

BNM Institute of Technology

An Autonomous Institution under VTU

For Internal Communication

Department of Computer Science & Engineering

III SEMESTER


Scheme of Teaching for 2022-26 Batch


Sl. No	Course and Course Code		Course Title	Teaching Department	Teaching Hours /Week				Hours Per week	Credits	Examination		
					Theory Lecture	Tutorial	Practical	Project			CIA	SEA	Total
					L	T	P	J					
1	BSC	22MAT131	Fourier Transforms, Fundamentals of Logic and Linear Algebra	Mathematics	2	2	-	-	4	3	50	50	100
2	PCC	22CSE132	Computer Organization	CSE	3	-	-	-	3	3	50	50	100
3	PCC	22CSE133	Operating System	CSE	2	1	1	-	4	3	50	50	100
4	PCI	22CSE134	Data Structures and Applications	CSE	3	-	2	-	5	4	50	50	100
5	PCI	22CSE135	Logic Design and applications	CSE	3	-	2	-	5	4	50	50	100
6	PBL	22CSE136	Object Oriented Programming using Java	CSE	-	-	2	2	4	2	50	50	100
7	IPL	22CSE137	Innovative Project Lab [IPL] (Social Concern)	CSE	-	-	2	-	2	1	100		100
8	AEC	22SFT138	Soft Skill -I	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
PBL--> Project based learning	HUM--> Humanity and Social Science	UHV--> Universal Human Values	AEC--> Ability Enhancement course
PW--> Project Work	PEC--> Professional Elective	INT--> Internship	PEC--> Professional Elective
OEC-->Open Elective			


 Head of the Department
 Dept. of Computer Science & Engineering
 BNM Institute of Technology
 Bangalore - 560 070


 Additional Director & Principal
 BNM Institute of Technology
 Bangalore-560 070

B.N.M. Institute of Technology

An Autonomous Institution under VTU

For Internal Communication

Department of Computer Science & Engineering

IV SEMESTER

Scheme of Teaching for 2022-26 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	22MAT141	Statistics, Probability and Graph Theory	Mathematics	2	2	-	-	4	3	50	50	100
2	PCC	22CSE142	Microcontroller and Embedded Systems	CSE	2	1	1	-	4	3	50	50	100
3	PCI	22CSE143	Database Management System	CSE	3	-	1	1	5	4	50	50	100
4	PCI	22CSE144	Design and Analysis of Algorithms	CSE	3	-	2	-	5	4	50	50	100
5	PBL	22CSE145	Python Programming and applications	CSE	-	-	2	2	4	2	50	50	100
6	PBL	22CSE146	Web Technologies and its Application	CSE	-	-	2	2	4	2	50	50	100
7	HSS	22CIP147	Constitution of India and professional Ethics[CIPe]	HSS	-	2	-	-	2	1	100		100
8	AEC	22SFT148	Soft Skill-2	HSS	-	2	-	-	2	1	100		100
9	INT	22CSE149	Internship-1/IPL	CSE	-	-	2	2	4	2	100	-	100
TOTAL					10	7	10	7	34	22	600	300	900

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.

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.

Head of the Department
 Dept. of Computer Science & Engineering
 B.N.M. Institute of Technology
 Bangalore - 560 070

Additional Director & Principal
 BNM Institute of Technology
 Bangalore-560 070

B.N.M. Institute of Technology

An Autonomous Institution under VTU

For Internal Communication

Department of Computer Science & Engineering

V SEMESTER

Scheme of Teaching for 2022-26 Batch

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week				Hours Per week	Credits	Examination		
					Theory Lecture	Tutorial	Practical	Project			CIA	SEA	Total
					L	T	P	J					
1	PCC	22CSE151	Software Project Management and Finance	CSE	2	2	-	-	4	3	50	50	100
2	PCC	22CSE152	Automata Theory and Computation	CSE	2	2	-	-	4	3	50	50	100
3	PCI	22CSE153	Computer Networks	CSE	3	-	2	-	5	4	50	50	100
4	PCI	22CSE154	Computer Graphics and Visualization	CSE	3	-	2	-	5	4	50	50	100
5	PBL	22CSE155	Data Science	CSE	-	-	2	2	4	2	50	50	100
6	OEC	22CSE156X	Open Elective -1	CSE	2	-	2	-	4	3	50	50	100
7	AEC	22CSE157	Employability Skills-1(Technical)	T&P	-	2	-	-	2	1	100	-	100
8	INT	22CSE158	Internship-2	CSE	-	-	2	2	4	2	100	-	100
TOTAL					12	6	10	4	32	22	500	300	800

Open Elective - 1			
22CSE1561	Data Structures and its Application	22CSE1563	Mobile Application Development
22CSE1562	Java and its Applications	22CSE1564	Data Analytics

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.

CIE: Continuous Internal Evaluation, SEE: Semester End Examination, NCMC: Non Credit Mandatory Course

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
PBL--> Project based learning	HUM--> Humanity and Social Science	UHV--> Universal Human Values	AEC--> Ability Enhancement course
PW--> Project Work	PEC--> Professional Elective	INT--> Internship	PEC--> Professional Elective
OEC-->Open Elective			

Signature
Head of the Department
Dept. of Computer Science & Engineering
B.N.M. Institute of Technology
Bangalore - 560 070

Signature
Additional Director & Principal
BNM Institute of Technology
Bangalore-560 070

B.N.M. Institute of Technology

An Autonomous Institution under VTU

For Internal Communication

Department of Computer Science & Engineering

VI SEMESTER

Scheme of Teaching for 2022-26 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	22CSE161	System Software and Compiler Design	CSE	2	2	-	-	4	3	50	50	100
2	PCI	22CSE162	Artificial Intelligence and Machine Learning	CSE	3	-	2	-	5	4	50	50	100
3	PCI	22CSE163	Cryptography and Cyber security	CSE	3	-	2	-	5	4	50	50	100
4	PCI	22CSE164	Gen AI	CSE	2	-	2	-	4	3	50	50	100
5	PEC	22CSE165X	Professional Elective-1	CSE	2	-	2	-	4	3	50	50	100
6	PEC	22CSE166X	Professional Elective -2	CSE	-	-	2	2	4	2	50	50	100
7	OEC	22CSE167X	Open Elective-2	CSE	3	-	-	-	3	3	50	50	100
8	AEC	22CSE168	Employability Skills -2(Technical)	T&P	-	-	2	-	2	1	100	-	100
TOTAL					15	2	12	2	31	23	450	350	800

Open Elective - 2			
22CSE1671	Computer Graphics and Visualization	22CSE1673	Storage Area Network
22CSE1672	Operating Systems and RTOS	22CSE1674	Information and Network Security
		22CSE1675	Technology and Transformation
Professional Elective - 1			
22CSE1651	Digital Image Processing	22CSE1654	Advanced Java Programming
22CSE1652	Wireless Sensor Networks	22CSE1655	Cryptography Hash and Integrity Protection
22CSE1653	Data Warehousing and Data Mining	22CSE1656	High Performance Computing in Cloud
Professional Elective - 2			
22CSE1661	Computer Vision: Algorithms and Application	22CSE1664	Cloud Computing
22CSE1662	Mobile Adhoc Networks	22CSE1665	Cyber Security and Digital Forensics
22CSE1663	DevOps	22CSE1666	High Performance Computer Architecture and Parallel Computing

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

BSC-->Basic Science	MAT-->Mathematics	PCC--> Professional Core course	PCCI--> Professional Core Integrated
PBL--> Project based learning	HUM--> Humanity and Social Science	UNV--> Universal Human Values	AEC--> Ability Enhancement course
PW--> Project Work	PEC--> Professional Elective	INT--> Internship	PEC--> Professional Elective

Chayra
Head of the Dept. of Computer Science & Engineering,
B.N.M. Institute of Technology
Bangalore - 560 070

Additional Director & Principal
BNM Institute of Technology
Bangalore - 560 070

B.N.M. Institute of Technology

An Autonomous Institution under VTU

For Internal Communication

Department of Computer Science & Engineering

VII SEMESTER

Scheme of Teaching for 2022-26 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	PCI	22CSE171	Robotic Process Automation	CSE	2	-	2	-	4	3	50	50	100
2	PEC	22CSE172X	Professional Elective-3	CSE	2	-	2	-	4	3	50	50	100
3	PEC	22CSE173X	Professional Elective-4 (MOOC)	CSE	3	-	-	-	3	3	50	50	100
4	AEC	22CSE174	Research Methodology & IPR	CSE	2	1	-	-	3	2	50	50	100
5	PW	22CSE175	Project Work Phase – 1	CSE	-	-	-	8	8	4	100	-	100
TOTAL					9	1	04	08	22	15	300	200	500

Professional Elective - 3			
22CSE1721	Big Data Analytics	22CSE1724	Mobile Application Development
22CSE1722	Natural Language Processing	22CSE1725	Prompt Engineering
22CSE1723	Blockchain Technology	22CSE1726	Reinforcement Learning

Professional Elective - 4			
22CSE1731	Computer Architecture	22CSE1734	Machine Learning for Earth Systems
22CSE1732	Distributed Systems	22CSE1735	Design and Implementation of Human Computer Interface
22CSE1733	Ethical Hacking	22CSE1736	Artificial Intelligence for Economics

Chayne
Head of the Department,
Dept. of Computer Science & Engineering,
B.N.M. Institute of Technology
Bangalore - 560 070

(Signature)
Additional Director & Principal
B.N.M. Institute of Technology
Bangalore - 560 070

(Signature)
(B.N.M.)

B.N.M. Institute of Technology

An Autonomous Institution under VTU

For Internal Communication

Department of Computer Science & Engineering

VIII SEMESTER

Scheme of Teaching for 2022-26 Batch

Sl. No	Course and Course code		Course Title	Teaching Department	Contact Hours /Week					Credits	Examination		
					Theory Lecture	Tutorial	Practical	Project	Hours Per Week		CIA	SEA	Total
					L	T	P	J					
1	PEC	22CSE181X	Professional Elective - 5	CSE	3	-	-	-	3	03	50	50	100
2	INT	22CSE182	Internship-3	CSE	-	-	8	-	8	04	50	50	100
3	PW	22CSE183	Project Work Phase-2	CSE	-	-	-	20	20	10	50	50	100
TOTAL					03	-	8	20	31	17	150	150	300

Professional Elective - 5 (PCC)			
22CSE1811	Advanced Computer Architecture	22CSE1814	Games and Information
22CSE1812	Privacy and Security in Online Social Media	22CSE1815	Business Intelligence and Analysis
22CSE1813	Parallel Computer Architecture	22CSE1816	NPTEL- CSE Offered courses relating to our scheme

Chayan
Head of the Department
Dept. of Computer Science & Engineering
B.N.M. Institute of Technology
Bangalore - 560 070

09/02
Additional Director & Principal
BNM Institute of Technology
Bangalore-560 070

dm
(Dr. An)