



Post Graduates Schema (For batch 2025 onwards)



**M. Tech. (Computer Science and Engineering)
M. Tech. (Information and Cyber Security)
(Department of Computer Science and Engineering)**

**M. Tech. (Information Technology)
M. Tech. (Wireless Networks and Computing)
(Department of Information Technology)**

**M. Tech. (IC Design and Technology)
M. Tech. (Autonomous Systems and Machine Intelligence)
(Department of Electrical and Electronics Engineering)**

**M.S. (Artificial Intelligence and Data Science)
(Department of Engineering Science)**

**Master of Business Administration
(Department of Management Studies)**

Dual Degree (M.Tech. and PhD)

**ATAL BIHARI VAJPAYEE-
INDIAN INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT,
GWALIOR (MADHYA PRADESH)
(AN INSTITUTE OF NATIONAL IMPORTANCE, MINISTRY OF EDUCATION, GOVT. OF INDIA)**

Schema
M. Tech.
(Computer Science and Engineering)



Department of Computer Science and Engineering



**ABV-Indian Institute of Information
Technology & Management, Gwalior**

SCHEMA

Name of the program: M. Tech. (Computer Science and Engineering)

(Credits: 74)

Name of the Department: Computer Science and Engineering

SEMESTER-I				
S. No.	Subject Code	Title of the course	L-T-P	Credits
1.	CS-701	Machine Learning Techniques	3-0-2	4
2.	CS-702	Cloud Computing	3-0-0	3
3.	CS-703	Advanced Data Structure and Algorithms	3-0-2	4
4.	CS-704	Distributed Systems	3-0-0	3
5.	CS-7XX	Elective-I	3-0-0	3
6.	CS-7XX	Elective-II	3-0-0	3
			Total credits	20

SEMESTER-II				
S. No.	Subject code	Title of the course	L-T-P	Credits
1.	CS-712	Cyber Physical Systems	3-0-0	3
2.	CS-713	Complex Networks	3-0-0	3
3.	CS-714	Nature Inspired Computing	3-0-0	3
4.	CS-715	Engineering Research Methodology	2-1-0	3
5.	CS-7XX	Elective-III	3-0-0	3
6.	CS-7XX	Elective-IV/MOOC	3-0-0	3
			Total credits	18

EXIT AFTER YEAR-1: Post Graduate Diploma in Computer Science and Engineering

SEMESTER-III				
S. No.	Subject code	Title of the course	L-T-P	Credits
1	CS7XX	Elective-V/MOOC	3-0-0	3
2	CS798	M.Tech Dissertation Part - I	0-0-30	15
			Total credits	18

SEMESTER-IV				
S. No.	Subject Code	Title of the course	L-T-P	Credits
1	CS799	M.Tech Dissertation Part – II	0-0-36	18
			Total credits	18

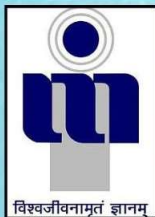
SEMESTER-I	SEMESTER-II	SEMESTER-III	SEMESTER-IV	TOTAL CREDITS
20	18	18	18	74

Electives Courses

Electives Category: Computer Science and Engineering			
S.No.	Subject Codes	Title of Courses	L-T-P
1.	CS-721	Cryptography and Network Security	3-0-0
2.	CS-722	Modern Cryptography	3-0-0
3.	CS-723	Formal Verification of Security Protocols	3-0-0
4.	CS-724	IoT and its security	3-0-0
5.	CS-725	Data Privacy in Social Networks	3-0-0
6.	CS-726	Cyber Forensics: Tools and Techniques	3-0-0
7.	CS-727	Malware Analysis	3-0-0
8.	CS-728	Big Data and Cyber fraud analysis	3-0-0
9.	CS-729	Hardware Security	3-0-0
10.	CS-730	Fault Tolerant Systems	3-0-0
11.	CS-731	Secure System Engineering	3-0-0
12.	CS-732	Blockchain Technology	3-0-0
13.	CS-733	AI and ML Techniques for Cyber Security	3-0-0
14.	CS-734	Natural Language Processing	3-0-0
15.	CS-735	Information Retrieval	3-0-0
16.	CS-736	Recommender Systems	3-0-0
17.	CS-737	Reinforcement Learning	3-0-0
18.	CS-738	Graphical NN	3-0-0
19.	CS-739	Optimization Techniques	3-0-0
20.	CS-740	Meta-Heuristics for Multi-Objective Optimization	3-0-0
21.	CS-741	Distributed Machine Learning	3-0-0
22.	CS-742	Fair, Accountable, Transparent AI	3-0-0
23.	CS-743	Machine Learning System Optimization	3-0-0
24.	CS-744	Computational Biology	3-0-0
25.	CS-745	Pattern Recognition	3-0-0
26.	CS-746	Deep Learning Techniques	3-0-0
27.	CS-747	Cognitive Science	3-0-0

28.	CS-748	Data Mining Techniques	3-0-0
29.	CS-749	Cloud Computing	3-0-0
30.	CS-750	Advanced Software Engineering	3-0-0
31.	CS-751	Machine Learning for Operations (MLOps)	3-0-0
32.	CS-752	Data Science	3-0-0
33.	CS-753	Data Visualization and Explainable Model	3-0-0
34.	CS-754	Time Series Data Analysis	3-0-0
35.	CS-755	Quantum Computing	3-0-0
36.	CS-756	Robotics and Intelligent Systems (Multi-Agents)	3-0-0
37.	CS-757	Big Data Analytics	3-0-0
38.	CS-758	Complexity and Advanced Algorithms	3-0-0
39.	CS-759	Randomized Algorithms	3-0-0
40.	CS-760	Algorithmic Game Theory	3-0-0
41.	CS-761	Computational Learning Theory	3-0-0
42.	CS-762	Biometric Image Processing	3-0-0
43.	CS-763	Perception for Autonomous Systems	3-0-0
44.	CS-764	Computer Vision	3-0-0
45.	CS-765	Remote Sensing and Satellite Image Processing	3-0-0
46.	CS-766	Human-Computer Interaction	3-0-0
47.	CS-767	Medical Imaging	3-0-0
48.	CS-768	Virtual Reality and Augmented Reality	3-0-0
49.	CS-769	Speech Processing	3-0-0
50.	CS-770	Digital Signal Processing	3-0-0
51.	CS-771	Multimedia Systems	3-0-0
52.	CS-772	Digital Watermarking & Steganalysis	3-0-0
53.	CS-773	Video Analytics	3-0-0
54.	CS-774	Visual Saliency and Attention Modelling	3-0-0
55.	CS-775	Modelling and Simulation	3-0-0
56.	CS-776	Optimization Techniques	3-0-0

*Department electives may be added or deleted with the approval of a departmental recommendation by the DoAA.



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