

### Programme Structure of M.Sc Microbiology

Category	Total Number of Credits
Programme Core	58
Skill Enhancement Course (SEC)	19
Ability Enhancement Compulsory Course (AECC)	2
Generic Elective (GE)	3
Discipline Specific Elective (DSE)	4
<b>Total Credits</b>	<b>86</b>

First Semester						
Sl. No.	Course Code	Course Title	L	T	P	C
1	MSDB5001	Cell Biology	4	0	0	4
2	MSDB5002	Molecular Biology	4	0	0	4
3	MSDB5004	Fundamentals of Biochemistry	4	0	0	4
4	MSMB5003	General Microbiology	4	0	0	4
5	MSMB5005	Advanced Microbiology Lab- I	0	0	4	2
<b>Total Credits</b>						<b>18</b>
Second Semester						
Sl. No.	Course code	Course Title	L	T	P	C
1	MSDB5006	Immunology	4	0	0	4
2	MSDB5007	Bioanalytical and Microbial Techniques	4	0	0	4
3	MSDB5008	Biotechnology and Genetic engineering	4	0	0	4
4	MSDB5009	Web based Course/Seminar	0	0	0	2
5	MSMB5010	Microbial Physiology and Metabolism	4	0	0	4
6	MSMB5011	Advanced Virology	4	0	0	4
7	MSMB5012	Advanced Microbiology Lab- II	0	0	4	2
Total Credits						<b>24</b>
Third Semester						
Sl. No.	Course Code	Course Title	L	T	P	C
1	MSCR5001	Research Methodology <sup>§</sup>	3	0	0	3
2	MSDB6002	Medical and Pharmaceutical Microbiology	4	0	0	4
3	MSMB6003	Summer Training*	0	0	0	3
4	MSMB6004	Algal and Fungal Microbiology	4	0	0	4
5	MSMB6005	Food and Agricultural Microbiology	4	0	0	4

6	MSMB6006	Environmental Microbiology	4	0	0	4
7	MSMB6007	Advanced Microbiology Lab- III	0	0	4	2
8	MSMB#	Electives#	4	0	0	4
<b>Total Credits</b>						<b>28</b>
<i><sup>s</sup> University Core Course</i>						
Fourth Semester						
Sl. No.	Course Code	Course Title	L	T	P	C
1	MSMB9999	Dissertation	0	0	0	16
<b>Total Credits</b>						<b>16</b>
<b>Grand Total</b>						<b>86</b>
# Electives						
Sl. No.	Course code	Course Title	L	T	P	C
1	MSDB6011	Computational Biology	4	0	0	4
2	MSDB6012	Bioethics, Bio-safety and IPR	4	0	0	4
3	MSDB6013	Toxicology	4	0	0	4
4	MSDB6016	Industrial Biochemistry	4	0	0	4
5	MSDB6017	Advanced Microbiology	4	0	0	4
6	MSDB6018	Plant -Pathogen interaction	4	0	0	4

**\*Summer training will be done in II Semester; credit will be evaluated in III Semester**