

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

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S.No.	Code	Course Title	Credits
<b>SEMESTER 1</b>			
1	BtMT501	Biochemistry	3
2	BtMT503	Cell and Molecular Biology	3
3	BtMT505	Introduction to Engineering Principles	3
4	BtMT507	Microbiology	2
5	BtMT509	Plant and Animal Cell Culture Technology	2
6	MA415	Biostatistics	3
7	BtMT511	Basics of Chemistry and Physics	2
8	BtMT513	Laboratory I: Biochemistry and Analytical Techniques	4
9	BtMT515	Laboratory II: Microbiology	4
10	--	General Proficiency	0
<b>TOTAL</b>			<b>26</b>
<b>SEMESTER 2</b>			
1	BtMT502	Genetic Engineering	3
2	BtMT504	Immunology	3
3	BtMT506	Bioprocess Engineering and Technology	3
4	BtMT508	Downstream Processing in Biotechnology	3
5	BtMT510	Bioreactor Operations	3
6	BtMT512	Computational Biology	3
7	BtMT514	Laboratory I: Molecular Biology & Genetic Engineering	4
8	BtMT516	Laboratory II: Immunology	3
9	--	General Proficiency	0
<b>TOTAL</b>			<b>25</b>
<b>SEMESTER 3</b>			
1	BtMT601	Bioprocess Equipment Design and Economics	3
2	BtMT603	Bioentrepreneurship	3
3	BtMT605	Instrumentation and Control	2
4	BtMT607	Research Methodology and Scientific Communication Skills	2
5	BtMT609	Intellectual Property Rights, Biosafety and Bioethics	2
6	BtMT611	Project Proposal Preparation and Presentation	2
7	BtMT613	Laboratory I: Downstream Processing in Biotechnology	2
8	BtMT615	Dissertation I	6
9	--	Discipline Specific Elective ( <b>Choose any One</b> ) 1. BtMT617 Metabolic and Systems Biology   2. BtMT619 Medical Devices and Automation   3. BtMT621 Pharmacogenomics   4. BtMT623 OMICS Technologies   5. BtMT625 Protein Engineering   6. BtMT627 Systems & Synthetic Biology   7. BtMT629 Product Development & Drug Delivery   8. BtMT631 Nanobiotechnology   9. BtMT633 Bioreaction Engineering   10. BtMT635 Computational Programming   11. BtMT637 Environmental Biotechnology   12. BtMT639 Enzyme Engineering and Technology   13. BtMT641 Molecular Diagnostics   14. BtMT643 Production of Biotherapeutics	2
10	--	General Proficiency	0

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			<b>TOTAL</b>	<b>24</b>
<b>SEMESTER 4</b>				
1	BtMT602	Dissertation II		22
2	--	General Proficiency		0
			<b>TOTAL</b>	<b>22</b>

**Total Credits = 97**