

COURSE STRUCTURE & CURRICULUM
(AS PER NATIONAL EDUCATION POLICY - 2020)

For

B.TECH
BIOTECHNOLOGY
FIRST YEAR

Department of Bioengineering
Integral University, Lucknow

Course Structure Acronyms:

S NO	Course Type	Acronym
1	Engineering Science Course	ESC
2	Professional Core Course	PCC
3	Professional Elective Course	PEC
4	Basic Sciences Course	BSC
5	Humanities and Management Course	HSMC
6	Open Elective Course	OEC

B. Tech Biotechnology Program
First Year
Semester 1
(w.e.f session 2024-25)
(For students admitted from batch 2024-25 onwards)

S. No.	Course	Course Code	Category	Periods				Evaluation Scheme						
								Sessional (CA)			End Sem Exam (ESE)			Subject Total
				L	T	P	C	CT	TA	Total	PE	TE	Total	
1	Physics	PY102	BSC	3	0	2	4	65	35	100	25	75	100	200
2	Mathematics-I for Bioengineers	MT102	BSC	3	1	0	4	50	25	75	-	75	75	150
3	Professional Communication	LN132	HSMC	3	0	2	4	65	35	100	25	75	100	200
4	Introduction to Bioengineering	BE101	PCC	2	0	0	2	50	25	75	-	75	75	150
5	Basics of Molecular Biology	BE102	PCC	3	0	2	4	65	35	100	25	75	100	200
6	Basic Mechanical Engineering & Workshop	ME101	ESC	3	0	2	4	65	35	100	25	75	100	200
7	Rashtra Gaurav	HM101	HSMC	2	0	0	0	50	25	75	-	75	75	150
Total				19	1	8	22	410	215	625	100	525	625	

L – Lecture **T** – Tutorial **P** – Practical **C** – Credits **CT** – Class Test
TA – Teacher Assessment

Sessional Total (CA) = Class Test + Teacher Assessment

Subject Total = Sessional Total (CA) + End Semester Examination (ESE)

B. Tech Biotechnology Program
First Year
Semester 2
(w.e.f session 2024-25)
(For students admitted from batch 2024-25 onwards)

S. No.	Course	Course Code	Category	Periods				Evaluation Scheme						
								Sessional (CA)			End Sem Exam (ESE)			Subject Total
				L	T	P	C	CT	TA	Total	PE	TE	Total	
1	Chemistry	CH102	BSC	3	0	2	4	65	35	100	25	75	100	200
2	Mathematics-II for Bioengineers	MT113	BSC	3	1	0	4	50	25	75	-	75	75	150
3	Computer Programming	CS101	ESC	3	0	2	4	65	35	100	25	75	100	200
4	Thermodynamics	BE103	ESC	2	1	0	3	50	25	75	-	75	75	150
5	IPR Biosafety and Bioethics	BE104	PCC	2	1	0	3	50	25	75	-	75	75	150
6	Engineering graphics	ME103	ESC	0	0	2	1	15	10	25	25	-	25	50
7	Basic Electrical Engineering	EE103	ESC	3	0	2	4	65	35	100	25	75	100	200
8	Basic Electronics	EC101	ESC	3	0	0	3	50	25	75	-	75	75	150
Total				19	3	8	26	410	215	625	100	525	625	

L – Lecture **T** – Tutorial **P** – Practical **C** – Credits **CT** – Class Test
TA – Teacher Assessment

Sessional Total (CA) = Class Test + Teacher Assessment

Subject Total = Sessional Total (CA) + End Semester Examination (ESE)