## Biology MS, Cell and Molecular Biology Emphasis

This Master of Science in Biology with the Profession Science in Cellular and Molecular Biology emphasis requires a total of 32 credit hours, of which at least half must be at the 5000-level or above. Students will take 21 credit hours in Biology, 9 hours in business courses, and 2 credit hours of internship/practicum. Professional Science students: 1) must take 2 seminars (4 credit hours total) of BIOL 6889 , 2) are limited to a maximum of 2 credit hours of Topics in Cellular and Molecular Biology (BIOL 5069 ) and 3) cannot count any hours of Graduate Research (BIOL 6905) as part of the 32 credit hour total.

## **Required Courses**

BIOL 6889	Graduate Seminar (must be taken twice)	4
Choose three of the following:		9-10
BIOL 6602	Advanced Molecular Biology	
BIOL 6612	Advanced Molecular Genetics of Bacteria	
BIOL 6615	Advanced Biotechnology Laboratory II	
BIOL 6622	Advanced Cellular Basis of Disease	
BIOL 6632	Advanced Nucleic Acid Structure and Function	
BIOL 6642	Advanced Plant Biology and Biotechnology	
Elective Courses in Biology		7-8
BIOL 4713	Techniques in Biochemistry	
BIOL 4842	Immunobiology	
BIOL 5069	Topics In Cellular And Molecular Biology <sup>1</sup>	
BIOL 6442	Advanced Developmental Biology	
BIOL 6550	Advanced Bacterial Pathogenesis	
BIOL 6602	Advanced Molecular Biology	
BIOL 6612	Advanced Molecular Genetics of Bacteria	
BIOL 6622	Advanced Cellular Basis of Disease	
BIOL 6632	Advanced Nucleic Acid Structure and Function	
BIOL 6642	Advanced Plant Biology and Biotechnology	
BIOL 6652	Advanced Virology	
BIOL 6920	Advanced Topics in Biology (when relevant)	
Required Internship or Practicum		2
BIOL 5798	Practicum in Science in Business	
or BIOL 5799	Internship in Sciences in Business	
Professional Science Business Electives		
MGMT 3623	Industrial and Organizational Psychology	
BUS AD 5000	Economics for Managers	

BUS AD 5100	Managerial Communication	
MGMT 5600	Managing People in Organizations	
MKTG 5700	Contemporary Marketing Concepts	
BUS AD 5900	Law, Ethics and Business	
Total Hours		32

Maximum of 2 credit hours.