



**MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY BHOPAL – 462003**

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**M.Tech. Information Security Part Time**

**Proposed Scheme**

**First Semester:**

Subject Code	Subject	Periods Per Week			Total Credits
		L	T	P	
PIS24 511	Cryptography	3	-	-	3
PIS24 512	Computer & Network Security	3	-	-	3
	Department Elective-1	3	-	-	3
PIS24 513	Lab-1(based on Core Subjects)	-	-	2	1
PIS24 514	Seminar-I	-	-	2	1
PIS24 515	Minor Project- I (Self Learning)	-	-	-	2
	Communication Skills/ Research Methodology (from NPTEL)	-	-	-	0
Total Hours:13 Total Credits:13		Total Semester Credits			13

**Second Semester:**

Subject Code	Subject	Periods Per Week			Total Credits
		L	T	P	
PIS24 521	Privacy and Database Security	3	-	-	3
PIS24 522	Digital Forensics	3	-	-	3
	Department Elective-2	3	-	-	3
PIS24 523	Lab-II (based on Core Subjects)	-	-	2	1
PIS24 524	Seminar-2	-	-	2	1
PIS24 525	Minor Project- II (Self Learning)	-	-	-	2
	Communication Skills/ Research Methodology (from NPTEL)	-	-	-	0
Total Hours:13 Total Credits:13		Total Semester Credits			13



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### Third Semester:

Subject Code	Subject	Periods Per Week			Total Credits
		L	T	P	
PIS24 611	Malware Analysis & Reverse Engineering	3	-	-	3
	Department Elective-3	3	-	-	3
PIS24 612	Lab-III (based on Core Subject or Elective)	-	-	2	1
PIS24 613	Pre-Dissertation Phase-I	-	-	12	6
TotalHours:20 TotalCredits:13		Total Semester Credits			13

### Fourth Semester:

Subject Code	Subject	Periods Per Week			Total Credits
		L	T	P	
PIS24 621	Department Elective-4	3	-	-	3
	Open Elective	3	-	-	3
PIS24 622	Lab –IV (Based on Elective Subjects)	-	-	2	1
PIS24 623	Pre-Dissertation Phase-II	-	-	12	6
Total Hours:20 TotalCredits:13		Total Semester Credits			13



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## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

### Fifth Semester:

Subject Code	Subject	Scheme of studies periods per week			Total Credits
		L	T	P	
PIS24 711	Dissertation Phase-I	-	-	28	14
Total Hours:28 Total Credits:14		Total Semester Credits			14

### Sixth Semester:

Subject Code	Subject	Periods Per Week			Total Credits
		L	T	P	
PIS24 721	Dissertation Phase-II	-	-	28	14
Total Hours:28 Total Credits:14		Total Semester Credits			14
Total Credits I, II, III, IV, V, VI Semester					80



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## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

List of Department Elective		List of Open Elective	
PIS24 551	Advanced Data Structure	ARP24 581	Introduction to Urban Planning
PIS24 552	Machine Learning	BSE24 581	Bioprocess Engineering
PIS24 553	Wireless Networking	BSE24 582	Biophysics Tool and Engineering
PIS24 554	Statistical Methods	CHE24 581	Analytical Techniques
PIS24 555	Soft Computing	CHE24 582	Green Technology and Processes
PIS24 556	Architecture of Large Systems	CE24 581	Solid Waste Management
PIS24 557	Quantum Computing	CE24 582	Basic Concept of GIS
PIS24 565	Deep Learning	CE24 583	Road Safety
PIS24 566	Parallel Algorithms	PHY24 581	Nanotechnology and Nanoscience
PIS24 567	Graph Theory & Network Algorithms	EE24 581	Electric Machines and Applications
PIS24 568	High Performance Computing	EE24 582	Control and Instrumentation
PIS24 569	Computer Vision	ECE24 581	Introduction to Fuzzy Logic
PIS24 570	Stochastic Process and queuing Theory	ECE24 582	Neural Networks and Applications
PIS24 558	Cybercrime & Information Warfare	EC24 581	Energy Resource Technologies
PIS24 559	Research Methodology	HUM24 581	Intellectual Property Rights for Engineers
PIS24 560	Ethical Hacking	HUM24 582	Applied Psychology: Human Centered Design and Engineering
PIS24 561	Web Search and Information Retrieval	MTH24 581	Advanced Operations Research
PIS24 562	Information Risk Management and Compliance	MTH24 582	Computing Technologies
PIS24 563	Internet Security, Tools and Techniques	ME24 581	Value Engineering
PIS24 564	Biometric	ME24 582	Design thinking
PIS24 571	Natural Language Processing	ME24 583	Mechatronics and NDT Engineering
PIS24 572	Internet of Things	MME24 581	Advanced Instrumentation Methods for Material Analysis
PIS24 573	Steganography & Digital Watermarking	MME24 582	Smart Materials and Their Applications
PIS24 574	Penetration Testing and Vulnerability Analysis	MBA24 581	Engineering Startup Management
PIS24 575	Security Threats & Modelling		
PIS24 576	Intellectual Property and Espionage		
PIS24 577	Security Operations and Incidence Response		