

Course Requirements and Registration Priorities
School of Engineering and Digital Sciences (PhD), Fall 2022

#	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				1 year PhD SEDS Chemical Engineering, Chemical Engineering	Science, Engineering and Technology		
2	DCHME 755	Integrated Computational Materials Engineering	4	8				1 year PhD SEDS Chemical Engineering	Science, Engineering and Technology		
3	DCHME 761	Advanced Chemical Reaction Engineering	4	8				1 year PhD SEDS Chemical Engineering	Science, Engineering and Technology		
4	DCHME 762	Advanced Materials Processing	4	8				1 year PhD SEDS Chemical Engineering	Science, Engineering and Technology		
Civil and Environmental Engineering											
5	DCEE 700-0	Thesis Research	0	0				1 year PhD SEDS Civil Engineering	SEDS		
6	DCEE 750	Finite Element Methods	4	8				1 year PhD SEDS Civil Engineering	SEDS	SMG	
7	DCEE 757	Advanced Environmental Chemistry	4	8				1 year PhD SEDS Civil Engineering	SEDS		
8	DCEE 761	Advanced Soil Mechanics	4	8				1 year PhD SEDS Civil Engineering	SEDS	SMG	
9	DCEE 772	Engineering Management and Engineering Economy	4	8				1 year PhD SEDS Civil Engineering	SEDS	SMG	
10	DCEE 773	Unsaturated Soil Mechanics for Engineering Practice	4	8				1 year PhD SEDS Civil Engineering	SEDS		
Computer Science											
11	CSCI 700-0	Thesis Research	0	0				1 year PhD SEDS Computer Science, Computer Science			
12	CSCI 701	Advanced Software Principles and Practice	4	8				Computer Science , Robotics Engineering	SEDS	SSH	
13	CSCI 711	Advanced Theory of Computation	4	8				Computer Science , Robotics Engineering	SEDS	SSH	
14	CSCI 785	Advanced Computer Vision	4	8				Computer Science , Robotics Engineering	SEDS	SSH	
15	CSCI 794	Advanced Deep Learning	4	8				Computer Science , Robotics Engineering	SEDS	SSH	
Electrical and Computer Engineering											
16	DELCE 700-0	Thesis Research	0	0				1 year PhD SEDS Electrical Engineering	Electrical Engineering		

17	DELCE 753	Stochastic Processes	4	8				1 year PhD SEDS Electrical Engineering	SEDS		
18	DELCE 761	Advanced Data Structures and Algorithms	4	8				1 year PhD SEDS Electrical Engineering	SEDS		
Mechanical and Aerospace Engineering											
19	DMAE 700-0	Thesis Research	0	0				1 year PhD SEDS Mechanical Engineering, Mechanical Engineering			
20	DMAE 701	Advanced Applied Mathematics	4	8				1 year PhD SEDS Mechanical Engineering	SEDS		
21	DMAE 750	Advanced Statistics and Probability	4	8			MSC 615 Advanced Statistics and Probability (2394) (B- and above)	1 year PhD SEDS Mechanical Engineering	SEDS		
22	DMAE 751	Modern Control Engineering	4	8				1 year PhD SEDS Mechanical Engineering	SEDS		
23	DMAE 753	Computational and Unsteady Aerodynamics	4	8				1 year PhD SEDS Mechanical Engineering			
24	DMAE 765	Advanced Manufacturing Processes and Strategies	4	8				1 year PhD SEDS Mechanical Engineering	SEDS		
Robotics and Mechatronics											
25	ROBT 700-0	Thesis Research	0	0				1 year PhD SEDS Robotics Engineering	Robotics Engineering, Science, Engineering and Technology		
26	ROBT 701	Advanced Robot Manipulation and Mobility	4	8				1 year PhD SEDS Robotics Engineering	Robotics Engineering, Science, Engineering and Technology		
27	ROBT 703	Advanced Optimal Control and Planning	4	8				1 year PhD SEDS Robotics Engineering	Robotics Engineering, Science, Engineering and Technology		
28	ROBT 709	Advanced Robot Dynamics and Control	4	8				1 year PhD SEDS Robotics Engineering	Robotics Engineering, Science, Engineering and Technology		
School of Engineering											
29	DENG 700	Thesis Research	89	178							
30	DENG 700-0	Thesis Research	0	0				Science, Engineering and Technology			

31	DENG 782	Research Methods and Ethics	3	6				SEDS, SSH	SMG		
32	DENG 792	Doctoral Seminar IV	3	6	DENG 791 Doctoral Seminar III (4600) (P)			Science, Engineering and Technology			
33	DENG 794	Dissertation Research	12	24	DENG 785 PhD Proposal Oral Defence (2604) (P)			Science, Engineering and Technology			
34	DENG 795	Research at Host University	6	12	DENG 785 PhD Proposal Oral Defence (2604) (P)			Science, Engineering and Technology			
35	DENG 796	Thesis Completion	0	0				Science, Engineering and Technology			
36	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			
37	DENG 798	Doctoral Seminar VI	3	6	DENG 793 Doctoral Seminar V (4602) (P)			Science, Engineering and Technology			
38	DENG 799	Doctoral Seminar VII	3	6	DENG 798 Doctoral Seminar VI (4607) (P)			Science, Engineering and Technology			