

**List of Courses in the Master of Science in Biological Sciences and Technologies Program**

<b>1st YEAR FALL SEMESTER</b>			
	<i>Course code and Name</i>	<i>ETCS</i>	
<b>Core</b>	BIOL 520 Statistical Methods in Life Sciences Research	6	
	BIOL 550 Structural and Molecular Biology in Health and Disease	6	
	BIOL 560 Molecular Biology of The Prokaryotic Cells	6	
<b>Research</b>	BIOL 592 Research Seminar	6	
	BIOL 599 Master's Thesis Research	0	
<b>Communication</b>	WCS 501 Science Communication	6	
<b>SEMESTER SUBTOTAL:</b>		<b>30</b>	
<b>1st YEAR SPRING SEMESTER</b>			
<b>Core</b>	BIOL 570 Advanced Biotechnology	} any 2 of BIOL 570, 580, 591	6
	BIOL 580 Applied Bioinformatics		6
	BIOL 591 Cellular Biophysics		6
	BIOL 590 Research Analysis in Life Sciences		
<b>Research</b>	BIOL 599 Master's Thesis Research		0
<b>Electives</b>	Elective 1		6
<b>Communication</b>	BIOL 502 Research Methods		6
<b>SEMESTER SUBTOTAL:</b>			<b>30</b>
<b>1st YEAR SUMMER SEMESTER</b>			
<b>Research</b>	BIOL 599 Master's Thesis Research		0
<b>SEMESTER SUBTOTAL:</b>			<b>0</b>
<b>2st YEAR FALL SEMESTER</b>			
<b>Electives</b>	Elective 2		6
	Elective 3		6
	Elective 4		6
	Elective 5		6
<b>Research</b>	BIOL 599 Master's Thesis Research		0
	BIOL 691 Master's Thesis Proposal		6
<b>SEMESTER SUBTOTAL:</b>			<b>30</b>
<b>2st YEAR SPRING SEMESTER</b>			
<b>Research</b>	BIOL 692 Master's Thesis		30
<b>SEMESTER SUBTOTAL:</b>			<b>30</b>
<b>TOTAL:</b>			<b>120</b>

### List of Departmental Graduate Elective Courses

#	<i>Course code and Name</i>	<i>ETCS</i>
1	BIOL 623 Advanced Immunology	6
2	BIOL 630 Advanced Neuroscience	6
3	BIOL 631 Synthetic Biology	6
4	BIOL 632 Drug Discovery and Design	6
5	BIOL 633 Environmental Systems and Environmental Toxicology	6
6	BIOL 634 Advanced Cancer Biology	6
7	BIOL 635 Hot Topics in Life Sciences	6
8	BIOL 637 Advanced Optical and Electron Microscopy	6
9	BIOL 637L Advanced Optical and Electron Microscopy Lab	2
10	BIOL 670 Gene Therapy	6
11	BIOL 675 Regenerative Medicine	6
12	BIOL 504 Commercialization of Bioscience Research	6

Electives can be also taken from other Schools (e.g. SEDS, SMG, SOM) or SSH Departments (CHEM, MATH, PHYS) as long they are approved by the Graduate Curriculum Committee of the Biology Department.