

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Department of Information Technology

Course Structure: B. Tech in Internet of Things(IoT)

For batches admitted in Academic Session 2020-21 Onwards

SEMESTER I	SEMESTER II	SEMESTER III	SEMESTER IV	SEMESTER V	SEMESTER VI	SEMESTER VII	SEMESTER VIII
Introduction to Internet of Things (IoT)	Digital Logic Design	Statistics and Random Processes	IoT for Industries	Ethics, Economics, Entrepreneurship & Management	Deep Learning	Departmental Elective-3	Departmental Elective-5 *
Introduction to Computer Programming	Linear Algebra and Matrix Analysis	Data Communication and Computer Networks	Database Management System	Introduction to Human Computer Interaction	Network Security	Departmental Elective-4 *	Open Category-4*
Basic Electrical & Electronics Engineering	Sensor Technology	Impact of IoT & Smart Services on Society	Operating System	Data Mining & Analytics	Departmental Elective-1	Open Category-2	Open Category-5*
Energy, Environment, Ecology & Society	Data Structures	Wireless Sensor Networks & IoT Standards	Cloud Management System	IoT Architecture and Protocols	Departmental Elective-2*	Open Category-3	Internship/Project
Technical Language and Lab	Object Oriented Programming and Methodology	Design & Analysis of Algorithms	Data Sciences in IoT	Artificial Intelligence & Machine Learning	Open Category-1	Intellectual Property Rights (IPR)	Professional Development [§]
	Sensor Technology & Hardware Lab	IoT Lab	Cyber Security	Minor Project-I**	Disaster Management	Departmental Lab	
		Self-learning/Presentation (through SWAYAM/NPTEL/MOOC)# or Interdisciplinary course from other institutions and platforms with credit transfer	Python Programming Lab	Summer Internship Project-II (Evaluation)	Minor Project-II**	Summer Internship Project-III (04 weeks)(Evaluation)	
		Summer Internship Project-I (Institute Level) (Evaluation)		Self-learning/Presentation (SWAYAM/NPTEL/MOOC)		Creative Problem Solving (Evaluation)	

Compulsory registration for one online course using SWAYAM/NPTEL/ MOOC, evaluation through attendance, assignments and presentations

**The minor project-I will be evaluated by an internal committee for awarding sessional marks

*All of these courses will run through SWAYAM/NPTEL/ MOOC platforms with credit transfer

§ Evaluation will be based on participation/laurels brought by the students to the institution in national/state level technical and other events during the complete tenure of the UG program (participation in professional chapter activities, club activities, cultural events, sports, personality development activities, collaborative events and technical events)