माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर (म.प्र.), भारत
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA
Deemed University
(Declared under Distinct Category by Ministry of Education, Government of India)
NAAC ACCREDITED WITH A++ GRADE

DEPARTMENT OF COMPUTER SCIENCE AND DESIGN (CSD)
COURSE STRUCTURE

Admitted Batch: 2025

I SEMESTER	II SEMESTER	III SEMESTER	IV SEMESTER	V SEMESTER	VI SEMESTER	VII SEMESTER	VIII SEMESTER
Introduction to CSD	Computer Graphics & Animation	Probability and Random Process	Artificial Intelligence & Machine Learning	Compiler Design	Soft Computing Techniques	Departmental Elective (DE-3)	Departmental Elective* (DE-5)
Computer Programming	Object oriented Programming & Methodology	Data Structures	Design and Analysis of Algorithms	IoT System Design	Network and Information Security	Departmental Elective* (DE-4)	Open Category Course* (OC-3)
Digital Circuit Design	Computer System and Organization	Software Engineering	Theory of Computation	Data Science	Departmental Elective* (DE-2)	Open Category Course (OC-2)	Industry Internship/ Research Internship/ Innovation & Start-up
Cyber World and Security Concern	Operating Systems	Web Technologies	Data communication and Networks	Departmental Elective* (DE-1)	Open Category Course (OC-1)	Specialization Course (SPC-3)	Professional Development
Linear Algebra	Basic Electrical & Electronics Engineering	Database Management System	Design Pattern	Specialization Course (SPC-1)	Specialization Course (SPC-2)	Creative Problem Solving	**Honours or Minor Degree (Optional)**
Computer Programming Lab	Computer Graphics & Animation Lab	Data Structures Lab	Artificial Intelligence & Machine Learning Lab	IoT System Design Lab	Network and Information Security Lab	**Honours or Minor Degree (Optional)**	
Digital Circuit Design Lab	Object oriented Programming & Methodology Lab	Database Management System Lab	Design and Analysis of Algorithms	Data Science Lab	Augmented & Virtual Reality Lab		
Novel Engaging Course	Electrical & Electronics Engineering Lab	Problem Solving through Python Programming	Competitive Programming	Cornerstone Project	Capstone Project		
Language Lab	Novel Engaging Course	Novel Engaging Course	Novel Engaging Course	Supply Chain Management	Disaster Management		
Micro Project-I	Micro Project-II	Macro Project-I	Macro Project-II	**Honours or Minor Degree (Optional)**	**Honours or Minor Degree (Optional)**		
Universal Human Values & Professional Ethics (UHVPE)	Sustainability & Environmental Science	Cyber Security	Project Management, Economics & Financing				
Skill Internship Program		Skill Internship Program	**Honours or Minor Degree (Optional)**				

Legend:

Color	Category
(Green)	Departmental Core Courses
(Cyan)	Engineering Science Courses
(Magenta)	Basic Science Courses
(Olive)	Mandatory Audit Courses

Note:

1. *Mandatory Workshops in each semester at Department Level (Duration: Two Days)*

Departmental Elective Courses
Software Design and Project Management
Image Processing
Datamining & Warehousing

Open Category Courses
Computer Graphics
Software Engineering
Database Management System
Computer Networks

Specialization Courses Tracks	
Specialization in AI and ML	**Specialization in System Design**
Natural Language Processing	*Microprocessor & Interfacing*
Deep Learning	*Advance Computer Architecture*
Machine Vision	*VLSI Design*
Mobile Robotics	*Embedded system*