



**S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT
& RESEARCH, NAGPUR.**

(An Autonomous Institute, Affiliated to RTMNU, Nagpur)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

"To become a center for quality education in the field of computer science & engineering and to create competent professionals."

CURRICULUM SCHEME

FOR

B.TECH. COMPUTER SCIENCE AND ENGINEERING

2nd YEAR / SEMESTER-III (NEP COMPLIANT)

Scheme of Teaching & Examination of Bachelor of Technology III Semester B.Tech. (Computer Science and Engineering)

Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs.)
1	N-PCCCS301T	Object Oriented Programming	3	0	0	3	40	60	100	3
2	N-PCCCS301P	Object Oriented Programming Lab	0	0	2	1	25	25	50	-
3	N-PCCCS302T	Data Structure and Algorithms	3	0	0	3	40	60	100	3
4	N-PCCCS302P	Data Structure and Algorithms Lab	0	0	2	1	25	25	50	-
5	N-PCCCS303T	Discrete Mathematics and Graph Theory	2	1	0	3	40	60	100	3
6	N-PCCCS304P	System Lab	0	0	2	1	25	25	50	-
7	N-MDM	Multidisciplinary Minor Course -1	3	0	0	3	40	60	100	3
8	N-OEC	Open Elective Course-1	3	0	0	3	40	60	100	3
9	N-HSSMCS301T	Entrepreneurship Development	2	0	0	2	20	30	50	2
10	N-VECCS301T	Environmental Studies	2	0	0	2	50	-	50	-
11	N-CEPCS301	Community Engagement Project (CEP)	0	0	4	2	50	-	50	-
	OR									
	N-FPCS301	Field Project (FP)								
Total			18	1	10	24	395	405	800	-

Revision	BOS Meeting	Date	W. E. F
-	7 th	14-07-2023	2024-25



**S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT
& RESEARCH, NAGPUR.**

(An Autonomous Institute, Affiliated to RTMNU, Nagpur)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

“To become a center for quality education in the field of computer science & engineering and to create competent professionals.”

2nd YEAR / SEMESTER-IV (NEP COMPLIANT)

Scheme of Teaching & Examination of Bachelor of Technology IV Semester B.Tech. (Computer Science and Engineering)										
Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs.)
1	N-PCCCS401T	Computer Architecture and Organization	3	0	0	3	40	60	100	3
2	N-PCCCS402T	Operating System	3	0	0	3	40	60	100	3
3	N-PCCCS402P	Operating System Lab	0	0	2	1	25	25	50	-
4	N-PCCCS403T	Computational Mathematics	2	1	0	3	40	60	100	3
5	N-MDM	Multidisciplinary Minor Course-2	3	0	0	3	40	60	100	3
6	N-OEC	Open Elective Course-2	3	0	0	3	40	60	100	3
7	N-SEC	Skill Enhancement Course-1	0	0	4	2	25	25	50	-
8	N-AEC	Ability Enhancement Course	2	0	0	2	50	-	50	-
9	N-HSSMCS401T	Economics and Finance for Engineers	2	0	0	2	20	30	50	2
10	N-VECCS401T	Universal Human Values	2	0	0	2	50	-	50	-
11	N-MCCS401	Indian Constitution	2	0	0	-	50	-	50	-
		TOTAL	22	1	6	24	420	380	800	-

Revision	BOS Meeting	Date	W. E. F
-	7 th	14-07-2023	2024-25



**S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT
& RESEARCH, NAGPUR.**

(An Autonomous Institute, Affiliated to RTMNU, Nagpur)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

"To become a center for quality education in the field of computer science & engineering and to create competent professionals."

3rd YEAR / SEMESTER-V (NEP COMPLIANT)

Scheme of Teaching & Examination of Bachelor of Technology V Semester B.Tech. (Computer Science and Engineering)										
Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs.)
1	N-PCCCS501T	Artificial Intelligence	3	0	0	3	40	60	100	3
2	N-PCCCS501P	Artificial Intelligence Lab	0	0	2	1	25	25	50	-
3	N-PCCCS502T	Computer Networks	3	0	0	3	40	60	100	3
4	N-PCCCS502P	Computer Networks Lab	0	0	2	1	25	25	50	-
5	N-PCCCS503T	Design Analysis of Algorithm	3	0	0	3	40	60	100	3
6	N-PCCCS503P	Design Analysis of Algorithm Lab	0	0	2	1	25	25	50	-
7	N-PEC	Program Elective-1	3	0	0	3	40	60	100	3
8	N-PEC	Program Elective-1 Lab	0	0	2	1	25	25	50	-
9	N-MDM	Multidisciplinary Minor Course -3	3	0	0	3	40	60	100	3
10	N-OEC	Open Elective Course-3	2	0	0	2	20	30	50	2
		TOTAL	17	0	8	21	320	430	750	-

Program Elective – 1 and Program Elective – 1 Lab

Sr. No	Course Code	Course Title
1	N-PECCS501T	Cryptography & Network Security
	N-PECCS501P	Cryptography & Network Security Lab
2	N-PECCS502T	Data Warehousing and Mining
	N-PECCS502P	Data Warehousing and Mining Lab
3	N-PECCS503T	Cloud Computing
	N-PECCS503P	Cloud Computing Lab

Revision	BOS Meeting	Date	W. E. F
-	7 th	14-07-2023	2025-26



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

(An Autonomous Institute, Affiliated to RTMNU, Nagpur)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

"To become a center for quality education in the field of computer science & engineering and to create competent professionals."

3rd YEAR / SEMESTER-VI (NEP COMPLIANT)

Scheme of Teaching & Examination of Bachelor of Technology VI Semester B.Tech. (Computer Science and Engineering)

Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs.)
1	N-PCCCS601T	Database Management System	3	0	0	3	40	60	100	3
2	N-PCCCS601P	Database Management System Lab	0	0	2	1	25	25	50	-
3	N-PCCCS602T	Theory of Computation	3	1	0	4	40	60	100	3
4	N-PEC	Program Elective-2	3	0	0	3	40	60	100	3
5	N-PEC	Program Elective-2 Lab	0	0	2	1	25	25	50	-
6	N-PEC	Program Elective-3	3	0	0	3	40	60	100	3
7	N-PEC	Program Elective-3 Lab	0	0	2	1	25	25	50	-
8	N-MDM	Multidisciplinary Minor Course -4	3	0	0	3	40	60	100	3
9	N-SEC	Skill Enhancement Course-2	0	0	2	1	25	25	50	-
10	N-SEC	Skill Enhancement Course-3	0	0	2	1	25	25	50	-
		TOTAL	15	1	10	21	325	425	750	-

Program Elective – 2 and Program Elective – 2 Lab

Sr. No.	Course Code	Course Title
1	N-PECCS601T	Security in Internet of Things
	N-PECCS601P	Security in Internet of Things Lab
2	N-PECCS602T	Machine Learning
	N-PECCS602P	Machine Learning Lab
3	N-PECCS603T	Design Patterns
	N-PECCS603P	Design Patterns Lab

Program Elective – 3 and Program Elective – 3 Lab

Sr. No.	Course Code	Course Title
1	N-PECCS604T	Cyber Security and Ethical Hacking
	N-PECCS604P	Cyber Security and Ethical Hacking Lab
2	N-PECCS605T	Big-Data Analysis
	N-PECCS605P	Big-Data Analysis Lab
3	N-PECCS606T	GPU Computing
	N-PECCS606P	GPU Computing Lab

Revision	BOS Meeting	Date	W. E. F
-	7 th	14-07-2023	2025-26



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

(An Autonomous Institute, Affiliated to RTMNU, Nagpur)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

“To become a center for quality education in the field of computer science & engineering and to create competent professionals.”

4th YEAR / SEMESTER-VII (NEP COMPLIANT)

Scheme of Teaching & Examination of Bachelor of Technology VII Semester B.Tech. (Computer Science and Engineering)

Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs.)
1	N-PCCCS701T	Software Engineering and Quality Assurance	2	0	0	2	20	30	50	2
2	N-PCCCS701P	Software Engineering and Quality Assurance Lab	0	0	2	1	25	25	50	-
3	N-PCCCS702T	Compiler Design	3	0	0	3	40	60	100	3
4	N-PCCCS702P	Compiler Design Lab	0	0	2	1	25	25	50	-
5	N-PEC	Program Elective-4	3	0	0	3	40	60	100	3
6	N-PEC	Program Elective-4 Lab	0	0	2	1	25	25	50	-
7	N-PEC	Program Elective-5	3	0	0	3	40	60	100	3
8	N-PEC	Program Elective-5 Lab	0	0	2	1	25	25	50	-
9	N-MDM	Multidisciplinary Minor Course -5	2	0	0	2	20	30	50	2
10	N-PROJCS701	Project-I	0	0	8	4	75	75	150	-
TOTAL			13	0	16	21	335	415	750	-

Program Elective – 4 and Program Elective – 4 Lab

Sr. No.	Course Code	Course Title
1	N-PECCS701T	Web Security
	N-PECCS701P	Web Security Lab
2	N-PECCS702T	Deep Learning
	N-PECCS702P	Deep Learning Lab
3	N-PECCS703T	Embedded Systems
	N-PECCS703P	Embedded Systems Lab

Program Elective – 5 and Program Elective – 5 Lab

Sr. No.	Course Code	Course Title
1	N-PECCS704T	Blockchain Technology
	N-PECCS704P	Blockchain Technology Lab
2	N-PECCS705T	Natural Language Processing
	N-PECCS705P	Natural Language Processing Lab
3	N-PECCS706T	Distributed Operating Systems
	N-PECCS706P	Distributed Operating Systems Lab

Revision	BOS Meeting	Date	W. E. F
-	7 th	14-07-2023	2026-27



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

(An Autonomous Institute, Affiliated to RTMNU, Nagpur)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

“To become a center for quality education in the field of computer science & engineering and to create competent professionals.”

4th YEAR / SEMESTER-VIII (NEP COMPLIANT)

Scheme of Teaching & Examination of Bachelor of Engineering VIII Semester B.Tech. (Computer Science and Engineering)										
Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs.)
1	N-PEC	Program Elective-6	3	0	0	3	40	60	100	3
2	N-RMCS801T	Research Methodology	3	0	0	3	40	60	100	3
3	N-PROJCS801	Project-II	0	0	12	6	100	100	200	-
TOTAL			6	0	12	12	180	220	400	-
OR										
1	N-ELCCS801	Internship/On Job Training (OJT)	One Semester			12	100	100	200	-

Program Elective –6

Sr. No.	Course Code	Course Title
1	N-PECCS801T	Privacy and Security in Online Social Media
2	N-PECCS802T	Computer Vision
3	N-PECCS803T	Social Network Analysis

Revision	BOS Meeting	Date	W. E. F
-	7 th	14-07-2023	2026-27