

B Tech Course Structure 2017-18 Biotechnology

Department of Biotechnology and Bioinformatics				
4 year BTech New Approved Curricula for Biotechnology wef 2017-18 batch				
BTech I semester (B1)				
SN	Sub Code	Subject	Contact hours	Credits
1	PD	Presentation and Communication Skills	3	3
2	MA	Basic Math-I/ OR	4	4
	BT	Fundamental Biology	3	3
3	PH	Basic Engineering & Applied Physics	4	4
4	BT	Cell Biology	4	4
5	CI	Introduction to Computers and Basic Programing	4	4
6	PH	Physics Lab-1	2	1
7	BT	Cell Biology Lab	2	1
8	BT	GLP and Instrumentation Lab	4	2
9	CI	Basic Computer Programming Lab	4	2
	BT	Fundamental Biology Lab	2	1
		Total	31	25
	PD	English* (*This subject will be offered as an audit course for students with less than 60% marks)		
4 year BTech New Approved Curricula for Biotechnology wef 2017-18 batch				
BTech II semester (B2)				
SN	Sub Code	Subject	Contact hours	Credits
1	PD	Group and Cooperative Processes	3	3
2	MA	Basic Math-II	4	4
3	BT	Genetics	4	4
4	BT	General Chemistry	4	4
5	CI	Basic Data Structures	4	4
6	BT	Genetics Lab	4	2
7	BT	Chemistry Lab	2	1

8	CI	Basic Data Structures & Computer Programming Lab	4	2
		Total	29	24

4 year BTech New Approved Curricula for Biotechnology wef 2017-18 batch

BTech III semester (B3)				
SN	Sub Code	Subject	Contact hours	Credits
1	PD	Managerial Economics	3	3
2	MA	Probability & Statistics	4	4
3	BT	Thermodynamics & Chemical Processes	4	4
4	BT	Biochemistry	4	4
5	BT	Microbiology	4	4
		Thermodynamics & Chemical Processes Lab	2	1
7	BT	Biochemistry Lab	4	2
8	BT	Microbiology Lab	4	2
		Total	29	24

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BTech IV semester (B4)				
SN	Sub Code	Subject	Contact hours	Credits
1	PD	Financial Management	3	3
2	BT	Cell Culture Technology	4	4
3	EC	Basic Electronics	4	4
4	PH	Biophysical Techniques	4	4
5	BT	Molecular Biology	4	4
7	GE	Environmental Studies	3	3
8	BT	Molecular Biology Lab	4	2
9	BT	Animal Tissue Culture Lab	2	1
10	BT	Plant Tissue Culture Lab	2	1
11	EC	Basic Electronics Lab	2	1
		Total	32	27

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BTech V semester (B5)				
SN	Sub Code	Subject	Contact hours	Credits
1	PD	Social & Legal Issues	3	3
2	BI	Elective course from Bioinformatics	4	4
3	BT	Bioprocess Engineering	4	4
4	BT	Genetic Engineering	4	4
5	BT	Immunology	4	4
6	BT	Bioinformatics Lab	2	1
7	BT	Bioprocess Engineering Lab	4	2
8	BT	Genetic Engineering Lab	4	2
9	BT	Immunology Lab	2	1
10.		Minor Project-I		2
		Total	31	27
4 year BTech New Approved Curricula for Biotechnology wef 2017-18 batch				
BTech VI semester (B6)				
SN	Sub Code	Subject	Contact hours	Credits
1	PD	Project Management/Open Elective	3	3
2	BT	Comparative and Functional genomics	4	4
3	BT	Food and Agricultural Biotechnology	4	4
4	BT	Downstream Processing	4	4
5	BT	Diagnostics & Vaccine Manufacture Technologies	4	4
6	BT	Comparative and Functional Genomics Lab	4	2
7	BT	Food and Agricultural Biotechnology Lab	4	2
8	BT	Downstream Processing Lab.	4	2
9	BT	Diagnostics & Vaccine Manufacture Technologies Lab	2	1
10	GE	Industrial Training		0
		Minor Project-II		2
		Total	33	28

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BTech VII semester (B7)				
SN	Sub Code	Subject	Contact hours	Credits
1		Professional Dev – VII/Open Elective/Moocs	3	3
2		DE-I	3	3
3		DE-II	3	3
4		DE-III	3	3
5	BT	Project Part I	16	8
		Total	28	20
4 year BTech New Approved Curricula for Biotechnology wef 2017-18 batch				
BTech VIII semester (B8)				
SN	Sub Code	Subject	Contact hours	Credits
1.		Professional Dev – VIII Open Elective/Moocs	3	3
2.		DE-IV	3	3
3.		DE-V	3	3
4.		DE-VI	3	3
		Project Part-II	16	8
		Total	28	20
		Total Credits		195
		Credit Summary	Credits	
		Sem1	25	
		Sem2	24	
		Sem3	24	
		Sem4	27	
		Sem5	27	
		Sem6	28	
		Sem7	20	
		Sem8	20	
		Total	195	