

CELL AND MOLECULAR BIOLOGY THESIS RESEARCH, MS

Overview

The two-year MS program focuses on preparing students to enter that workforce by broadening students' background in the biological sciences as well as training in research design and methods. Completing the program will improve the students' competitiveness for employment in the biotechnology industry, academic research positions, and acceptance to PhD programs.

The two-year program focuses on providing the core biological course work as well as research training and experience. Students can take relevant graduate level courses in other departments or programs with Academic Advisor approval. Credit hours earned in non-CMB courses will apply to the total number of hours needed to complete the program. Over the course of two years, students will earn 24 credit hours in traditional classes, and 12 credit hours doing research, for a total of 36 credit hours.

Requirements

Course ID	Title	Credits
Required Courses		
CELL 6140	Research Methods in Cellular and Molecular Biology	3
CELL 7260	Graduate Communications	3
Research		12
CELL 9980	Masters Research ^{4 semesters, 3 credit hours per semester}	
Core Courses ^{Minimum of 6 credit hours}		6
CELL 6010	Cellular Biochemistry	
CELL 6030	Molecular Biology	
CELL 6050	Foundations of Pharmacology	
CELL 6200	General Endocrinology	
CELL 6210	Physiology	
CELL 6220	Microbiology	
CELL 6230	Virology	
CELL 6310	Cellular Neuroscience	
CELL 6450	Genome Biology	
CELL 6750	Cell Biology	
Approved Electives ^{Minimum of 12 credit hours}		12
CELL 6070	Neurobiology of Aging	
CELL 6110	Human Histology	
CELL 6111	Human Histology Lab	
CELL 6180	Biomedical Research in Animals	
CELL 6160	Developmental Biology	
CELL 6170	Psychedelics	
CELL 6320	Systems Neuroscience	
CELL 6340	Neurobiology of Disease	
CELL 6350	Developmental Neurobiol	
CELL 6370	Molecular Neurobiology	
CELL 6400	Regenerative Biology	
CELL 6480	Head and Neck Anatomy	
CELL 6490	Anatomy	
CELL 6491	Anatomy Lab	
CELL 6550	Synaptic Organization of the Brain	
CELL 6560	Pathophysiology	
CELL 6710	Molecular Biology of Cancer	
CELL 6750	Cell Biology	
BMEN 6440	Microphysiological Systems	
BMEN 6400	Biomaterials & Tissue Engineering	

Thesis ¹**Total Credit Hours****36**

¹ A written thesis and presentation of a seminar are a requirement for graduation. Students will produce a thesis in the format of a journal article. The thesis will be assessed by a thesis committee.

Program String and Field of Study: SEMS_GR, CELM

Catalog Addendum Note: This program was added to the catalog in July 2025.

Contact

For more information, contact the School of Science and Engineering - Department of Cell and Molecular Biology (<https://sse.tulane.edu/contact-us-1/>).