

National Institute of Technology Raipur												
Course of Study and Scheme of Examination							B. Tech. 5th Semester				Branch:Biotechnology	
S. No.	Subject Code	Subject Name	Periods per Week			TA	Examination Scheme				Total Marks	Credits
			L	T	P		MSE/MTR		ESE/ESVE			
							Theory	Prac.	Theory	Prac.		
1	BT105101BT	Bioinformatics (PC)	3	1	0	20	30		50		100	4
2	BT105102BT	Heat and Mass transfer (PC)	3	1	0	20	30		50		100	4
3	BT105103BT	Recombinant DNA Technology (PC)	3	1	0	20	30		50		100	4
4	BT105201BT	Food Biotechnology (PE1)	3	0	0	20	30		50		100	3
5	BT105202BT	Computational Biology (PE1)	3	0	0	20	30		50		100	
6	BT105301BT	Environmental Biotechnology (OE1)	3	0	0	20	30		50		100	
7	BT105302BT	Molecular Moldeling & Drug Designing (OE1)	3	0	0	20	30		50		100	3
8	BT105401BT	Bioinformatics Lab	0	0	0	40		20		40	100	
9	BT105402BT	Heat and Mass transfer Lab	0	0	2	40		20		40	100	
10	BT105402BT	Summer Internship I				40		20		40	100	1
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Course of Study and Scheme of Examination							B. Tech. 6th Semester				Branch:Biotechnology	
S. No.	Subject Code	Subject Name	Periods per Week			TA	Examination Scheme				Total Marks	Credits
			L	T	P		MSE/MTR		ESE/ESVE			
							Theory	Prac.	Theory	Prac.		
1	BT106104BT	Database Management System (PC)	3	1	0	20	30		50		100	4
2	BT106105BT	Fluid Flow Operations (PC)	3	1	0	20	30		50		100	4
3	BT106106BT	Immunology (PC)	3	1	0	20	30		50		100	4
4	BT106203BT	Biopharmaceutical Technology (PE2)	3	0	0	20	30		50		100	3
5	BT106204BT	Bioseparation Engineering (PE2)	3	0	0	20	30		50		100	
6	BT106205BT	Membrane Technology (PE3)	3	0	0	20	30		50		100	
7	BT106206BT	Stem Cell and Tissue Engineering (PE3)	3	0	0	20	30		50		100	3
8	BT106302BT	Intellectual Property Rights (OE2)	3	0	0	20	30		50		100	
9	BT106403BT	Database Management System Lab	0	0	2	40		20		40	100	
10	BT106404BT	Immunology Lab	0	0	2	40		20		40	100	1
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Course of Study and Scheme of Examination												
S. No.	Subject Code	Subject Name	Periods per Week				B. Tech. 7th Semester Examination Scheme				Total Marks	Credits
			L	T	P	TA	MSE/MTR		ESE/ESVE			
							Theory	Prac.	Theory	Prac.		
1	BT107107BT	Microbial Biotechnology (PC)	3	1	0	20	30		50		100	4
2	BT108212BT	Genomics and Proteomics (PC)	3	1	0	20	30		50		100	4
3	BT107205BT	Metabolic Engineering (PE4)	3	0	0	20	30		50		100	3
4	BT108211BT	Industrial Biotechnology (PE4)	3	0	0	20	30		50		100	
5	BT107207BT	Unit Operations(PES)	3	0	0	20	30		50		100	
6	BT107208BT	Process dynamics and control(PES)	3	0	0	20	30		50		100	3
7	BT107303BT	Nano Biotechnology (OE3)	3	1	0	20	30		50		100	
8	BT107304BT	Biosensor Technology (OE3)	3	0	0	20	30		50		100	
9	BT107405BT	Microbial Technology Lab	0	0	2	40		20		40	100	2
10		Project Work	0	0	8	40		20		40	100	4
11		Summer Internship II				40		20		40	100	1
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Course of Study and Scheme of Examination												
S. No.	Subject Code	Subject Name	Periods per Week			TA	B. Tech. 8th Semester Examination Scheme				Total Marks	Credits
			L	T	p		MSE/MTR		ESE/ESVE			
							Theory	Prac.	Theory	Prac.		
1	BT108304BT	Bioreactor Design and Analysis (0E4)	3	0	0	20	20		50		100	3
2	BT108407BT	Interactomics (OE5)	3	0	0	20	20		50		100	3
3		Project Work	0	0	8	40		20		40	100	4
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Course of Study and Scheme of Examination for Students undergoing Major Internship							B. Tech. 8th Semester			Branch:Biotechnology		
S. No.	Subject Code	Subject Name	Periods per Week			TA	Examination Scheme			Total Marks	Credits	
			L	T	P		MSE/MTR	ESE/ESVE				
							Theory	Prac.	Theory			Prac.
1	BT108405BT	Biostatistics and Design of Experiments (OE1) NPTEL	3	0	0	20	30		50		100	3
2	BT108406BT	Biomicrofluidics(0E 2) NPTEL	3	0	0	20	30		50		100	3
3	BT108407BT	Interactomics (0E 2) NPTEL	3	0	0	20	30		50		100	
Major Internship						40		20		40	100	4 (3* +1^^)
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* Report submission, end semester presentation and Viva
^^ Mid semester examination (viva/presentation)

Dean Academics, NITRR

Srijesh Kumar
03/05/2024

Chiranjit
13/05/2024

Latika
3/5/24
Awanish
03/05/24
(Chairperson)