

**Semester wise Plan (Subject to minor changes)**

Year & Sem	Course Code	Course Name	Full/Half Sem	Lectures-L, Tutorial-T, Practical-P Hours per week			Credits earned							
				L	T	P	Ins Core	Prog Core	Prog Elec	CS Elec	Maths	Hum	Open Elec	Hons
I-I	Monsoon													
	MA5.101	Discrete Structures	Full	3	1	0	-	-	-	-	4	-	-	-
	MA4.101	Real Analysis	Full	3	1	0	-	-	-	-	4	-	-	-
	SC4.101	Computing in Sciences-1	Half	1	0	3	-	2	-	-	-	-	-	-
	CS0.101	Computer Programming	Full	3	1	3	-	5	-	-	-	-	-	-
	EC2.101	Digital Systems & Microcontrollers	Full	3	1	3	-	5	-	-	-	-	-	-
	OC2.101	Arts-1	Full	0	2	2	2	-	-	-	-	-	-	-
	OC1.101	Sports-1	Full	0	0	2	1	-	-	-	-	-	-	-
	OC3.101	Value Education-1	Full	2	1	0	2	-	-	-	-	-	-	-
		Sub Total		15	7	13	5	12	0	0	8	0	0	0
	Total	25												
I-II	Spring													
	MA2.101	Linear Algebra	Full	3	1	0	-	-	-	-	4	-	-	-
	SC1.101	Classical Mechanics	Half-1	3	1	0	-	2	-	-	-	-	-	-
	SC1.101	Electrodynamics	Half-2	3	1	0	-	2	-	-	-	-	-	-
	SC2.101	General & Structural Chemistry	Full	3	1	0	-	4	-	-	-	-	-	-
	SC4.102	Computing in Sciences-2	Half	1	0	3	-	2	-	-	-	-	-	-
	CS1.201	Data Structures & Algorithms	Full	3	1	3	-	5	-	-	-	-	-	-
	CS6.201	Introduction to Software Systems	Half	1	0	3	-	2	-	-	-	-	-	-
	OC1.102	Sports-2	Full	0	0	2	1	-	-	-	-	-	-	-
	OC2.102	Arts-2	Full	0	2	2	2	-	-	-	-	-	-	-
	Sub Total		17	7	13	3	17	0	0	4	0	0	0	
	Total	24												
II-I	Monsoon													
	MA6.102	Probability and Random Processes	Full	3	1	0	-	-	-	-	4	-	-	-
	SC1.203	Quantum Mechanics	Full	3	1	0	-	4	-	-	-	-	-	-
	SC3.101	Introduction to Biology	Full	3	1	0	-	4	-	-	-	-	-	-
	SC4.110	Science Lab - 1	Half	0	0	3	-	2	-	-	-	-	-	-
	CS1.302	Automata Theory	Half	3	1	0	-	2	-	-	-	-	-	-
	CS4.301	Data and Applications	Half	3	1	0	-	2	-	-	-	-	-	-
	CS1.301	Algorithm Analysis and Design	Full	3	1	0	-	4	-	-	-	-	-	-
	OC1.103	Sports-3	Full	0	0	2	1	-	-	-	-	-	-	-
		Sub Total		18	6	5	1	18	0	0	4	0	0	0
	Total	23												
II-II	Spring													
	CS2.201	Computer Systems Organization	Full	3	1	0	-	4	-	-	-	-	-	-
	CS7.301	Machine, Data and Learning	Full	3	1	0	-	4	-	-	-	-	-	-
	CS6.301	Design & Analysis of Software Systems	Full	3	1	0	-	4	-	-	-	-	-	-
	SC1.204	Thermodynamics	Half-1	3	1	0	-	2	-	-	-	-	-	-
	SC1.205	Statistical Mechanics	Half-2	3	1	0	-	2	-	-	-	-	-	-
	SC2.203	Biomolecular Structures	Half-1	3	1	0	-	2	-	-	-	-	-	-
	SC2.202	Organic Chemistry	Half-2	3	1	0	-	2	-	-	-	-	-	-
	SC4.111	Science Lab-2	Half	0	0	3	-	2	-	-	-	-	-	-
	OC1.104	Sports-4	Full	0	0	2	1	-	-	-	-	-	-	-
OC3.102	Value Education-2	Full	2	1	0	2	-	-	-	-	-	-	-	
	Sub Total		23	8	5	3	22	0		0	0	0	0	
	Total	25												
III-I	Monsoon													
	CS3.301	Operating Systems and Networks	Full	3	1	0	-	4	-	-	-	-	-	-
		CS elective - 1	Full	3	1	0	-	-	-	-	4	-	-	-
	SC2.304	Spectroscopy	Half-1	3	1	0	-	2	-	-	-	-	-	-
	SC2.305	Chemical Kinetics	Half-2	3	1	0	-	2	-	-	-	-	-	-
	SC3.202	Bioinformatics	Half-1	3	1	0	-	2	-	-	-	-	-	-
	SC3.203	Systems Biology	Half-2	3	1	0	-	2	-	-	-	-	-	-
	SC9.302	CNS Honors - 1	Full	0	2	6	-	-	-	-	-	-	-	2
	SC9.600	CCNSB seminar - 1					0	-	-	-	-	-	-	
		Sub Total		18	8	6	0	12	0	4	0	0	0	2
	Total	18												

III-II		CNS elective - 1	Full	3	1	0	-	-	4	-	-	-	-	-
		CNS elective - 2	Full	3	1	0	-	-	4	-	-	-	-	-
		CS elective - 2	Full	3	1	0	-	-	-	4	-	-	-	-
	HS8.102	Introduction to Human Sciences	Full	3	1	0	-	-	-	-	-	4	-	-
	SC9.600	CCNSB seminar - 2	Full				0	-	-	-	-	-	-	-
	SC9.303	CNS Honors - 2	Full	0	2	6	-	-	-	-	-	-	-	2
		<b>Sub Total</b>		12	6	6	0	0	8	4	0	4	0	2
		<b>Total</b>												<b>18</b>
IV-I				<b>Monsoon</b>										
		CNS elective - 3	Full	3	1	0	-	-	4	-	-	-	-	-
		CS elective - 3	Full	3	1	0	-	-	-	4	-	-	-	-
		CS elective - 4	Full	3	1	0	-	-	-	4	-	-	-	-
		Ethics-1	Full	3	1	0	-	-	-	-	-	2	-	-
	SC9.402	CNS Honors - 3	Full	0	2	6	-	-	-	-	-	-	-	2
	SC9.600	CCNSB seminar - 3	Full				0	-	-	-	-	-	-	-
		<b>Sub Total</b>		12	6	6	0	0	4	8	0	2	0	2
	<b>Total</b>												<b>16</b>	
IV-II				<b>Spring</b>										
		CNS elective - 4	Full	3	1	0	-	-	4	-	-	-	-	-
		CNS elective - 5	Full	3	1	0	-	-	4	-	-	-	-	-
		CS elective - 5	Full	3	1	0	-	-	-	4	-	-	-	-
		HSS elective - 1	Full	3	1	0	-	-	-	-	-	4	-	-
		Ethics-2	Half	3	1	0						2		
	SC9.403	CNS Honors - 4	Full	0	2	6	-	-	-	-	-	-	-	2
	SC9.600	CCNSB seminar - 4	Full				0	-	-	-	-	-	-	-
	<b>Sub Total</b>		15	7	6	0	0	8	4	0	6	0	2	
	<b>Total</b>												<b>20</b>	
V-I				<b>Monsoon</b>										
	SC9.605	Open Elective-1	Full	3	1	0	-	-	-	-	-	-	4	-
		Thesis	Full				-	12	-	-	-	-	-	-
	SC9.600	CCNSB seminar - 5	Full				0	-	-	-	-	-	-	-
		<b>Sub Total</b>		3	1	0	0	12	0	0	0	0	4	0
	<b>Total</b>												<b>16</b>	
V-II				<b>Spring</b>										
	SC9.605	Open Elective-2	Full	3	1	0	-	-	-	-	-	-	4	-
		Thesis	Full				-	12	-	-	-	-	-	-
	SC9.600	CCNSB seminar - 6	Full				0	-	-	-	-	-	-	-
		<b>Sub Total</b>		3	1	0	0	12	0	0	0	0	4	0
	<b>Total</b>												<b>16</b>	

Category	Credits	%
Institute Core	12	7
CS Core	41	23
Domain (CNS) Core	40	23
Programme Electives	20	11
Maths	16	9
CS Electives	20	11
Humanities	12	7
Open Electives	8	5
Honours	8	5
<b>Total</b>	<b>177</b>	<b>100</b>