BNM Institute of Technology

An Autonomous Institution under VTU
For Internal Communication
Department of Computer Science & Engineering
III SEMESTER
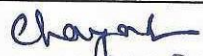Scheme of Teaching for 2023-27 Batch

Sl. No	Course and Course Code		Course Title	Teaching Department	Teaching Hours /Week				Hours Per week	Credits	Examination		
					Theory Lecture	Tutorial	Practical	Project					
					L	T	P	J			CIA	SEA	Total
1	BSC	23MAC131	FourierTransforms,Fundamentals of Logic and Linear Algebra	Mathematics	2	2	-	-	4	3	50	50	100
2	PCC	23CSE132	Logic Design and Computer Organization	CSE	3	-	-	-	3	3	50	50	100
3	PCC	23CSE133	Operating System	CSE	2	1	1	-	4	3	50	50	100
4	PCI	23CSE134	Data Structures and Applications using C	CSE	3	-	2	-	5	4	50	50	100
5	PCI	23CSE135	Introduction to Artificial Intelligence and Machine Learning	CSE	3	-	2	-	5	4	50	50	100
6	PBL	23CSE136	Object Oriented Programming using Java	CSE	-	-	2	2	4	2	50	50	100
7	IPL	23CSE137	Innovative Project Lab [IPL]	CSE	-	-	2	-	2	1	100		100
8	AEC	23SFT138	Soft Skill -1	HSS	-	-	2	-	2	1	100		100
	TOTAL				13	3	11	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.

BSC-->Basic Science	MAT-->Mathematics	PCC--> Professional Core course	PCCI--> Professional Core Integrated
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Bangalore - 560 070

Additional Director & Principal
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B.N.M. Institute of Technology

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For Internal Communication

Department of Computer Science & Engineering

IV SEMESTER

Scheme of Teaching for 2023-27 Batch

Sl. No	Course and Course Code		Course Title	Teaching Department	Teaching Hours /Week				Hours Per week	Credits	Examination		
					Theory Lecture	Tutorial	Practical	Project					
					L	T	P	J			CIA	SEA	Total
1	BSC	23MAC141	Statistics, Probability and Graph Theory	Mathematics	2	2	-	-	4	3	50	50	100
2	PCC	23CSE142	Microcontroller and Embedded Systems	CSE	2	1	1	-	4	3	50	50	100
3	PCI	23CSE143	Database Management System	CSE	3	-	2		5	4	50	50	100
4	PCI	23CSE144	Design and Analysis of Algorithms	CSE	3	-	2	-	5	4	50	50	100
5	PBL	23CSE145	Introduction to AR and VR	CSE	-	-	2	2	4	2	50	50	100
6	PBL	23CSE146	Advanced IOT	CSE	-	-	2	2	4	2	50	50	100
7	HSS	23CIP147	CIPE	HSS	-	2	-	-	2	1	100		100
8	AEC	23SFT148	Soft Skill-2	HSS	-	-	2	-	2	1	100		100
9	INT	23CSE149	Internship-1/IPL	CSE	-	-	2	2	4	2	100	-	100
	TOTAL				10	5	13	6	34	22	600	300	900

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Internship: All the students registered to III year of BE shall have to undergo mandatory internship of 4 weeks during II semester or III semester vacation. Semester End Assessment will be conducted in IV semester and the prescribed credit will be included. Internship shall be considered as a head of passing and shall be considered for the award of degree.

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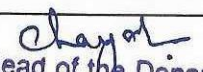## An Autonomous Institution under VTU
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Department of Computer Science & Engineering
V SEMESTER
Scheme of Teaching for 2023-27 Batch

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

Open Elective - 1

23CSE1561	Data Structures and its Application	23CSE1563	Mobile Application Development
23CSE1562	Java and its Applications	23CSE1564	Data Analytics
23CSE1565	Efficient Algorithm and Data Structures using Java		

Internship-2 (21CSE158)- All the students registered to III year of BE shall have to undergo mandatory internship of 4 weeks during IV semester vacation. Semester End Assessment will be conducted in V semester and the prescribed credit will be included. Internship shall be considered as a head of passing and shall be considered for the award of degree.

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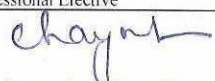An Autonomous Institution under VTU

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Department of Computer Science & Engineering

VI SEMESTER

Scheme of Teaching for 2023-27 Batch

Sl. No	Course and Course code		Course Title	Teaching Department	Theory Lecture	Tutorial	Practical	Project	Hours Per week	Credits	Examination		
					L	T	P	J	week		CIA	SEA	Total
1	PCC	23CSE161	System Software and Compiler Design	CSE	2	2	-	-	4	3	50	50	100
2	PCI	23CSE162	Cryptography and Cyber security	CSE	3	-	2	-	5	4	50	50	100
3	PCI	23CSE163	Gen AI & Prompt Engineering	CSE	2	-	2	-	4	3	50	50	100
4	PBL	23CSE164	Data Science	CSE	1	-	-	2	3	2	50	50	100
5	PEC	23CSE165X	Professional Elective-1	CSE	2	1	1	-	4	3	50	50	100
6	PEC	23CSE166X	Professional Elective -2	CSE	2	-	2	-	4	3	50	50	100
7	OEC	23CSE167X	Open Elective-2	CSE	3	-	-	-	3	3	50	50	100
8	AEC	23CSE168	Employability Skills -2(Technical)	T&P	-	-	2	-	2	1	100	-	100
			TOTAL		15	3	9	2	29	22	450	350	800

Open Elective – 2

23CSE1671	Computer Graphics and Visualization	23CSE1673	Storage Area Network
23CSE1672	Operating Systems and RTOS	23CSE1674	Modern Web Development and UI_UX
23CSE1675	Technology and Transformation		

Professional Elective - 1

23CSE1651	Advanced AI	23CSE1652	Information and Network Security
23CSE1653	Data Ware housing and Data Mining	23CSE1654	No Sql Database
23CSE1655	Cryptographic Hash and Integrity Protection	23CSE1656	Advanced computer architecture

Professional Elective - 2

23CSE1661	Digital Image Processing	23CSE1662	Reverse Engieering & Malware Analysis
23CSE1663	DevOps	23CSE1664	Mobile Application Development
23CSE1665	Cyber Security and Digital forensics	23CSE1666	High performance Computer Architecture

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VII SEMESTER
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Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week				Hours Per Week	Credits	Examination		
					Theory Lecture	Tutorial	Practical	Project					
					L	T	P	J			CIA	SEA	Total
1	PCI	23CSE171	Robotic Process Automation	CSE	2	-	2	-	4	3	50	50	100
2	PEC	23CSE172X	Professional Elective-3	CSE	3	-	-	-	3	3	50	50	100
3	PEC	23CSE173X	Professional Elective-4 (MOOC)	CSE	3	-	-	-	3	3	50	50	100
4	AEC	23CSE174	Research Methodology & IPR	CSE	2	1	-	-	3	2	50	50	100
5	PW	23CSE175	Project Work Phase – 1	CSE	-	-	-	8	8	4	100	-	100
	TOTAL				10	1	2	8	21	15	300	200	500

Professional Elective - 3

23CSE1721	Deep Learning	23CSE1724	Storage Area Networks
23CSE1722	Agentic AI	23CSE1725	Advanced Web Technologies
23CSE1723	Block Chain Technology	23CSE1726	Quantum Computing

Professional Elective-4 (MOOC)

23CSE1731	Algorithmic Game Theory	23CSE1734	Ethical Hacking
23CSE1732	User Interface Design	23CSE1735	Process Mining
23CSE1733	Foundation for cloud IOT Edge ML	23CSE1736	Understanding Incubation and Entrepreneurship

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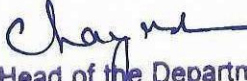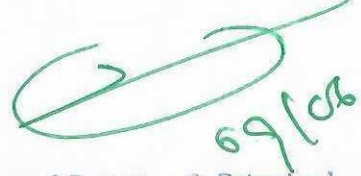Department of Computer Science & Engineering

VIII SEMESTER

Scheme of Teaching for 2023-27 Batch

Sl. No	Course and Course code		Course Title	Teaching Department	Contact Hours /Week					Credits	Examination		
					Theory Lecture	Tutorial	Practical	Project	Hours Per Week				
					L	T	P	J			CIA	SEA	Total
1	PEC	23CSE181X	Professional Elective - 5	CSE	3	-	-	-	3	03	50	50	100
2	INT	23CSE182	Internship-3	CSE	-	-	8	-	8	04	50	50	100
3	PW	23CSE183	Project Work Phase-2	CSE	-	-	-	20	20	10	50	50	100
			TOTAL		03	-	8	20	31	17	150	150	300

Professional Elective - 5 (Mooc)			
23CSE1811	Learning Deep Architectures for AI	23CSE1814	Privacy and security in online social media
23CSE1812	Mobile App Development	23CSE1815	Business Intelligence and Analysis
23CSE1813	Edge Computing	23CSE1816	Parallel Computing System

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