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

Scheme of Evaluation B.Tech. V Semester (Electrical Engineering)

For batch admitted in academic session 2022– 2023

S. N o.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted							Total Marks	Contact Hours per week			Total Credits	Mode of Teaching	SSMode of Exam.
				Theory Slot				Practical Slot									
				End Term Evaluation		Continuous Evaluation		End Sem. Exam	Continuous Evaluation			L	T	P			
				End Sem. Exam	$Proficiency in subject /course	Mid Sem. Exam	Quiz/ Assignment		Lab Work & Sessional	Skill Based Mini Project							
1.	2130511	DC	Signals & Systems	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP
2.	2130512	DC	Control System	50	10	20	20	60	20	20	200	2	1	2	4	Blended	PP
3.	2130513	DC	Power Electronics	50	10	20	20	60	20	20	200	2	1	2	4	Blended	PP
4.	2130514	DC	Switchgear & Protection	50	10	20	20	60	20	20	200	2	1	2	4	Blended	PP
5.	2130515	MC	Data Science	50	10	20	20	60	20	20	200	3	-	2	4	Blended	MCQ
6.	2130516	DLC	Minor Project-I**	-	-	-	-	60	40	-	100	-	-	4	2	Offline	SO
7.	2130517	DLC	Self-learning/Presentation (SWAYAM/NPTEL/ MOOC)#	-	-	-	-	-	40	-	40	-	-	2	1	Online+ Mentoring	SO
8.	200xxx	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
9.	2130518	DLC	Summer Internship Project–II(Institute Level Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline	SO
			Total	250	50	100	100	410	160	80	1150	12	3	20	25		
10.	1000006	MAC	Disaster Management	50	10	20	20	-	-	-	100	2	-	-	Grade	Blended	MCQ
Additional Course for Honours or Minor Specialization				**Permitted to opt for maximum two additional courses for the award of Honours or Minor Specialization**													

$proficiency in course/subject-includes the weightage towards ability/skill/competence/knowledge level/ expertise attained etc. in that particular course/subject.

$$MCQ: Multiple Choice Question $$AO: Assignment + Oral $$PP: Pen Paper $$SO: Submission + Oral

** Minor Project-I may be evaluated by an internal committee for awarding sessional marks.

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

Mode of Teaching					Mode of Examination					Total Credits
Theory			Lab	NEC/SIP	Theory			Lab	SIP/ SLP/ NEC	
Offline	Online	Blended	Offline	Interactive	PP	A+O	MCQ	SO	SO	
-	-	15	8	3	12	-	3	6	4	25
-	-	40%	36 %	4.0%	48 %	-	12 %	24 %	16 %	Credits %

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B. Tech. with Honors (Electrical Engineering)
(For students of the host department: Electrical Engineering)
* Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform
(In each semester, starting from V to VIII semester, students are required to opt for new subjects)

Specialization 1: Control System & Instrumentation	Specialization 2: Power System & Energy
Course Name:	**Course Name:**
Advanced Linear Continuous Control Systems: Applications with MATLAB Programming and Simulink (08 weeks) Mentor: Prof Ashis Patra	**Smart Grid: Basics to Advanced Technologies (**12 weeks) Mentor: Dr Himmat Singh
Electronic Systems Design: Hands-on Circuits and PCB Design with CAD Software (12 Week) Dr Ankit Tiwari	**Design of Photovoltaic Systems** (12 Week) Prof Vishal Chaudhary
Power Electronics with Wide Band Gap Devices (12 Week) Prof Manoj Kumar	**Advances in UHV Transmission and Distribution** (8 Week) Mentor: Prof Vishal Chaudhary
Introduction to Industry 4.0 and Industrial Internet of Things (12 Week) Mentor: Dr Vikram	**Introduction to Industry 4.0 and Industrial Internet of Things (12 Week)** Mentor: Dr Vikram

Note: In each semester (starting from V to VIII semester), it is required to opt for new subjects towards Honours Degree/ DE/OC. *Credit for opting a particular NPTEL course will be given only once throughout the tenure of B.Tech. program*

B. Tech. with a Minor Specialization in Electrical Engineering
(For students of the other department)
* Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform

Course Name	Course Name
Basic Electrical Circuits (12 weeks) Mentor: Prof Vishal Chaudhary	**Electrical Machines – I (12 Week)** Mentor Prof Ashis Patra
A Basic Course on Electric and Magnetic Circuits (12 Weeks) Mentor: Dr Vijay Bhuria	**Control Systems** Mentor: Dr Vikram
Electrical Measurement and Electronic Instruments Mentor: Dr Ankit Tiwari	**Smart Grid: Basics to Advanced Technologies** (12 week) Mentor: Dr Himmat Singh

Note: In each semester (starting from V to VIII semester), it is required to opt for new subjects towards Minor Specialization. *Credit for opting a particular NPTEL course will be given only once throughout the tenure of B.Tech. program*