D and above)						
73	EME 486	Oscillations of mechanical systems	3	6							
74	MME 600	MSc Thesis in Mechanical Engineering	15	30							
75	MME 604	Engineering Mathematics	3	6							
76	MME 605	Numerical Techniques for Engineers	3	6							
77	MME 606	Advanced Control Systems	3	6							
School of Engineering											
78	BENG 117	Engineering Mechanics	3	6							
79	BENG 124	Engineering Mathematics I	3	6							
80	BENG 145	Occupal & Environment Health and Safety	3	6							
81	BENG 146	Programming for Engineers	3	6							
82	BENG 201	Engineering Economy	3	6							
83	BENG 215	Sensors and Actuators	3	6							
84	BENG 221	Engineering Materials	3	6							
85	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)						

86	BENG 405	Project Management	3	6							
87	DENG 782	Research Methods and Ethics	3	6							
88	DENG 784	Doctoral Proposal I	0	6							
89	DENG 785	PhD proposal oral defence	0	0							
90	DENG 794	Dissertation Research	12	24	DENG 785 PhD proposal oral defence (2604) (C- and above)						