

**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
<b>SSH</b>											
<b>Biological Science</b>											
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							
<b>Mathematics</b>											
9	MATH 517	Scientific Modeling and Simulation with Mathematics	3	6							
10	MATH 518	Applied Finite Element Analysis	3	6	MATH 517 Scientific Modeling and Simulation with Mathematics (2341) (B- and above) AND MATH 351 Numerical Methods with Applications (1166) (C and above)						
11	MATH 540	Statistical Learning	3	6							
12	MATH 576	Numerical Methods for Partial Differential Equations	3	6							
13	MATH 676	Advanced Partial Differential Equations with Applications	3	6	MATH 481 Partial Differential Equations (1168) (C and above) OR MATH 482 Fourier Analysis (3389) (C and above)						
<b>Physics</b>											
14	PHYS 505	Classical Mechanics	3	6							

15	PHYS 511	Computational Modeling and Simulation	3	6				Physics	SST, Science, Engineering and Technology	SEng, SHSS	
16	PHYS 515	Classical Electrodynamics	3	6							
17	PHYS 550	Advanced Mathematical Physics	3	6				Physics	SST, Science, Engineering and Technology	SEng, SHSS	
18	PHYS 574	Lasers and Photonics	3	6				Physics	SST, Science, Engineering and Technology	SEng, SHSS	
19	SST 501	Teaching and Learning	3	6							
20	SST 503	Laboratory Practicum	3	6	SST 501 Teaching and Learning (2260) (C- and above) AND SST 502 Teaching Practicum (2824) (C- and above)						
21	SST 591	Research Methods	3	6							
22	SST 693	Thesis Proposal	3	6	SST 591 Research Methods (3184) (C- and above)						
<b>SEDS</b>											
<b>Computer Science</b>											
23	CSCI 501	Software Principles and Practice	3	6							
24	CSCI 511	CS Track Core-Theory	3	6							
25	CSCI 512	Information Theory	3	6							
26	CSCI 525	Quantum Computing	3	6				Computer Science, Physics	SST, Science, Engineering and Technology	SEng, SHSS	
27	CSCI 545	Big Data Analytics	3	6							
28	CSCI 575	Formal Methods and Applications	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	