

Maulana Azad National Institute of Technology, Bhopal – 462003
Computer Science and Engineering Department

M Tech in Computer Networking

SCHEME OF STUDY (wef July 2021)

First Semester:

Course No.	Subject	Schemes of studies periods per week			Total Credits
		L	T	P	
CN 511	Mathematical Foundations of Computer Networks	3	-	-	3
CN 512	Computer & Network Security	3	-	-	3
CN 513	TCP/IP	3	-	-	3
CN 514	Wireless Networking	3	-	-	3
HUM 511	Communication Skills	2	-	-	2
	Elective-1 (A)	3	-	-	3
	Elective-2 (B)	3	-	-	3
CN 515	Lab-I	-	-	2	1
CN 516	Seminar-I	-	-	2	1
Total Hours: 24 Total Credits: 22		Total Semester Credits			22

Second Semester:

Course No.	Subject	Schemes of studies periods per week			Total Credits
		L	T	P	
CN 521	Network Devices & Programming	3	-	-	3
CN 522	Stochastic Process & Queuing Theory	3	-	-	3
CN 523	Graph Theory & Network Algorithms	3	-	-	3
	Elective-3 (A)	3	-	-	3
	Elective-4 (A)	3	-	-	3
	Elective-5 (C)	3	-	-	3
MTH 524	Research Methodology	1	1	-	2
CN 525	Lab-II	-	-	2	1
CN 526	Seminar-II	-	-	2	1
Total Hours: 24 Total Credits: 44		Total Semester Credits			22

Maulana Azad National Institute of Technology, Bhopal – 462003
Computer Science and Engineering Department

M Tech in Computer Networking

Third Semester:

Course No.	Subject	Schemes of studies periods per week			Total Credits
		L	T	P	
CN 611	Dissertation Phase - I	-	-	32	16
Total Hours: 32 Total Credits: 60		Total Semester Credits			16

Fourth Semester:

Course No.	Subject	Schemes of studies periods per week			Total Credits
		L	T	P	
CN 621	Dissertation Phase - II	-	-	40	20
Total Hours: 40 Total Credits: 80		Total Semester Credits			20

Maulana Azad National Institute of Technology, Bhopal – 462003
Computer Science and Engineering Department

M Tech in Computer Networking

List of Program Electives A		List of Open Electives C	
CN 551	Internet of Things (IoT)	ARP - 581	Introduction to Urban Planning
CN 552	Cloud Computing	BSE – 581	Bioprocess Engineering
CN 553	Ad hoc & Sensor Networks	BSE – 582	Biophysics Tools and Techniques
CN 554	Mobile Computing	CHE – 581	Analytical Techniques
CN 555	Information Theory and Coding	CHE – 582	Green Technology & Processes
CN 556	Network Analysis and Design	CE – 581	Solid Waste Management
CN 557	Organization of Web information	CE – 582	Basic Concept of GIS
CN 558	Network Science and Modeling	CE – 583	Road Safety
CN 559	Storage Area Networks	PHY – 581	Nanotechnology and Nanoscience
CN 560	Next Generation Networks	EE – 581	Electric Machines & Applications
CN 561	Software Defined Networking and Network Function Virtualization	EE – 582	Control and Instrumentation
		ECE – 581	Introduction to Fuzzy Logic
		ECE – 582	Neural Networks and its Applications
List of Departmental Electives B		EC - 581	Energy Resource Technologies
IS 513	Cybercrime & Information Warfare	HUM – 581	Intellectual Property Rights for Engineers
AC 512	Advanced Data Structures	HUM – 582	Applied Psychology: Human Centered Design and Engineering
AI 513	Machine Learning	MTH – 581	Advanced Operations Research
AI 514	Soft Computing	MTH – 582	Computing Technologies
AI 552	Reinforcement Learning	ME – 581	Value Engineering
AC 553	Web Search & Information Retrieval	ME – 582	Design Thinking
		ME - 583	Mechatronics and NDT in Engineering
		MME – 581	Advanced Instrumentation Methods for Material Analysis
		MME – 582	Smart Materials and their Application
		MBA-581	Engineering Startup Management