

Master of Science Program in Microbiology

Research Focus

- Environmental Microbiology
- Microbial Ecology and Diversity
- Molecular Medical Microbiology
- Microbial Biotechnology
- Immunology
- Virology

Structure of the Program

1. Credit Requirements *

Requirements	Option 1.1	Option 1.2
Coursework	-	24
- Core Courses	-	6
- Electives	-	18
Required Non-credit Courses	5	5
Thesis	36	12
Total	36	36

* Minimum credits required

2. Core Courses

Requirements	Option 1.1		Option 1.2	
	Course No.	Cr.	Course No.	Cr.
Advanced Microbial Physiology (<i>or</i>) Medical Microbiology *	-	-	266502 / 266511	3
Biochemistry, Cell and Molecular Biology	-	-	422514	3
Total	-	-	2	6

* Choose one

3. Electives

Requirements	Option 1.1		Option 1.2	
	Course No.	Cr.	Course No.	Cr.
Medical Microbiology:				
Medical Microbiology	-	-	266511	3
Diagnostic Medical Microbiology	-	-	266512	3
Microbiology for Public Health and Sanitation	-	-	266513	3
Advanced Immunology	-	-	266514	3
Advanced Medical Virology	-	-	266515	3
Advanced Medical Bacteriology	-	-	266516	3
Advanced Medical Mycology	-	-	266517	3
Medical DNA Technology	-	-	266518	3
Microbial Forensics	-	-	266519	3
Applied Microbiology:				
Advanced Microbial Physiology	-	-	266502	3
Research Techniques in Molecular Biology and Microbiology	-	-	266503	3
Selected Topics in Microbiology	-	-	266504	3
Bioinformatics	-	-	266506	3
Quantitative Predictive Microbiology	-	-	266507	3
Advanced Microbial Genetics	-	-	266508	3
Microbial Food Safety	-	-	266509	3
Microbiology of Wastewater Treatment	-	-	266521	3
Microbial Biotechnology	-	-	266522	3
Advanced Microbial Enzyme Technology	-	-	266523	3
Microbial Cell Immobilization	-	-	266524	3
Biotechnological Applications of Actinomycetes	-	-	266525	3
Fungal Biotechnology	-	-	266526	3
Microbial Ecology	-	-	266531	3
Pollution Microbiology	-	-	266532	3
Microbial Degradation and Deterioration	-	-	266533	3
Microbial Diversity and Phylogeny	-	-	266534	3
Total	-	-	≥6	≥18

4. Required Non-credit Courses

Requirements	Option 1.1		Option 1.2	
	Course No.	Cr.	Course No.	Cr.
Research Methodology in Health Sciences	422510	3	422510	3
Seminar 1	266596	1	266596	1
Seminar 2	266597	1	266597	1
Total	3	5	3	5

5. Thesis Credit Requirements

Requirements	Option 1.1		Option 1.2	
	Course No.	Cr.	Course No.	Cr.
Thesis 1, Option 1.1	266551	9	-	-
Thesis 2, Option 1.1	266552	9	-	-
Thesis 3, Option 1.1	266553	9	-	-
Thesis 4, Option 1.1	266554	9	-	-
Thesis 1, Option 1.2	-	-	266561	4
Thesis 2, Option 1.2	-	-	266562	4
Thesis 3, Option 1.2	-	-	266563	4
Total	4	36	3	12