

Course Requirements and Registration Priorities
School of Engineering and Digital Sciences (PhD), Spring 2020

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
SEDS											
Chemical and Materials Engineering											
1	DCHME 700-0	Thesis Research	0	0				Science, Engineering and Technology			
2	DCHME 701	Current Research Literature	4	8				Science, Engineering and Technology			
3	DCHME 715	Air Quality, Toxicity and Health	4	8				Science, Engineering and Technology			
4	DCHME 751	Advanced Safety, Reliability and Risk Engineering in Process Industries	4	8				Science, Engineering and Technology			
5	DCHME 752	Polymer Melt Fluid Mechanics and Processing	4	8				Science, Engineering and Technology			
6	DCHME 763	Advanced Heat and Mass Transfer	4	8				Science, Engineering and Technology			
Civil and Environmental Engineering											
7	DCEE 700-0	Thesis Research	0	0				Science, Engineering and Technology			
8	DCEE 701	Current Research Literature	4	8				Science, Engineering and Technology			
9	DCEE 759	Geotechnical Earthquake Engineering	4	8				Science, Engineering and Technology			
10	DCEE 762	Advanced Project Management	4	8				Science, Engineering and Technology			
11	DCEE 766	Advanced Pavement Design, Analysis, and Rehabilitation	4	8				Science, Engineering and Technology			
12	DCEE 767	Advanced Concrete Design	4	8				Science, Engineering and Technology			
13	DCEE 769	Sustainable Development	4	8				Science, Engineering and Technology			
Computer Science											
14	CSCI 700-0	Thesis Research	0	0				Science, Engineering and Technology			
15	CSCI 702	Advanced Hardware/Software Co-Design	4	8				Science, Engineering and Technology			
16	CSCI 722	Current Research Literature	4	8				Science, Engineering and Technology			
17	CSCI 745	Advanced Big Data Analytics	4	8				Science, Engineering and Technology			

18	CSCI 747	Advanced Algorithmic Trading	4	8				Science, Engineering and Technology		
19	CSCI 791	Advanced Artificial Reasoning and Problem solving	4	8				Science, Engineering and Technology		
20	DS 704	Advanced Data Mining and Decision Support	4	8				Science, Engineering and Technology		
Electrical and Computer Engineering										
21	DELCE 700-0	Thesis Research	0	0				Science, Engineering and Technology		
22	DELCE 701	Current Research Literature	4	8				Science, Engineering and Technology		
23	DELCE 755	Advanced Electromagnetics	4	8				Science, Engineering and Technology		
24	DELCE 759	Advanced Pattern Recognition and Machine Learning	4	8				Science, Engineering and Technology		
25	DELCE 760	Advanced System Modelling and Control	4	8				Science, Engineering and Technology		
Mechanical and Aerospace Engineering										
26	DMAE 700-0	Thesis Research	0	0				Science, Engineering and Technology		
27	DMAE 702	Current Research Literature	4	8				Science, Engineering and Technology		
28	DMAE 703	Numerical Techniques for Engineers	4	8				Science, Engineering and Technology		
29	DMAE 756	Design and Manufacturing with Environmental Concern	4	8				Science, Engineering and Technology		
30	DMAE 757	Design Optimization	4	8				Science, Engineering and Technology		
31	DMAE 769	Advanced Computational Fluid Dynamics and Heat Transfer in Mechanical Engineering	4	8				Science, Engineering and Technology		
Robotics and Mechatronics										
32	ROBT 700-0	Thesis Research	0	0				Science, Engineering and Technology		
33	ROBT 702	Advanced Robot Perception and Vision	4	8				Science, Engineering and Technology		
34	ROBT 722	Current Research Literature	4	8				Science, Engineering and Technology		
School of Engineering										
35	DENG 789	Doctoral Seminar I	3	6	DENG 785 PhD Proposal Oral Defence (2604) (P)			SEDS		
36	DENG 790	Doctoral Seminar II	3	6	DENG 789 Doctoral Seminar I (4598) (P)			Science, Engineering and Technology		

37	DENG 791	Doctoral Seminar III	3	6	DENG 790 Doctoral Seminar II (4599) (P)						
38	DENG 792	Doctoral Seminar IV	3	6	DENG 791 Doctoral Seminar III (4600) (P)			Science, Engineering and Technology			
39	DENG 794	Dissertation Research	12	24	DENG 785 PhD Proposal Oral Defence (2604) (P)			Science, Engineering and Technology			
40	DENG 796	Thesis Completion	0	0				Science, Engineering and Technology			
41	DENG 797	Oral Defence of PhD Dissertation	0	0	DENG 785 PhD Proposal Oral Defence (2604) (P) AND DENG 789 Doctoral Seminar I (4598) (P) AND DENG 790 Doctoral Seminar II (4599) (P)			Science, Engineering and Technology			