

Course Requirements and Registration Priorities
School of Science and Technology (Graduate: Master), Fall 2018

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
SST											
Biological Science											
1	BIOL 520	Statistical Methods in Life Sciences	3	6							
2	BIOL 550	Structural and Molecular Biology in Health and Disease	3	6							
3	BIOL 560	Molecular Biology of Prokaryotic Cells	3	6							
4	BIOL 600	Graduate Seminar Series	3	6							
5	BIOL 623	Advanced Immunology	3	6				Biological Sciences	SST, Science, Engineering and Technology	SEng, SHSS	
6	BIOL 635	Hot Topics in Life Sciences	3	6							
7	BIOL 670	Gene Therapy	3	6				Biological Sciences	SST, Science, Engineering and Technology	SEng, SHSS	
8	BIOL 690	Research Thesis I	6	12							
Computer Science											
9	CSCI 501	Software Principles and Practice	3	6							
10	CSCI 511	CS Track Core-Theory	3	6							
11	CSCI 512	Information Theory	3	6							
12	CSCI 525	Quantum Computing	3	6				Computer Science, Physics	SST, Science, Engineering and Technology	SEng, SHSS	
13	CSCI 545	Big Data Analytics	3	6							
14	CSCI 575	Formal Methods and Applications	3	6							
Mathematics											
15	MATH 517	Scientific Modeling and Simulation with Mathematics	3	6	MATH 273 Linear Algebra with Applications (C- and above) OR MATH 351 Numerical Methods with Applications (C- and above)						
16	MATH 518	Applied Finite Element Analysis	3	6	MATH 517 Scientific Modeling and Simulation with Mathematics (B- and above) AND MATH 351 Numerical Methods with Applications (C and above)						

17	MATH 540	Statistical Learning I	3	6	MATH 322 Mathematical Statistics (C- and above) OR (MATH 310 Applied Statistical Methods (C- and above) AND MATH 273 Linear Algebra with Applications (C- and above))						
18	MATH 576	Numerical Methods for Partial Differential Equations	3	6	MATH 551 Advanced Numerical Methods (B- and above)						
19	MATH 676	Advanced Partial Differential Equations with Applications	3	6	MATH 481 Partial Differential Equations (C and above) OR MATH 482 Fourier Analysis (C and above)						
Physics											
20	PHYS 505	Classical Mechanics	3	6							
21	PHYS 511	Computational Modeling and Simulation	3	6				Physics	SST, Science, Engineering and Technology	SEng, SHSS	
22	PHYS 515	Classical Electrodynamics	3	6							
23	PHYS 550	Advanced Mathematical Physics	3	6				Physics	SST, Science, Engineering and Technology	SEng, SHSS	
24	PHYS 574	Lasers and Photonics	3	6				Physics	SST, Science, Engineering and Technology	SEng, SHSS	
25	SST 501	Teaching and Learning	3	6							
26	SST 503	Laboratory Practicum	3	6	SST 501 Teaching and Learning (C- and above) AND SST 502 Teaching Practicum (C- and above)						
27	SST 591	Research Methods	3	6							
28	SST 693	Thesis Proposal	3	6	SST 591 Research Methods (C- and above)						
Robotics and Mechatronics											
29	ROBT 501	Robot Manipulation and Mobility	3	6							
30	ROBT 503	Dynamic Systems and Control	3	6							
31	ROBT 611	Industrial Robotics	3	6	ROBT 501 Robot Manipulation and Mobility (C- and above) AND CSCI 501 Software Principles and Practice (C- and above)			Robotics	SST, Science, Engineering and Technology	SEng, SHSS	
32	ROBT 613	Brain-Machine Interfaces	3	6				Robotics	SST, Science, Engineering and Technology	SEng, SHSS	

33	ROBT 615	Optimal Control and Planning	3	6	ROBT 501 Robot Manipulation and Mobility (C- and above) AND ROBT 503 Dynamic Systems and Control (C- and above)			Robotics	SST, Science, Engineering and Technology	SEng, SHSS	
----	----------	------------------------------	---	---	--	--	--	----------	--	------------	--