



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.
(Information Technology)



Department of Information Technology



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

SCHEMA

Name of the program: M. Tech. (Information Technology)

(Credits: 70)

Name of the Department: Information Technology

SEMESTER-I				
S. No.	Subject Code	Title of the course	L-T-P	Credits
1.	IT-701	Machine Learning Techniques	3-0-2	4
2.	IT-702	Mathematical Foundations for Data Science	3-0-0	3
3.	IT-703	Advanced Data Structures and Algorithms	3-0-2	4
4.	IT-704 / IT-706	Introduction to Robotics / Natural Language Processing	3-0-0	3
5.	IT-XXX	Elective – I	3-0-0	3
6.	IT-XXX	Elective – II	3-0-0	3
			Total credits	20

SEMESTER-II				
S. No.	Subject code	Title of the course	L-T-P	Credits
1.	IT-712	Deep Learning	3-0-2	4
2.	IT-713	Cyber Physical Systems	3-0-0	3
3.	IT-714 / IT-716	Secure System Design / Social Network Analysis	3-0-0	3
4.	IT-XXX	Elective III	3-0-0	3
5.	IT-XXX	Elective IV/MOOC	0-0-6	3
6.	IT-717	Engineering Research Methodology	2-1-0	3
			Total credits	19

EXIT AFTER YEAR-1: Post Graduate Diploma in Information Technology

SEMESTER-III				
S. No.	Subject code	Title of the course	L-T-P	Credits
1	IT-XXX	Elective V/MOOC	3-0-0	3
2	IT-798	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	IT-799	M.Tech Dissertation Part - II	0-0-36	18
			Total credits	18

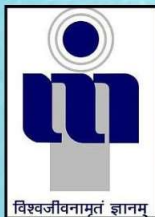
SEMESTER-I	SEMESTER-II	SEMESTER-III	SEMESTER-IV	TOTAL CREDITS
20	19	18	18	75

Electives Courses

S. No.	List of Electives
IT-001	Computer Vision
IT-002	Digital Signal Processing
IT-004	Information Retrieval and Extraction
IT-005	Human Computer Interaction
IT-006	Digital Video Processing
IT-007	Advanced Machine Learning
IT-008	Multimedia Processing
IT-012	Next Generation Networks
IT-013	Queuing Theory
IT-014	Network design and Optimization
IT-015	Advanced Wireless
IT-016	Multimedia Networks
IT-016	Distributed Systems
IT-020	Information Theory and Coding
IT-022	Digital Watermarking and Steganalysis
IT-023	Cryptography and Network Security
IT-024	Distributed System Security
IT-025	Cyber Security and Laws
IT-026	Advanced cryptography
IT-027	Information Security and Secure Coding

IT-028	Malware Analysis
IT-029	Formal methods for Security
IT-030	IoT and its security
IT-031	Blockchain Technologies
IT-032	Convex Optimization
IT-033	Parallel and Concurrent Programming
IT-035	Game Theory
IT-036	Big Data Analytics
IT-040	Nature Inspired computing
IT-038	Program Analysis Verification and Testing
IT-039	Competitive Programming
IT-718	Large Language Models
IT-402	Digital Image Processing
EE-057	Hardware Security
IT-706	Introduction to Natural Language Processing
IT-715	Advanced Natural Language Processing
IT-716	Social Networks Analysis

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



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