



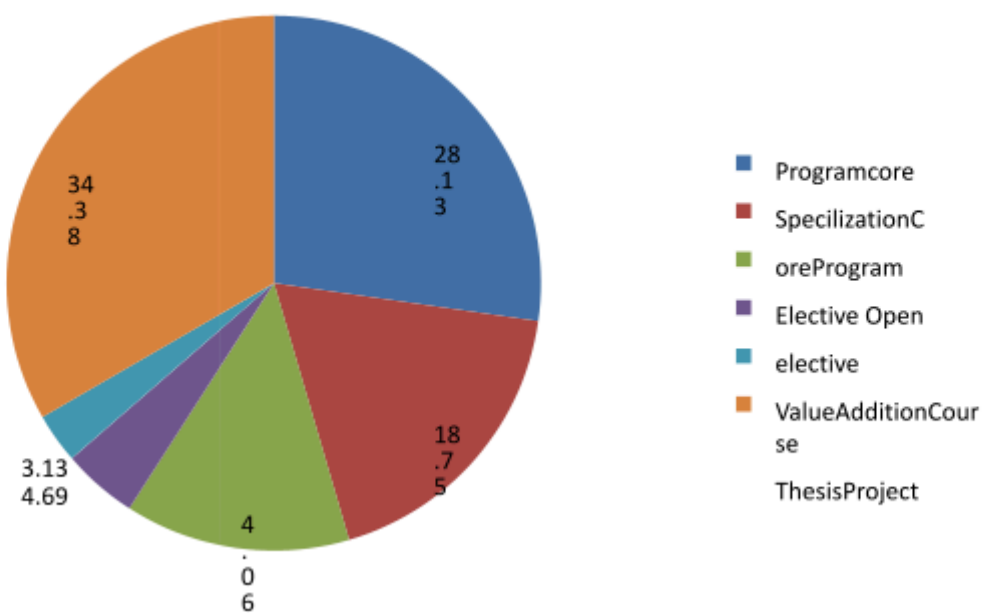
Indian Institute of Information Technology-Allahabad

Deoghat, Jhalwa-211015, Prayagraj, Uttar Pradesh

Department of Applied Sciences

M. Tech BI 2026, Credit Distribution

M.TechBI	I	II	III	IV	Total Credits	
Program core	6	12			18	28.13%
Specialization Core	12				12	18.75%
Program Elective		3	6		9	14.06%
Open Elective			3		3	4.69%
Value Addition Course		2			2	3.13%
Thesis/Project		2	8	12	22	34.38%





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Table1: First Semester (M. Tech)

Sl. No.	Course Name	Code	Type	Credit	Hours
					L-T-P-S
1.	OMICS	AS501	PC C	4	3-0-2-0
2	Mathematics and Statistics for Biology	AS502	PC C	4	3-1-0-0
3.	Scripting and Computer Environments	AS503	PC C	4	2-0-4-0
4.	Data Structure and Algorithms	AS504	PC C	4	2-0-4-0
5.	Tools for Research	AS505	AE C	2	2-0-0-0
6.	Research Methodology & IPR (For PhD and MTECH- PhD only)	AS690	EL C	4	3-1-0-0
Total Credit:				18/20	24Hrs./week 6Hrs./week

Table2: Second Semester (M. Tech)

Sl. No.	Course Name	Code	Type	Credit	Hours
					L-T-P-S
1.	Next-Generation Sequencing Tools and Algorithms	AS506	PCC	4	3-0-2-0
2.	Data Engineering for Molecular Structure Prediction	AS507	PCC	4	3-0-2-0
3.	Elective-1		PEC	3	3-0-0-0
4.	Dissertation I	AS509	ELE	4	0-0-8-0
5.	HSMC		VEC	2	2-0-0-0
Total Credit:				17	24 Hrs./week

EXIT: after the end of second Semester, after clearing all the papers, the M. Tech student may be eligible for PG Diploma in Bioinformatics. However, these students have to secure **additional 5 credits for receiving PG diploma**, which is mandatory.

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Table 3: For Exit Cases Semester

Sl. No.	Course Name	Code	Type	Credit	Hours
					L-T-P-S
1.	Summer Project (for PG Diploma)	AS610	ELC	2	0-0-4-0
2.	Systems Biology/Cheminformatics/NPTEL (for PG Diploma)	AS612/AS608	PCC	3	3-0-0-0
Total Credit:				5	7Hrs./week 16Hrs./week

Table4: Third Semester (M. Tech)

Sl. No.	Course Name	Code	Type	Credit	Hours
					L-T-P-S
1.	Program Elective II		PEC	3	3-0-0-0
2.	Program Elective III		PEC	3	3-0-0-0
3.	Open Electives		ELC	3	3-0-0-0
4.	Dissertation II	AS601	ELC	8	0-0-16-0
Total Credit:				17	25 Hrs./week

In III sem, Dual Degree students have to do extra electives course /independent study (of minimum 3 credits)besides regular courses prescribed above in consultation with HOD/Supervisor to satisfy minimum credit requirement as per PhD ordinance.

Table 5: Fourth Semester (M. Tech)

Sl. No.	Course Name	Code	Type	Credit	Hours
					L-T-P-S
1.	Thesis	AS605	ELC	12	0-0-24-0
Total Credit:				12	24 Hrs./week

Table 6: List of Electives

Sl. No.	Course Name	Code	Type	Credit	Hours
					L-T-P-S
1.	Machine Learning for Biological Systems	AS607	PEC	3	2-0-1-0
2.	Cheminformatics	AS608	PEC	3	3-0-0-0
3.	Molecular Medicine	AS609	PEC	3	3-0-0-0
4.	Cognitive Modeling	AS611	PEC	3	3-0-0-0
5.	Advance Data Analytics	AS612	PEC	3	2-0-1-0
6.	Deep Learning	IT697	PEC	3	2-0-1-0
7.	Systems Biology	AS613	PEC	3	3-0-0-0
8.	Parallel Computing	AS614	PEC	3	3-0-0-0
9.	Pattern Recognition	IT698	PEC	3	2-0-1-0
10.	Numerical Methods	AS615	PEC	3	3-0-0-0
1	All the electives provided in the M. Tech BME basket are also available for M. Tech BI students				
1	OPEN ELECTIVES				
1	Open Elective			3	