

**Course Requirements and Registration Priorities  
School of Engineering (Undergraduate), Spring 2017**

#	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 210	Foundations of Unit Operations	3	6							
2	ECHE 221	Engineering Fluid Mechanics	3	6							
3	ECHE 270	Transport Phenomena-I	3	6							
4	ECHE 319	Chemical Engineering Thermodynamics	3	6							
5	ECHE 323	Computational methods in Chemical Engineering-I	3	6	ECHE 333 Separation Processes-I (1271) (D and above)	ECHE 481 Chemical Reaction Engineering (1985) (D and above)					
6	ECHE 327	Micro and Nanotechnology	3	6							
7	ECHE 328	Mineral Processing	3	6							
8	ECHE 383	Separation Processes II	3	6	ECHE 126 Introduction to Chemical Engineering (33) (D and above) AND ECHE 225 Heat and Mass Transfer Operations (541) (D and above)						
9	ECHE 384	Interdisciplinary Design Project	3	6							
10	ECHE 478	Electrochemical Engineering and Corrosion Protection	3	6	ECHE 222 Chemistry I (731) (D and above)						
11	ECHE 479	Capstone Project II	9	18	ECHE 418 Capstone project 1 (1278) (D and above)						
12	ECHE 481	Chemical Reaction Engineering	3	6	ECHE 126 Introduction to Chemical Engineering (33) (D and above) AND BENG 124 Engineering Mathematics I (101) (D and above) AND BENG 225 Engineering Mathematics II (48) (D and above)						
13	ECHE 483	Chemistry II	3	6	ECHE 222 Chemistry I (731) (D and above)						
<b>Civil and Environmental Engineering</b>											
14	ECE 210	Soil Mechanics	3	6							

15	ECE 218	Environmental Chemistry	3	6						
16	ECE 219	Hydraulics	3	6						
17	ECE 302	Civil Engineering Materials	3	6	BENG 221 Engineering Materials (47) (D and above)					
18	ECE 306	Geotechnical Design	3	6	ECE 210 Soil Mechanics (862) (D and above)					
19	ECE 315	Structural Engineering Applications II	3	6	ECE 213 Structural Engineering Analysis (863) (D and above) OR ECE 217 Structural Analysis I (3156) (D and above)					
20	ECE 405	Environmental Engineering	3	6	ECE 473 Environmental Systems (1953) (D and above) OR ECE 218 Environmental Chemistry (3296) (D and above)					
21	ECE 478	Capstone Project II	9	18	ECE 401 Capstone Project 1 (1270) (D and above)					
22	ECE 479	Structural Analysis II	3	6	ECE 217 Structural Analysis I (3156) (D and above)					

**Electrical and Computer Engineering**

23	EEE 210	Software Engineering	3	6	BENG 146 Programming for Engineers (2234) (D and above)					
24	EEE 211	Computer Systems Architecture	3	6	ECHE 126 Introduction to Chemical Engineering (33) (D and above)					
25	EEE 212	Signals and Systems	3	6	BENG 225 Engineering Mathematics II (48) (D and above)					
26	EEE 239	Communication systems	3	6						
27	EEE 340	Data Communications	3	6						
28	EEE 341	Digital Electronic System Design	3	6						
29	EEE 379	Power Systems Analysis	3	6						
30	EEE 380	Integrated Circuits Design	3	6						
31	EEE 381	Electrical Machines and Drives	3	6						
32	EEE 410	Nonlinear Circuits and Systems	3	6	EEE 380 Integrated Circuits Design (1954) (D and above)					
33	EEE 411	Special Topics in Signal Processing	3	6						
34	EEE 480	Capstone Project II	9	18						

**Mechanical and Aerospace Engineering**

35	EME 262	Machine Dynamics I	3	6							
36	EME 275	Fluid Mechanics I	3	6							
37	EME 354	Advanced Control Systems	3	6	BENG 219 Control Systems (728) (D and above)						
38	EME 377	Mechanical Systems Design	3	6	EME 361 Machine Design (1051) (D and above)						
39	EME 410	Aerodynamics	3	6	EME 357 Fluid Mechanics II (1280) (D and above)						
40	EME 411	Air Conditioning and Fire Engineering	3	6	BENG 226 Engineering Thermodynamics (1553) (D and above)						
41	EME 463	Machine Dynamics II	3	6							
42	EME 464	Materials and Manufacturing I	3	6							
43	EME 476	Materials and Manufacturing II	3	6							
44	EME 477	Capstone Project II	9	18							
45	EME 480	Industrial Automation	3	6							
<b>School of Engineering</b>											
46	BENG 114	Introduction to Electrical Systems	3	6							
47	BENG 147	Mechanics of Fluids and Thermodynamics	3	6	BENG 124 Engineering Mathematics I (101) (D and above)						
48	BENG 148	Engineering Practice	3	6							
49	BENG 201	Engineering Economy	3	6							
50	BENG 225	Engineering Mathematics II	3	6							
51	BENG 226	Engineering Thermodynamics	3	6							
52	BENG 343	Interdisciplinary Design Project	3	6							