

Course Requirements and Registration Priorities
School of Engineering (Graduate: Master), Spring 2019

#	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 600	MSc Thesis in Chemical Engineering	15	30							
Chemical and Materials Engineering											
2	MCHME 600	Research Seminar	3	6				1 year Gr SEng Chemical and Materials Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
3	MCHME 606	Advanced Heat and Mass Transfer	3	6				1 year Gr SEng Chemical and Materials Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
4	MCHME 704	Advanced Safety, Reliability and Risk Engineering in Process Industries	3	6				1 year Gr SEng Chemical and Materials Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
5	MCHME 712	Advanced Tissue Engineering	3	6				1 year Gr SEng Chemical and Materials Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
Civil Engineering											
6	EMEM 510	Managerial Accounting	2	4				1 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		

7	EMEM 511	Business Strategy	2	4				1 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
8	EMEM 512	Leading Change	2	4				1 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
9	EMEM 513	Entrepreneurship	2	4				1 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
10	EMEM 514	Finance	2	4				1 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
11	EMEM 516	Management of Organizations	2	4				1 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
12	EMEM 517	Marketing	2	4				1 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
13	EMEM 527	Globalization and Engineering	3	6				2 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		

14	EMEM 529	Capstone Project	8	16				2 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
15	EMEM 535	Managing Product and Service Development	3	6				2 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
16	EMEM 543	Quality and Lean Management	3	6				2 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
17	EMEM 545	Business Communication	2	4				1 year Gr SENG Engineering Management	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
18	MCEE 600	Research Seminar	3	6				1 year Gr SENG Civil and Environmental Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
19	MCEE 606	Advanced Project Management	3	6				1 year Gr SENG Civil and Environmental Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
20	MCEE 700	Structural Dynamics and Earthquake Engineering	3	6				1 year Gr SENG Civil and Environmental Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		

21	MCEE 701	Advanced Concrete Technology	3	6				1 year Gr SEng Civil and Environmental Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
22	MCEE 703	Theory of Physico-Chemical Treatment Processes	3	6				1 year Gr SEng Civil and Environmental Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
23	MCEE 704	Contaminated Site Management and Soil Treatment Technologies	3	6				1 year Gr SEng Civil and Environmental Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
24	MSC 600	Research methods and ethics	3	6				1 year Gr SEng Chemical and Materials Engineering, 1 year Gr SEng Civil and Environmental Engineering, 1 year Gr SEng Electrical and Computer Engineering, 1 year Gr SEng Mechanical and Aerospace Engineering	Science, Engineering and Technology		
Electrical and Computer Engineering											
25	MECE 600	Research Seminar	3	6				1 year Gr SEng Electrical and Computer Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
26	MECE 700	Industrial and Commercial Power System	3	6				1 year Gr SEng Electrical and Computer Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		

27	MECE 703	Advanced Photonics	3	6				1 year Gr SEng Electrical and Computer Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
28	MECE 705	Advanced Mixed Signal Circuit Design	3	6				1 year Gr SEng Electrical and Computer Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
29	MECE 717	Pattern Recognition and Machine Learning	3	6				1 year Gr SEng Electrical and Computer Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
30	MECE 718	Deep Learning for Internet of Things	3	6				1 year Gr SEng Electrical and Computer Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
31	MECE 724	System Modelling and Control	3	6	MSC 602 Advanced Applied Mathematics (4499) (C- and above)			1 year Gr SEng Electrical and Computer Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
Mechanical Engineering											
32	MME 600	MSc Thesis in Mechanical Engineering	15	30							
Mechanical and Aerospace Engineering											
33	MMAE 600	Research Seminar	3	6				1 year Gr SEng Mechanical and Aerospace Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		

34	MMAE 604	Advanced Computational Fluid Dynamics (CFD) and Heat Transfer in Mechanical Engineering	3	6				1 year Gr SENG Mechanical and Aerospace Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
35	MMAE 700	Advanced Statistics and Probability	3	6				1 year Gr SENG Mechanical and Aerospace Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		
36	MMAE 701	Numerical Techniques for Engineers	3	6				1 year Gr SENG Mechanical and Aerospace Engineering	1 year PhD SENG Science, Engineering and Technology, 2 year PhD SENG Science, Engineering and Technology, 3 year PhD SENG Science, Engineering and Technology, 4 year PhD SENG Science, Engineering and Technology, 5 year PhD SENG Science, Engineering and Technology		