

M Tech in Digital Communication

SCHEME OF STUDY (wef July 2021)

First Semester:

Course No.	Subject	Scheme of studies periods per week			Total Credits
		L	T	P	
MTH 513	Computational Techniques	3	-	-	3
DC 511	Digital Signal Processing & It's Applications	3	-	-	3
DC 512	Digital Communication Techniques	3	-	-	3
DC 513	Micro strip Antenna Design	3	-	-	3
HUM 511	Communication Skills	2	-	-	2
	Elective-1 (A)	3	-	-	3
	Elective-2 (B)	3	-	-	3
DC 514	Lab-I (Communication System Design Lab-I)	-	-	2	1
DC 515	Seminar-I	-		2	1
Total Hours: 24 Total Credits: 22		Total Semester Credits			22

Second Semester:

Course No.	Subject	Scheme of studies periods per week			Total Credits
		L	T	P	
DC 521	Detection and Estimation Theory	3	-	-	3
DC 522	Optical Communication	3	-	-	3
DC 523	Digital Image Processing	3	-	-	3
	Elective-3 (A)	3	-	-	3
	Elective-4 (A)	3	-	-	3
	Elective-5 (C)	3	-	-	3
MTH 524	Research Methodology	1	1	-	2
DC 525	Laboratory – II (Communication System Design Lab-II)	-	-	2	1
DC 526	Seminar-II	-	-	2	1
Total Hours: 24 Total Credits: 44		Total Semester Credits			22

Maulana Azad National Institute of Technology, Bhopal – 462003
Electronics and Communication Engineering Department

M Tech in Digital Communication

Third Semester:

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

Fourth Semester:

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

Maulana Azad National Institute of Technology, Bhopal – 462003
Electronics and Communication Engineering Department

M Tech in Digital Communication

List of Program Electives A		List of Open Electives C	
DC 551	Signal Theory	ARP - 581	Introduction to Urban Planning
DC 552	Mobile Communication	BSE – 581	Bioprocess Engineering
DC 553	Optical Networks	BSE – 582	Biophysics Tools and Techniques
DC 554	Video Signal Processing	CHE – 581	Analytical Techniques
DC 555	Statistical Signal processing	CHE – 582	Green Technology & Processes
DC 556	Satellite Communication	CE – 581	Solid Waste Management
DC 557	Modern Telecom Switching Systems	CE – 582	Basic Concept of GIS
DC 558	Data Compression & Cryptography	CE – 583	Road Safety
DC 559	Wireless Communication	CSE – 581	Machine Learning
DC 560	Microwave Communication	CSE – 582	Advanced Data Structures and Algorithms
DC 561	Computer vision and pattern recognition	PHY – 581	Nanotechnology and Nanoscience
DC 562	Communication Networks	EE – 581	Electric Machines & Applications
DC 563	Information Theory and Coding	EE – 582	Control and Instrumentation
DC 564	Multi rate Signal Processing	EC - 581	Energy Resource Technologies
DC 565	Optimization Techniques	HUM – 581	Intellectual Property Rights for Engineers
DC 566	Fuzzy Logic	HUM – 582	Applied Psychology: Human Centered Design and Engineering
DC 567	Neural Networks	MTH – 581	Advanced Operations Research
DC 568	Queuing Theory	MTH – 582	Computing Technologies
DC 569	Biomedical Signal Processing	ME – 581	Value Engineering
List of Departmental Electives B		ME – 582	Design Thinking
VE 511	VLSI Design	ME - 583	Mechatronics and NDT in Engineering
VE 512	Computer Aided Design of Digital Systems	MME – 581	Advanced Instrumentation methods for Material Analysis
VE 513	Embedded Systems	MME – 582	Smart Materials and their application
VE 551	Digital System Design	MBA-581	Engineering Startup Management
VE 552	Mixed Signal Design		
VE 553	Design for Testability		
VE 554	Design of Semiconductor Memories		
VE 555	CMOS Active Filter Design		
VE 556	Design of Analog IC		
VE 557	CMOS RF Circuit Design		
VE 558	Device Modeling and Simulation		
VE 559	Physical Design Automation		
VE 560	High Speed System Design		
VE 566	Operation Research		
VE 567	Wavelet Transforms		