



**SCHOOL OF LIFE SCIENCE AND BIOTECHNOLOGY**

**Department of Biotechnology**

**M.Tech. Biotechnology**

Course Grid -

<b>SEMESTER 1</b>					
<b>No.</b>	<b>Subject Type</b>	<b>Subject Code</b>	<b>Subject Name</b>	<b>L-T-P</b>	<b>Credit</b>
1	Theory	BIT21551	Bioprocess Engineering and Technology	3-1-0	4
2	Theory	BIT21552	Advanced Genetic Engineering	3-1-0	4
3	Theory	BIT21553	Advances in Animal biotechnology	3-1-0	4
4	Theory	BIT21557/59	Professional Elective- I	3-0-0	3
5	Theory	BIT21560/61	Professional Elective- II	3-0-0	3
6	Theory	CSE21605/ LWJ21036	Professional Elective- III	3-0-0	3
7	Laboratory	BIT22554	Bio separation and Bioprocess Technology Lab	0-0-3	2
8	Laboratory	BIT22555	Advanced Genetic Engineering Lab	0-0-3	2
9	Laboratory	BIT22556	Animal Biotechnology Lab	0-0-3	2
<b>Total</b>				<b>18-3-9</b>	<b>27</b>

<b>SEMESTER 2</b>					
<b>No.</b>	<b>Subject Type</b>	<b>Subject Code</b>	<b>Subject Name</b>	<b>L-T-P</b>	<b>Credit</b>
1	Theory	BIT21563	Advanced Immunology	3-1-0	4
2	Theory	BIT21564	Biotechnology of Plant Metabolites	3-1-0	4
3	Theory	BIT21565	Advanced Genomics and Proteomics	3-1-0	4
4	Theory	BIT21566	Enzyme technology	3-0-0	3
5	Theory	BIT21567/68	Professional Elective IV	3-0-0	3
6	Theory	BIT21569/70	Professional Elective V	3-0-0	3
7	Laboratory	BIT22571	Advanced Immunology Lab	0-0-3	2
8	Laboratory	BIT22572	Plant biotechnology Lab	0-0-3	2
9	Laboratory	BIT22573	Advanced Genomics and Proteomics Lab	0-0-3	2
<b>Total</b>				<b>18-3-9</b>	<b>27</b>

**Total Credits (First Year): 54**

**YEAR 2**

<b>SEMESTER 3</b>					
<b>No.</b>	<b>Subject Type</b>	<b>Subject Code</b>	<b>Subject Name</b>	<b>L-T-P</b>	<b>Credit</b>
1	Theory	BIT21574	Entrepreneurship, IPR & Biosafety	3-1-0	4
2	Project	BIT25575	Dissertation-I	0-0-24	12
3	Project	BIT24576	Industry Internship	-----	2
<b>Total</b>				<b>3-1-30</b>	<b>18</b>

<b>SEMESTER 4</b>					
<b>No.</b>	<b>Subject Type</b>	<b>Subject Code</b>	<b>Subject Name</b>	<b>L-T-P</b>	<b>Credit</b>
1	Project	BIT25577	Dissertation-II	0-0-32	16
2	Project	BIT25578	Comprehensive Viva		2
<b>Total</b>				<b>0-0-32</b>	<b>18</b>

**Total Credits (Second Year): 36**

<b>Professional Elective I</b> (Choose any one paper in Sem I) *		<b>Professional Elective II</b> (Choose any one paper in Sem I) *		<b>Professional Elective III</b> (Choose any one paper in Sem I) *	
1	Biostatistics & Bioinformatics (BIT21557)	1.	Environmental Biotechnology (BIT21569)	1	Computer Programming and Language (CSE21605)
2	Nanobiotechnology (BIT21559)	2.	Applied Food Technology (BIT21561)	2	Industrial Law (LWJ21036)
<b>Professional Elective IV</b> (Choose any one paper in Sem II) *			<b>Professional Elective V</b> (Choose any one paper in Sem II) *		
1	Bioreactor Analysis & Design (BIT21567)	1.	Stem Cell Technology (BIT21560)		
2	Pharmaceutical Biotechnology (BIT21568)	2.	Research Methodology and GLP (BIT21570)		