M. Sc. Computer Science Course Structure & Syllabus (NEP-2020)
(2022 onwards)
Total Credits – 80

Course Code	Courses		
	First Semester	**L-T-P**	**Credits**
CSC81DC00104	Operating Systems	3-1-0	4
CSC81DC00204	Data Structure and Algorithms	3-0-1	4
CSC81DC00304	Computer Networks	3-1-0	4
CSC81DC00402	Indian Knowledge System in Computer Science	2-0-0	2
CSC81DC00502	Human Values and Professional Ethics	2-0-0	2
	Open Elective – I	-	4
Total Credits			**20**
	Second Semester		
CSC82DC00604	Database Management System	3-0-1	4
CSC82DC00704	Object Oriented Programming Methodology	3-0-1	4
CSC82DC00804	Software Engineering	3-1-0	4
CSC82DC00904	Research Methodology	3-1-0	4
	Elective – I (Within Department)/SWAYAM	-	4
	Mandatory Elective Non-Credit Course-1	-	Non-credit
Total Credits			**20**
	Third Semester		
CSC91DC01004	Artificial Intelligence	3-1-0	4
CSC91DC01104	Design & Analysis of Algorithms	3-0-1	4
	Elective-II (Within Department)/ SWAYAM	-	4
	Elective-III (Within Department) / SWAYAM	-	4
	Open Elective – II	-	4
	Mandatory Elective Non-Credit Course-2	-	Non-credit
Total Credits			**20**
	Fourth Semester		
CSC92DC01220	Project in Industry/Academia	-	20

Total Credits			**20**

Elective Basket (Within Dept.)

Course Code	Course Title	Credits
CSC82DE01304	Computer Organization	4
CSC82DE01404	Distributed Systems	4
CSC82DE01504	Computer Graphics	4
CSC82DE01604	Internet Technologies	4
CSC82DE01704	Mobile Network Systems	4
CSC82DE01804	Wireless Sensor Networks	4
CSC82DE01904	Next Generation Networks	4
CSC82DE02004	Digital Logic and Design	4
CSC82DE02104	Modeling and Simulation	4
CSC82DE02204	Statistical Methods	4
CSC82DE02304	Theory of Computation	4
CSC91DE02404	Big Data Analytics	4
CSC91DE02504	Machine Learning	4
CSC91DE02604	Advanced Computer Network	4
CSC91DE02704	Cryptography and Network Security	4
CSC91DE02804	Software Testing	4
CSC91DE02904	Soft Computing	4
CSC91DE03004	Digital Image Processing	4
CSC91DE03104	Speech processing and recognition	4
CSC91DE03204	Social Network Analysis	4
CSC91DE03304	Advanced software engineering	4
CSC91DE03404	Compiler Design	4
CSC91DE03504	Advanced Python Programming	4
CSC91DE03604	Data Mining	4
CSC91DE03704	Internet of Things	4
CSC91DE03804	Data Security	4

Note: The Department will float elective courses subject to availability of course expert.

Mandatory Elective Non-Credit Course (MENC)

Course Code	Course Title	Credits
CSC82ME03900	Latex	Non-Credit
CSC82ME04000	Socket Programming using Python	Non-Credit
CSC91ME04100	Python Basics	Non-Credit

Open Elective (interdisciplinary) Basket for other departments

Course Code	Course Title	Credits
CSC82OE04204	Programming in C	4
CSC82OE04304	Fundamentals of Computers	4
CSC82OE04404	Introduction to Database System	4

Note: The Department will float one elective courses subject to availability of course expert.