

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

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
<b>SST</b>											
<b>Computer Science</b>											
1	CSCI 512	Information Theory	3	6							
<b>SSH</b>											
<b>Biological Science</b>											
2	BIOL 520	Statistical Methods in Life Sciences	3	6							
3	BIOL 550	Structural and Molecular Biology in Health and Disease	3	6							
4	BIOL 560	Molecular Biology of Prokaryotic Cells	3	6							
5	BIOL 600	Graduate Seminar Series	3	6							
6	BIOL 623	Advanced Immunology	3	6				Biological Sciences	SST, Science, Engineering and Technology	SEng, SHSS	
7	BIOL 635	Hot Topics in Life Sciences	3	6							
8	BIOL 670	Gene Therapy	3	6				Biological Sciences	SST, Science, Engineering and Technology	SEng, SHSS	
9	BIOL 690	Research Thesis I	6	12							
<b>Mathematics</b>											
10	MATH 517	Scientific Modeling and Simulation with Mathematics	3	6							
11	MATH 518	Applied Finite Element Analysis	3	6							
12	MATH 540	Statistical Learning	3	6							
13	MATH 576	Numerical Methods for Partial Differential Equations	3	6							
14	MATH 676	Advanced Partial Differential Equations with Applications	3	6							
<b>Physics</b>											
15	PHYS 505	Classical Mechanics	3	6							

16	PHYS 511	Computational Modeling and Simulation	3	6				Physics	SST, Science, Engineering and Technology	SEng, SHSS	
17	PHYS 515	Classical Electrodynamics	3	6							
18	PHYS 550	Advanced Mathematical Physics	3	6				Physics	SST, Science, Engineering and Technology	SEng, SHSS	
19	PHYS 574	Lasers and Photonics	3	6				Physics	SST, Science, Engineering and Technology	SEng, SHSS	
20	SST 501	Teaching and Learning	3	6							
<b>SEDS</b>											
<b>Computer Science</b>											
21	CSCI 501	Software Principles and Practice	3	6							
22	CSCI 511	Theory of Computation	3	6							
23	CSCI 525	Quantum Computing	3	6				Computer Science, Physics	SST, Science, Engineering and Technology	SEng, SHSS	
24	CSCI 545	Big Data Analytics	3	6							
25	CSCI 575	Formal Methods and Applications	3	6							
26	CSCI 693	Thesis Proposal	3	6	SEDS 591 Research Methods (3184) (C- and above)						
27	SEDS 503	Laboratory Practicum	3	6	SEDS 502 Teaching Practicum (2824) (P)						
28	SEDS 591	Research Methods	3	6							
<b>Robotics and Mechatronics</b>											
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 (2263) (C- and above) AND CSCI 501 Software Principles and Practice (2408) (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 (2263) (C- and above) AND ROBT 503 Dynamic Systems and Control (2264) (C- and above)			Robotics	SST, Science, Engineering and Technology	SEng, SHSS	
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