

Program Structure

MSc Microbiology (2-years)

School of Biological and Life Sciences

Scheme: 2023-25

Summary of Credits

Course Category	For 2 years Program
University Core Courses	4
Program Core Courses	69
Electives	3
Industrial/Academic Internship	2
Dissertation	12
Total Credits	80

Curriculum Structure (23-25)

MSc Microbiology (2-years)

SEMESTER I						
S. No.	Course Code	Course Name	L	T	P	Credits
1.		Cell Biology	3	0	1	4
2.		Molecular Biology	4	0	0	4
3.		Biochemistry	4	0	0	4
4.		General Microbiology	4	0	1	5
5.		Bioanalytical and Biophysical Techniques	4	0	0	4
		Total credit	19	0	2	21
SEMESTER II						
S. No.	Course Code	Course Name	L	T	P	Credits
1.		Immunology	4	0	0	4
2.		Medical and Pharmaceutical Microbiology	4	0	1	5

3.		Physiology and Metabolism of Microbes	4	0	1	5
4.		Advanced Virology	4	0	0	4
5.		Professional Communication	1	0	1	2
6.		Research Methodology	2	0	0	2
		Total credit	19	0	3	22

SEMESTER III

S. No.	Course Code	Course Name	L	T	P	Credits
1.		Biotechnology And Genetic Engineering	4	0	1	5
2.		Algal and Fungal Microbiology	4	0	0	4
3.		Applied Microbiology (Food, Soil and Agriculture)	4	0	1	5
4.		Environmental Microbiology and Waste Water Management	4	0	0	4
5.		Elective	3	0	0	3
		Total credit	19	0	2	21

SEMESTER IV

S. No.	Course Code	Course Name	L	T	P	Credits
1.		Dissertation	0	0	12	12
2.		Research, Innovation and & IPR	2	0	0	2
3.		Industry training	0	0	2	2
		Total credit	2	0	14	16

List of Electives

S.No.	Course Code	Course name	L	T	P	C
1.		Computational Biology and Bioinformatics	2	0	1	3
2.		Plant – Pathogen Interaction	3	0	0	3
3.		Toxicology	3	0	0	3

4.		Industrial Aspects in Life Science	2	0	1	3
5.		Proteomics, Genomics and Nanotechnology	3	0	0	3
6.		Pharmaceutical Biotechnology	3	0	0	3
7.		Bioethics, Bio-safety and IPR	3	0	0	3