

Department of Bioscience & Bioengineering
B.Tech. Program in Biotechnology

I Semester					II Semester				
Cat	Course	L-T-P	Credits		Cat.	Course	L-T-P	Credits	
H	BB111	Biology for Engineers	3-0-3	4	H	ME122	Engineering Mechanics	3-1-3	5
H	CS111	Computer Programming	3-1-3	5	H	ME121	System Exploration-workshop	3-0-3	4
H	ME111	System Exploration Drawing	3-0-3	4	H	EE121	Basic Electronic Engineering	3-1-3	5
B	MA111	Linear Algebra and Calculus	4-1-0	5	B	MA121	Complex Analysis and Differential Equations	4-1-0	5
B	PH111	Electromagnetism and Optics	3-1-3	5	C	BB121	Cell & Molecular Biology	3-0-0	3
L	HS111	English Language and Communication Skills	3-0-0	3	L	HS121	Rights Responsibilities Law and Constitution	3-0-0	3
S	PE111	Physical Exercise I		0	S	PE121	Physical Exercise II		0
Total			34	26	Total			31	25
III Semester					IV Semester				
H	EE211	Basic Electrical Engineering	3-1-3	5	B	MA221	Probability Statistics and Random Processes	4-1-0	5
B	CY211	Chemistry	3-0-3	4	C	BB221	Biochemistry	3-0-3	4
C	EE213	Signals and Systems	3-1-0	4	C	BB222	Genetics & Recombinant DNA Technology	3-0-3	4
C	BB211	Microbiology	3-0-3	4	C	BB223	Bioprocess Engg. & Fermentation Technology	3-1-3	5
C	CS121	Data structures & Algorithms	3-1-3	5	P	BB299	B.Tech. Project	0-0-8	2
L	HS211	Economics	3-0-0	3	L	HS221	Principles of Management	3-0-0	3
Total			33	25	Total			35	23
V Semester					VI Semester				
C	BB311	Animal Biotechnology	3-0-3	4	C	BB321	Bioengineering	3-0-3	4
C	BB312	Bioinformatics & Computational Biology	3-0-3	4	C	BB322	Environmental Biotechnology and Bioremediation	3-0-0	3
C	BB313	Food and Agriculture technology	3-0-3	4	C	BB323	Biomedical technology	3-0-3	4
C	BB314	Molecular Biophysics	3-0-3	4	C	CS323	Artificial Intelligence	3-0-0	3
P	BB398	B. Tech. Project	0-0-8	2	P	BB399	B. Tech. Project	0-0-9	3
L	HS311	Psychology	3-0-0	3	L	HS321	Culture Art and Heritage	3-0-0	3
Total			35	21	Total			30	20
VII Semester					VIII Semester				
E		Elective	3-0-0	3	E		Elective	3-0-0	3
E		Elective	3-0-0	3	E		Elective	3-0-0	3
E		Elective	3-0-0	3	E		Elective	3-0-0	3
P	BB498	B. Tech. Project	0-0-24	8	P	BB499	B. Tech. Project	0-0-24	8
L	HS411	Basics of Leadership	3-0-0	3	L	HS421	Role of Technology in Development	3-0-0	3
Total			36	20	Total			36	20
Grand Total							270	180	