

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY BHAGALPUR

B.Tech. Course Structure for Mathematics and Computing (MAC)

Course Code	Course name	L	T	P	C	Semester	Total Semester Credit
MA101	Engineering Mathematics – I	3	1	0	4	I	23
PH101	Engineering Physics	3	0	0	3		
EC101	Electrical Sciences	3	0	0	3		
CS101	Computer Programming	3	0	0	3		
HS101	Professional Communication	2	0	0	2		
ME102	Engineering Graphics	2	0	3	4		
EC112	Electrical Sciences LAB	0	0	3	2		
CS110	Computer Programming LAB	0	0	3	2		
MA102	Engineering Mathematics – II	3	1	0	4	II	23
CS102	Data Structures and Algorithms	3	0	0	3		
EC102	Digital Design	3	0	0	3		
EC104	Semiconductor Devices and Circuits	3	0	0	3		
ME101	Engineering Mechanics	3	1	0	4		
CS112	Data Structure and Algorithm LAB	0	0	3	2		
EC113	Digital Design LAB	0	0	3	2		
EC114	Semiconductor Devices and Circuits LAB	0	0	3	2		
NSS	NSS	0	0	0	0		
MA201	Engineering Mathematics III	3	1	0	4	III	24
CS203	Object Oriented Programming	3	0	0	3		
CS202	Discrete Mathematics	3	1	0	4		
CS201	Design and Analysis of Algorithms	3	1	0	4		
CS207	Computer Organization and Architecture	3	1	0	4		
HS201	Management Concepts and Technology	2	0	0	2		
CS211	Object Oriented Programming LAB	0	0	3	2		
SAI I	Society Internship Program	0	0	0	1		
MA204	Optimization	3	1	0	4	IV	22
CS206	Operating System	3	0	0	3		
CS205	Formal Language and Automata Theory	3	1	0	4		
CS204	Database Management Systems	3	0	0	3		
MA203	Probability and Statistics	3	1	0	4		
CS212	Database Management Systems LAB	0	0	3	2		
CS213	Operating System LAB	0	0	3	2		
MA301	Mathematical Finance	3	1	0	4	V	21
MA302	Abstract Algebra	3	0	0	3		
MA303	Scientific Computing	3	0	2	4		
MA304	Real Analysis	3	1	0	4		
CS303	Artificial Intelligence	3	0	2	4		
MA312	Statistical Methods LAB	1	0	2	2		
SAI II	Academia Internship	0	0	0	1		
MA306	Stochastic Process	3	0	0	3	VI	24
MA307	Number Theory and Cryptography	3	1	0	4		
MA308	Functional Analysis	3	1	0	4		
CS307	Machine Learning	3	0	0	3		
ME306	Environmental Sciences & Green Technology	2	0	0	2		
	Elective-I	3	1	0	4		
MA313	Stochastic Process LAB	0	0	3	2		
CS314	Machine Learning LAB	0	0	3	2		
HS401	Professional Ethics for Engineers	2	0	0	2	VII	22
	Elective – II	3	1	0	4		
	Elective – III	3	1	0	4		
	Open Elective	3	1	0	4		
HS4XX	Foreign Language	0	0	2	2		
MA491	Minor Project	0	0	6	4		
SAI III	Industry Internship	0	0	0	2		
MA492	B. Tech Research/Industry Project	0	0	0	16	VIII	16
TOTAL CREDIT: 175							