

School of Biotechnology
M.Tech. (Biotechnology) Programme
[4 Semesters] (Batch: 2019-2021)

S.No.	Code	Course Title	Credits
SEMESTER 1			
1	BT501	Biochemistry	3
2	BT503	Cell and Molecular Biology	3
3	BT505	Introduction to Engineering Principles	3
4	BT507	Microbiology	2
5	BT509	Plant and Animal Cell Culture Technology	2
6	MA415	Biostatistics	3
7	BT511	Basics of Chemistry and Physics	2
8	BT513	Laboratory I: Biochemistry and Analytical Techniques	4
9	BT515	Laboratory II: Microbiology	4
10	--	General Proficiency	0
TOTAL			26
SEMESTER 2			
1	BT502	Genetic Engineering	3
2	BT504	Immunology	3
3	BT506	Bioprocess Engineering and Technology	3
4	BT508	Downstream Processing in Biotechnology	3
5	BT510	Bioreactor Operations	3
6	BT512	Computational Biology	3
7	BT514	Laboratory I: Molecular Biology & Genetic Engineering	4
8	BT516	Laboratory II: Immunology	3
9	--	General Proficiency	0
TOTAL			25
SEMESTER 3			
1	BT601	Bioprocess Equipment Design and Economics	3
2	BT603	Bioentrepreneurship	3
3	BT605	Instrumentation and Control	2
4	BT607	Research Methodology and Scientific Communication Skills	2
5	BT609	Intellectual Property Rights, Biosafety and Bioethics	2
6	BT611	Project Proposal Preparation and Presentation	2
7	BT613	Laboratory I: Downstream Processing in Biotechnology	2
8	BT615	Dissertation I	6
9	--	Discipline Specific Elective (<u>Choose any One</u>)	2
		1. BT617 Metabolic and Systems Biology 2. BT619 Medical Devices and Automation 3. BT621 Pharmacogenomics 4. BT623 OMICS Technologies 5. BT625 Protein Engineering 6. BT627 Systems & Synthetic Biology 7. BT629 Product Development & Drug Delivery 8. BT631 Nanobiotechnology 9. BT633 Bioreaction Engineering 10. BT635 Computational Programming 11. BT637 Environmental Biotechnology 12. BT639 Enzyme Engineering and Technology 13. BT641 Molecular Diagnostics 14. BT643 Production of Biotherapeutics	
10	--	General Proficiency	0
TOTAL			24

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SEMESTER 4			
1	BT602	Dissertation II	22
2	--	General Proficiency	0
TOTAL			22

Total Credits = 97