

# MICROBIOLOGY AND IMMUNOLOGY (MS)

The Microbiology and Immunology MS program offers a two-year, research-intensive program that leads to a Master's degree in Microbiology and Immunology. Students will be trained in the rigor of the scientific method by proposing and completing a research project under the direction of a selected faculty mentor.

## Related Programs

### Doctoral

- Microbiology and Immunology (PhD) (<https://catalog.luc.edu/graduate-professional/graduate-school/health-sciences/biomedical-sciences/microbiology-immunology-phd/>)

### Combined

- Microbiology and Immunology (MD/PhD) (<https://catalog.luc.edu/graduate-professional/dual-degree-programs/microbiology-immunology-md-phd/>)

## Curriculum

The Master of Science in Microbiology and Immunology requires 30 credit hours of coursework and a master's thesis.

### Required Courses

Code	Title	Hours
BMSC 405	Ethics in Biomedical Sciences	1
BMSC 410	Biochemistry and Molecular Biology	4
BMSC 412	Cell Biology	4
BMSC 416	Methods Biomedical Science	1
BMSC 418	Presentation skills	1
MIIM 402	Microbes & Hosts	3
Select one of the following:		3
MIIM 413	Basic Concepts of Immunology	
MIIM 411	Basic Molecular Microbiology	
MIIM 431	The Molecular Biology of Viruses	
MIIM 442	Cell & Molecular Immunology	
MIIM 471	Molecular Microbial Genetics	
BMSC 402	Statistical Methods for Biomedical Science (Optional)	3
MIIM 492	Research (hours may vary—see note below)	1-9
MIIM 501	Seminar	0
MIIM 503	Current Literature	1
<b>Total Hours</b>		<b>30-33</b>

Note: Students may choose to take more than one additional class and reduce their research credits accordingly.

## Graduate & Professional Standards and Regulations

Students in graduate and professional programs can find their Academic Policies in Graduate and Professional Academic Standards and Regulations (<https://catalog.luc.edu/academic-standards-regulations/>)

graduate-professional/) under their school. Any additional University Policies supersede school policies.

## Learning Outcomes

Upon completion of this program, students will be able to:

- apply their broad training in the biomedical sciences and specialized training in Microbiology and Immunology. This wide knowledge base will provide versatility in applying for subsequent positions in research or teaching.
- demonstrate expertise in molecular biology and a variety of other areas, such as biochemistry, immunological techniques, enzyme assays, and cell culturing.
- communicate your scientific expertise in oral presentations.
- Our graduates are equipped to succeed in more advanced research, teaching or administrative positions and will serve as leaders in their chosen professions. They are also prepared for additional educational objectives such as obtaining an advanced degree in such areas as law, medicine or research.