

# **NAAC Criterion-I**

## **Curricular Aspects**

**Key Indicator -1.1 Curriculum Design and Development**

### **Sub-Criteria -1.1.2**



**Department of Electrical Engineering**

**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

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

**Gola ka Mandir, Gwalior - 474005, Madhya Pradesh, India**

Department of Electrical Engineering					
Internet of Things					
SEMESTER	2020-2024 BATCH (Tentative Scheme)		2020-2024 BATCH		Percentage Change
	COURSE CODE	COURSE NAME	COURSE CODE	COURSE NAME	
I	220101	Basic of Internet of Things (IoT)	220101	Basic of Internet of Things (IoT)	25.42
	230102	Introduction to Computer Programming	230102	Introduction to Computer Programming	
	100022	Basic Electrical & Electronics Engineering	100022	Basic Electrical & Electronics Engineering	
	250100	Linear Algebra and Matrix Analysis	250100	Linear Algebra	
	100015	Energy, Environment, Ecology & Society	100015	Energy, Environment, Ecology & Society	
II	220201	Digital Electronics and Logic Design	220201	Digital Electronics and Logic Design	
	220202	Sensor Technology	220202	Sensor Technology	
	230202	Data Structures	230202	Data Structures	
	230203	Object Oriented Programming and Methodology	230203	Object Oriented Programming and Methodology	
	100016	Technical Language	100016	Technical Language	
	100017	Language Lab	100017	Language Lab	
III	250106	Probability theory and Random process	250106	Probability theory and Random process	
	220301	Fundamentals of Signals and Control Systems	220301	Fundamentals of Signals and Control Systems	
	220302	Design & Analysis of Algorithms	220302	Design & Analysis of Algorithms	
	220303	Operating system	220303	Operating system	
	220304	Software Engineering	220304	Analog Electronics	
	220305	Arduino Programming and Simulation	220305	Programming and Simulation Lab	
	220306	Self-learning/ Presentation (SWAYAM/NPTEL)	220306	Self-learning/ Presentation (SWAYAM/NPTEL)	
	200xxx	Novel Engaging Courses	200xxx	Novel Engaging Courses	
	220307	Summer Internship Project-I (Institute Level)	220307	Summer Internship Project-I (Institute Level) (Evaluation)	
IV	220401	Database Management System	220401	Database Management System	
	220402	Computer Networks & Protocols	220402	Computer Networks & Protocols	
	220403	Robotics and Mechatronics	220403	Power Electronics	
	220404	Microprocessor & Embedded Systems	220404	Microprocessor & Embedded Systems	
	220405	Network and Web Security	220405	Network and Web Security	
	220406	Software Lab	220406	Programming with Python	
	200xxx	Novel Engaging Course	200xxx	Novel Engaging Course	
V	220501	IoT in Microgrid	220501	IoT in Microgrid	
	220502	Theory of Computation	220502	Cloud computing	
	220503	Energy Conversion Systems	220503	Embedded Control of Electrical Machines	
	220504	Special Machines	220504	IoT Architecture & Protocol	
	220505	IoT in Smart Grid	220505	Data Science in IOT	
	220506	Minor Project-I	220506	Minor Project-I	
	220507	Self-learning/ Presentation (SWAYAM/NPTEL)	220507	Self-learning/ Presentation (SWAYAM/NPTEL)	
	200xxx	Novel Engaging Course	200xxx	Novel Engaging Course	
	220508	Summer Internship Project-II (Evaluation)	220508	Summer Internship Project-II (Evaluation) (DLC)	
	1000006	Disaster Management	1000005	Project Management & Financing	
		1000006	Disaster Management		
VI	220601	Industrial Automation and IoT	220601	Soft Computing	
	220602	Wireless Sensor Networks	220602	Software Engineering	
	DE	DE-I(a):Data Analytics using Python DE-1	DE	220651 Introduction to Industry 4.0 and Industrial Internet of Things 220652 Data Mining 220653 Foundation of Cloud IoT Edge ML 220654 Industrial Automation and Control	

	OC	910104 Energy Conservation and Management	OC	910104 Energy Conservation and Management 910105 Biomedical Instrumentation 910106 Industrial Automation 910107 Solar PV Systems: Design and
	220603	Artificial Intelligence	220603	AI and ML
	220604	Minor Project -II	220604	Minor Project-II
	200xxx	Novel Engaging Course	200xxx	Novel Engaging Course
	100008	Intellectual Property Rights (IPR)	100008	Intellectual Property Rights (IPR)
VII	DE	220711 Ethical Hacking220712 Object Ori	DE	220711 Ethical Hacking220712 Object Oriented
	DE	220751 Embedded Systems Design220752	DE	220751 Embedded Systems Design220752 Desig
	OC	910108 Applications of Electrical Equipments and Motors 910109 Sensor Technology	OC	910108 Applications of Electrical Equipments and Motors 910109 Sensor Technology
	OC	910110 IoT in Microgrid 910111 Electric Vehicles	OC	910110 IoT in Microgrid 910111 Electric Vehicles
	220701	IoT is Smart Grid Lab	220701	Industrial Internet of Things Lab
	220702	Summer Internship Project-III (04 weeks )	220702	Summer Internship Project-III (04 weeks )
	220703	Creative Problem Solving (Evaluation)	220703	Creative Problem Solving (Evaluation)
VIII	DE	220851 Deep Learning220852 Big Data An	DE	220851 Deep Learning220852 Big Data Analytica
	OC	900607 Renewable Energy Engineering:	OC	900607 Renewable Energy Engineering: Solar,
	220801	Internship/Project	220801	Internship/Project
	220802	Professional Development	220202	Professional Development
				<b>Total Change</b>

25.42