B. N. M. Institute of Technology
An Autonomous Institute Under VTU

Department of Computer Science and Engineering
III Semester
Scheme of Teaching 2024 – 28 Batch

Sl. No.	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours/Week				Hours Per Week	Credits	Examination		
					Lecture	Tutorial	Practical	Project					
					L	T	P	J			CIA	SEA	Total
1	BSC	24MAC131	Fourier Transforms, Fundamentals of Logic and Linear Algebra	Mathematics	2	2	-	-	4	3	50	50	100
2	PCC	24CSE132	Logic Design and Computer Organization	CSE	2	2	-	-	4	3	50	50	100
3	PCC	24CSE133	Operating System	CSE	2	-	2	-	4	3	50	50	100
4	PCI-P	24CSE134	Data Structures and Applications Using C	CSE	3	-	2	-	5	4	50	50	100
5	PCI-P	24CSE135	Data Analysis	CSE	2	-	2	-	4	3	50	50	100
6	PCI-P	24CSE136	Object Oriented Programming using Java	CSE	2	-	2	-	4	3	50	50	100
7	PBL	24CSE137	Innovative Project Learning (Social Concern)	CSE	-	-	-	2	2	1	100	-	100
8	AEC	24SFT138	Soft Skills – I	HSS	-	-	2	-	2	1	100	-	100
Total					13	4	10	2	29	21	500	300	800

CIE: Continuous Internal Evaluation, SEE: Semester End Examination, NCMC: Non Credit Mandatory Course AICTE Activity Points to be earned by students admitted to BE day college programme (For more details refer to Chapter 6, AICTE Activity Point Programme, Model Internship Guidelines): Over and above the academic grades, every Day College regular student admitted to the 4 years Degree programme and every student entering 4 years Degree programme through lateral entry, shall earn 100 and 75 Activity Points respectively for the award of degree through AICTE Activity Point Programme. Students transferred from other institutions and Universities to the fifth semester are required to earn 50 Activity Points from the year of entry to BNMIT. The Activity Points earned shall be reflected on the student's eighth semester Grade Card. The activities can be spread over the years, anytime during the semester weekends and holidays, as per the liking and convenience of the student from the year of entry to the programme. However, the minimum hours' requirement should be fulfilled. Activity Points (non-credit) do not affect SGPA/CGPA and shall not be considered for vertical progression. In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of the degree only after the release of the Eighth semester Grade Card.

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Additional Director & Principal 09/06
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B. N. M. Institute of Technology
An Autonomous Institute Under VTU

Department of Computer Science and Engineering
IV Semester
Scheme of Teaching 2024 – 28 Batch

Sl. No.	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours/Week				Hours Per Week	Credits	Examination		
					Lecture	Tutorial	Practical	Project					
					L	T	P	J			CIA	SEA	Total
1	BSC	24MAC141	Statistics, Probability and Graph Theory	Mathematics	2	2	-	-	4	3	50	50	100
2	PCI-C	24CSE142	Microcontroller and Internet of Things	CSE	2	-	2	-	4	3	50	50	100
3	PCI-C	24CSE143	Database Management System	CSE	3	-	2	-	5	4	50	50	100
4	PCI-P	24CSE144	Design and Analysis of Algorithms	CSE	3	-	2	-	5	4	50	50	100
5	PCI-P	24CSE145	Introduction to Machine Learning	CSE	3	-	2	-	5	4	50	50	100
6	PBL	24CSE146	Internship – I and IPL	CSE	-	-	2	2	4	2	100	-	100
7	HSS	24CIP147	CIPE	HSS	-	2	-	-	2	1	100	-	100
8	AEC	24SFT148	Soft Skills – II	HSS	-	2	-	-	2	1	100	-	100
Total					13	6	10	2	31	22	550	250	800

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B. N. M. Institute of Technology
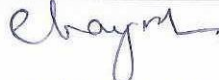## An Autonomous Institute Under VTU

Department of Computer Science and Engineering
V Semester
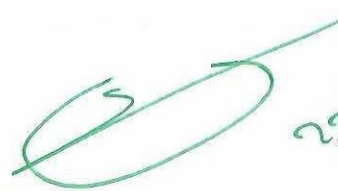### Scheme of Teaching 2024 – 28 Batch

Sl. No.	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours/Week				Hours Per Week	Credits	Examination		
					Lecture	Tutorial	Practical	Project					
					L	T	P	J			CIA	SEA	Total
1	PCC	24CSE151	Software Project Management and Finance	CSE	2	2	-	-	4	3	50	50	100
2	PCC	24CSE152	Automata Theory and Computation	CSE	2	2	-	-	4	3	50	50	100
3	PCC	24CSE153	Computer Networks	CSE	3	-	2	-	5	4	50	50	100
4	PCI-P	24CSE154	Natural Language Processing	CSE	3	-	2	-	5	4	50	50	100
5	PCI-C	24CSE155	Cloud Computing and Applications	CSE	2	-	2	-	4	3	50	50	100
6	OEC	24CSE156X	Open Elective - I	CSE	2	-	2	-	4	3	50	50	100
7	AEC	24CSE157	Employability Skills – I [Technical]	T&P	-	2	-	-	2	1	100	-	100
8	INT	24CSE158	Internship - II	CSE	-	-	2	2	4	2	100	-	100
			Total		14	6	10	2	32	23	500	300	800

Open Elective – I			
24CSE1561	Operating System	24CSE1562	Object Oriented Programming Using Java
24CSE1563	Efficient Algorithms and Data Structures using Java	24CSE1564	Database Management System.

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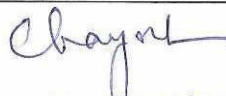## Department of Computer Science and Engineering
VI Semester
Scheme of Teaching 2024 – 28 Batch
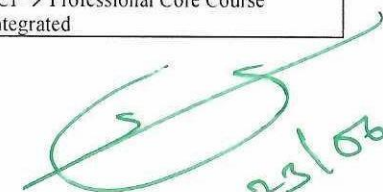
Sl. No.	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours/Week				Hours Per Week	Credits	Examination		
					Lecture	Tutorial	Practical	Project					
					L	T	P	J			CIA	SEA	Total
1	PCC	24CSE161	System Software and Compiler Design	CSE	2	2	-	-	4	3	50	50	100
2	PCI-P	24CSE162	Cryptography and Cyber Security	CSE	3	-	2	-	5	4	50	50	100
3	PCI-C	24CSE163	Gen AI & Prompt Engineering	CSE	2	-	2	-	4	3	50	50	100
4	PBL	24CSE164	Data Science	CSE	1	-	-	2	3	2	50	50	100
5	PEC	24CSE165X	Professional Elective - I	CSE	2	2	-	-	4	3	50	50	100
6	PEC	24CSE166X	Professional Elective - II	CSE	2	-	2	-	4	3	50	50	100
7	PCC	24CSE167X	Open Elective - II	CSE	3	-	-	-	3	3	50	50	100
8	AEC	24CSE168	Employability Skills – I [Technical]	T&P	-	-	2	-	2	1	100	-	100
			Total		15	4	8	2	29	22	450	350	800

Open Elective – II			
24CSE1671	Storage Area Networks	24CSE1672	Computer Graphics & Visualization
24CSE1673	Modern Web Development and UI/UX Design	24CSE1674	Machine Learning
24CSE1675	Technology and Transformation		

Professional Elective – 1			
24CSE1651	Introduction to AI	24CSE1652	Information and Network Security
24CSE1653	Data Warehousing and Data Mining [Data Lake House]	24CSE1654	No Sql Database
24CSE1655	Cryptography and Hash Integrity Protection	24CSE1656	Advanced Computer Architecture

Professional Elective – II			
24CSE1661	Digital Image Processing	24CSE1662	Reverse Engineering & Malware Analysis
24CSE1663	DevOps	24CSE1664	Augmented Reality & Virtual Reality
24CSE1665	Cyber Security & Digital Forensics	24CSE1666	High Performance & Computer Architecture

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Department of Computer Science and Engineering
VII Semester
Scheme of Teaching 2024 – 28 Batch

Sl. No.	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours/Week				Hours Per Week	Credits	Examination		
					Lecture	Tutorial	Practical	Project			CIA	SEA	Total
					L	T	P	J					
1	PCI-P	24CSE171	Robotic Process Automation	CSE	2	-	2	-	4	3	50	50	100
2	PEC	24CSE172X	Professional Elective III	CSE	2	-	2	-	4	3	50	50	100
3	PEC	24CSE173X	Professional Elective IV	CSE	3	-	-	-	3	3	50	50	100
4	AEC	24CSE174	Research Methodology and Intellectual Property Rights	CSE	2	1	-	-	3	2	50	50	100
5	PW	24CSE175	Project Work Phase - I	CSE	-	-	-	8	8	4	100	-	100
			Total		9	1	4	8	22	15	300	200	500

Professional Elective – III			
24CSE1721	Deep Learning	24CSE1722	Storage Area Networks
24CSE1723	Agentic AI	24CSE1724	Advanced in Web Technologies
24CSE1725	Block Chain Technology	24CSE1726	Quantum Computing
Professional Elective – IV			
24CSE1731	Algorithmic Game Theory	24CSE1732	Foundation of Cloud IoT Edge ML
24CSE1733	Process Mining	24CSE1734	User Interface Design
24CSE1735	Ethical Hacking	24CSE1736	Understanding Incubation and Entrepreneurship

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Department of Computer Science and Engineering
VIII Semester
Scheme of Teaching 2024 – 28 Batch

Sl. No.	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours/Week				Hours Per Week	Credits	Examination		
					Lecture	Tutorial	Practical	Project					
					L	T	P	J			CIA	SEA	Total
1	PEC	24CSE181X	Professional Elective V	CSE	3	-	-	-	3	3	50	50	100
2	INT	24CSE182	Internship	CSE	-	-	8	-	8	4	50	50	100
3	PW	24CSE183	Project Work Phase - II	CSE	-	-	-	20	20	10	50	50	100
Total					3	-	8	20	31	17	150	150	300

Professional Elective – V			
24CSE1811	Learning Deep Architectures for AI	24CSE1812	Edge Computing
24CSE1813	Business Intelligence & Analysis	24CSE1814	Mobile App Development (Flutter/Kotlin)
24CSE1815	Privacy and Security in Online Social Media	24CSE1816	Parallel Computing System

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