



TECHNO INDIA UNIVERSITY

W E S T B E N G A L

**COURSE CURRICULUM FOR 2-YEARS MASTERS IN
SCIENCE IN BIOTECHNOLOGY (with Research)**



DEPARTMENT OF BIOTECHNOLOGY

Techno India University, West Bengal

EM-4, EM Block, Sector V, Bidhannagar,

Kolkata -700091, West Bengal



SEMESTER- I

Sl. No.	Course code	Subject	L	T	P
Theory					
1	TIU-PBT-T125	Chemistry of Bio-molecules	3	0	0
2	TIU-PBT-T121	Molecular Genetics	3	0	0
3	TIU-PBT-T117	Environmental Science	3	0	0
4	TIU-PBT-T115	Cell Biology and Signalling	3	0	0
Practical					
1	TIU-PBT-L125	Analytical Biochemistry Lab	0	0	4
2	TIU-PBT-L121	Molecular Techniques Lab	0	0	4
3	TIU-PBT-L127	Cell Biology Lab	0	0	4
4	TIU-PBT-S101	Skill Development - I	0	0	6
Sessional					
1	TIU-PES-S199	Entrepreneurship Skill Development	2	0	0
Total Credits			23		



Semester-II

Sl. No.	Course code	Subject	L	T	P
Theory					
1	TIU-PBT-T102	Immunology	3	0	0
2	TIU-PBT-T114	Bacteriology and Virology	3	0	0
3	TIU-PBT-T128	Plant Biotechnology	3	0	0
4	TIU-PBT-T126	Recombinant DNA Technology	3	0	0
5	TIU-PBT-T130	Bioenergetics and Metabolism	3	0	0
Practical					
1	TIU-PBT-L130	Cell Biology and Immunology Lab	0	0	4
2	TIU-PBT-L124	Basic Genetic Engineering Lab	0	0	4
3	TIU-PBT-L132	Bacteriology and Virology Lab	0	0	4
Sessional					
1	TIU-PES-S198	Entrepreneurship Skill Development	2	0	0
2	TIU-PBT-S100	Skill Development - II	3	0	0
Total Credits			26		



Semester-III

Sl. No.	Course code	Subject	L	T	P
Theory					
1.	TIU-PBT-T205	Animal Biotechnology	3	0	0
2.	TIU-PBT-T207	Bioprocess Engineering and Downstream Processing	3	0	0
3.	TIU-PBT-T209	Genetics and Statistics	3	0	0
4.	TIU-PBT-T211	Microbial Ecology	3	0	0
Practical					
1	TIU-PBT-L203	Environmental Chemistry Lab	0	0	4
2	TIU-PBT-L207	Bioprocess Engineering and Downstream Processing Lab	0	0	4
3	TIU-PBT-P297	Project -I	0	0	10
Sessional					
1	TIU-PES-S299	Entrepreneurship Skill Development	2	0	0
2	TIU-PBT-S201	Skill Development - III	2	0	0
		Total Credits	25		



Semester-IV

Sl. No.	Course code	Course Title	L	T	P
Practical					
1	TIU-PBT-P294	Project Work	0	0	20
2	TIU-PBT-S294	Career Advancement and Skill Development (Grand Viva)	0	0	3
Sessional					
1	TIU-PES-S298	Entrepreneurship Skill Development	2	0	0
Total Credits			25		