MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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

Department of Electronics Engineering

Scheme of Examination *For batch admitted in Academic Session 2021-2022*

B.Tech. (Electronics Engineering) I Semester

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted							Total Marks	Contact Hours per week			Total Credits	Mode of Teaching (Offline/ Online)	Mode of Exam.
				Theory Slot				Practical Slot									
				End Sem.		Mid Sem. Exam.	Quiz/ Assignment	End Sem	Lab Work & Sessional	Skill Based Mini Project		L	T	P			
				End Term Evaluation	$ Proficiency in subject /course												
1.	100013	BSC	Engineering Physics	50	10	20	20	60	40	-	200	2	1	2	4	Blended (2/1)	MCQ
2.	100020	ESC	Basic Civil Engineering &Mechanics	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
3.	100021	ESC	Basic Mechanical Engineering	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	MCQ
4.	100022	ESC	Basic Electrical & Electronics Engineering	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	MCQ
5.	100023	ESC	Basic Computer Engineering	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	AO
6.	140111	ESC	Electronics Workshop	-	-	-	-	60	20	20	100	-	-	2	1	Offline (1/0)	SO
Total				**250**	**50**	**100**	**100**	**240**	**80**	**80**	**900**	**10**	**5**	**8**	**19**		

Induction programme of three weeks (MC):Physical activity, Creative Arts,Universal Human Values,Literary,ProficiencyModules,Lectures by Eminent People, Visits to local Areas, Familiarization to Dept./Branch & Innovations.

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

Mode of Teaching					Mode of Examination				Total Credits
Theory				Lab	Theory			Lab	
Offline	Online	Blended		Offline	PP	A+O	MCQ	SO	
		Offline	Online						
0	0	10	5	8	3	4	11	1	19
0%	0%	52.63%	26.31%	42.10%	15.78%	21.05%	57.89%	5.26%	

Dr. Laxmi Shrivastava (HOD)

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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Department of Electronics Engineering

Scheme of Examination *For batch admitted in Academic Session 2021-2022*

B.Tech. (Electronics Engineering) II Semester

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted							Total Marks	Contact Hours per week			Total Credits	Mode of Teaching (Offline/ Online)	Mode of Exam.
				Theory Slot				Practical Slot									
				End Sem.		Mid Sem. Exam.	Quiz/ Assignment	End Sem	Lab Work & Sessional	Skill Based Mini Project		L	T	P			
				End Term Evaluation	$ Proficiency in subject /course												
1.	100011	BSC	Engineering Mathematics –I	50	10	20	20	-	-	-	100	3	1	-	4	Offline (4/0)	PP
2.	140211	DC	Electronics Devices	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	PP
3.	140212	DC	Engineering Materials	50	10	20	20	-	-	-	100	3	1	-	4	Blended (3/1)	PP
4.	100015	HSMC	Energy, Environment, Ecology & Society	50	10	20	20	-	-	-	100	3	-	-	3	Online (0/3)	MCQ
5.	100016	HSMC	Technical Language	50	10	20	20	-	-	-	100	3	-	-	3	Blended (2/1)	PP
6.	100017	HSMC	Language Lab	-	-	-	-	60	20	20	100	-	-	2	1	Offline (2/0)	SO
Total				**250**	**50**	**100**	**100**	**120**	**40**	**40**	**700**	**14**	**3**	**4**	**19**		
Summer Internship Project– I (Institute Level) (Qualifier): Minimum two-week duration: Evaluation in III Semester.																	

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

Mode of Teaching					Mode of Examination				Total Credits
Theory				Lab	Theory			Lab	
Offline	Online	Blended		Offline	PP	A+O	MCQ	SO	
		Offline	Online						
4	3	7	3	4	15	0	3	1	19
21.05%	15.78%	36.84%	15.78%	21.05%	78.94%	0%	15.78%	5.26%	

Dr. Laxmi Shrivastava (HOD)

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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B.Tech. (Electronics Engineering) III Semester

Effective for academic session 2021-22 & 2022-23

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted							Total Marks	Contact Hours per week			Total Credits	Mode of Teaching (Offline/ Online)	Mode of Exam.
				Theory Slot				Practical Slot				L	T	P			
				End Sem.		Mid Sem. Exam.	Quiz/ Assignment	End Sem	Lab Work & Sessional	Skill Based Mini Project							
				End Term Evaluation	[$]Proficiencyin subject /course												
1.	100025	BSC	Engineering Mathematics-II	50	10	20	20	-	-	-	100	2	1	-	3	Offline (3/0)	PP
2.	140311	DC	Electronics Circuit Design	50	10	20	20	60	20	20	200	2	1	2	4	Blended (3/1)	PP
3.	140318	DC	Network Theory	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
4.	140319	DC	Digital Circuits & Systems	50	10	20	20	60	20	20	200	2	1	2	4	Blended (3/1)	PP
5.	140320	DC	Analog Communicatio	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
6.	140321	DLC	Hardware lab	-	-	-	-	60	20	20	100	-	-	2	1	Offline(1/0)	SO
7.	140316	DLC	Self-learning/ Presentation[#]	-	-	-	-	-	40	-	40	-	-	2	1	Online +Mentoring	SO
8.		CLC	Novel Engaging Course	-	-	-		50	-	-	50	-	-	2	1	Interactive	SO
9.	140317	DLC	Summer Internship Project–I (Institute Level Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline	SO
Total				250	50	100	100	290	100	60	950	10	5	14	22		
10.	1000005	MAC	Project Management & Financing	50	10	20	20	-	-	-	100	2	-	-	Grade	Online	MCQ

[$]Proficiency in course/subject – includes the weightage towards ability/ skill/ competence /knowledge level /expertise attained /attendance etc. in that particular course/subject.

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

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

Approved with Code changes MK

DEAN (ACADEMICS) M.I.T.S GWALIOR

Mode of Teaching						Mode of Examination					Total Credits
Theory				Lab	NEC	Theory			Lab	SIP/ SLP/ NEC	
Offline	Online	Blended		Offline	Interactive	PP	A+O	MCQ	SO	SO	
		Offline	Online								
3	1	8	4	5	1	17	0	0	1	4	22
13.63%	4.54%	36.36%	18.18%	22.72%	4.54%	77.27%	0%	0%	4.54%	18.18%	

B. Tech. (Electronics Engineering) IV Semester

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted							Total Marks	Contact Hours per week			Total Credits	Mode of Teaching (Offline/ Online)	Mode of Exam	Duration of Exam
				Theory Slot				Practical Slot				L	T	P				
				End Sem.		Mid Sem. Exam.	Quiz/ Assignment	End Sem	Lab Work & Sessional	Skill Based Mini Project								
				End Term Evaluation	$Proficiency in subject /course													
1.	100003	BSC	Engineering Mathematics-III	50	10	20	20	-	-	-	100	2	1	-	3	Offline	PP	2 Hrs
2.	140416	DC	Digital Communication	50	10	20	20	60	20	20	200	2	1	2	4	Blended	PP	2 Hrs
3.	140417	DC	Linear Control Theory	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs
4.	140418	DC	Analog Integrated Circuits	50	10	20	20	60	20	20	200	2	1	2	4	Blended	PP	2 Hrs
5.	140419	DLC	Software Lab Introduction to MATLAB	-	-	-	-	60	20	20	100	-	-	4	2	Offline	SO	-
6.	100004	MC	Cyber Security	50	10	20	20				100	2	-	-	2	Blended	MCQ	1.5 Hrs
7.		CLC	Novel Engaging Course	-	-	-	-	-	50	-	100	-	-	2	1	Interactive	SO	-
Total				250	50	100	100	180	110	60	900	11	3	10	19			
Summer Internship Project-II (Softskills Based) for two weeks duration: Evaluation in V Semester																		
9.	100001	MAC	Indian Constitution & Traditional Knowledge	50	10	20	20	-	-	-	100	2	-	-	Grade	Online	MCQ	

$Proficiency in course/subject – includes the weightage towards ability, skill, competence /knowledge level /expertise attained /attendance etc. in that particular course/subject

Mode of Teaching						Mode of Examination					Total Credits
Theory				Lab	NEC	Theory			Lab	NEC	
Offline	Online	Blended		Offline	Interactive	PP	A+O	MCQ	SO	SO	
		Offline	Online								
3	6	6	3	4	1	18	0	2	1	1	22
13.63%	27.27%	27.27%	13.63%	18.18%	4.54%	81.81%	0%	9.09%	4.54%	4.54%	Credits %

02/03/2023

AN (ACADEMICS)

CTS

JALIOR

Department of Electronics Engineering
MITS Gwalior

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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Scheme of Examination (For the Batch Admitted in the Year 2021-2022)

B.Tech. (Electronics Engineering) V Semester *[For batches admitted in Academic Session 2021-22 onwards]*

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted							Total Marks	Contact Hours per week			Total Credits	Mode of Teaching (Offline/ Online)	Mode of Exam.
				Theory Slot				Practical Slot									
				End Sem.		Mid Sem. Exam.	Quiz/ Assignment	End Sem	Lab Work & Sessional	Skill Based Mini Project		L	T	P			
				End Term Evaluation	$Proficiency in subject /course												
1.	140511	DC	Data Science	50	10	20	20	60	20	20	200	3	-	2	4	Offline	MCQ
2.	140512	DC	Microprocessor & Interfacing	50	10	20	20	60	20	20	200	2	1	2	4	Offline	PP
3.	140515	DC	Electromagnetic Fields	50	10	20	20	-	-	-	100	2	1	-	3	Offline	PP
4.	140519	DC	Data Communication	50	10	20	20	-	-	-	100	2	1	-	3	Offline	PP
5.	140520	DC	Digital Signal Processing	50	10	20	20	-	-	-	100	2	1	-	3	Offline	PP
6.	140516	DLC	Minor Project-I	-	-	-	-	60	40	-	100	-	-	4	2	Offline	SO
7.	140517	DLC	Self-learning/ Presentation*	-	-	-	-	-	40	-	40	-	-	2	1	Online +Mentoring	SO
8.		CLC	Novel Engaging Course	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
9.	140518	DLC	Summer Internship Project–II (Institute Level Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline	SO
Total				**250**	**50**	**100**	**100**	**290**	**120**	**40**	**950**	**11**	**4**	**16**	**23**		
Additional Courses for obtaining Honors/Minor Specialization by desirous students				**Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization**													
*compulsory registration for one online course using SWAYAM/NPTEL/ MOOC, evaluation through attendance, assignments and presentation																	
10.	1000006	MAC	Disaster Management	50	10	20	20	-	-	-	100	2	-	-	Grade	Online	MCQ

Honors	1. Principles and Techniques of Modern Radar Systems 2. Stochastic Control & Communication	1. Hardware modeling using Verilog 2. Analog VLSI Design	1. Nano-Technology, Science and Application 2. Microelectronics: Devices to Circuits
Minors	Control System	Introduction to Wireless and Cellular Communications	

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous Institute, Affiliated to RGPV, Bhopal (M.P.) India)

NAAC Accredited with A++ Grade

Department of Electronics Engineering

Scheme of Evaluation

B. Tech. VI Semester (Electronics Engineering) *(for batch admitted in academic session 2021-22)*

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted									Total Marks	Contact Hours per week			Total Credits	Mode of Teaching	^{SS}Mode of Exam.	Duration of Exam
				Theory Slot				Practical Slot			MOOCs									
				End Term Evaluation		Continuous Evaluation		End Sem. Exam.	Continuous Evaluation		Assignment	Exam		L	T	P				
				End Sem. Exam.	$^{\$}$Proficiency in subject /course	Mid Sem. Exam.	Quiz/ Assignment		Lab work & Sessional	Skill Based Mini Project										
1.	140619	DC	Mobile Communication & 5G Networks	50	10	20	20	-	-	-	-	-	100	4	-	-	4	Blended	PP	2 Hrs
2.	140616	DC	VLSI Design	50	10	20	20	60	20	20	-	-	200	3	-	2	4	Blended	PP	2 Hrs
3.	1406**	DE	Departmental Elective* (DE-1)	-	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	1.5 Hrs
4.	900***	OC	Open Category (OC-1)**	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs
5.	140617	MC	Artificial Intelligence & Machine Learning	50	10	20	20	60	20	20	-	-	200	3	-	2	4	Blended	MCQ	1.5 Hrs
6.	140618	DLC	Minor Project-II	-	-	-	-	60	40	-	-	-	100	-	-	4	2	Offline	SO	-
7.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	-	-	50	-	-	2	1	Blended	SO	-
Total				200	40	80	80	230	80	40	25	75	850	16	-	10	21	-	-	
8.		MAC	Intellectual Property Rights (IPR)	50	10	20	20	-	-	-	-	-	100	2	-	-	GRADE	Online	MCQ	1.5 Hrs
Summer Internship-III (On Job Training) for Four weeks duration: Evaluation in VII Semester																				
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. *This course run through SWAYAM/NPTEL/ MOOC platform

*DE-1 (SWAYAM/NPTEL/ MOOC platform)		**Open Category (OC-1)(For students of other branches)	
140665	Electromagnetic Waves in Guided and Wireless Media	900116	Embedded Systems
140662	Digital IC Design	900117	Intelligent Control
140663	Fuzzy sets, logic and System & Applications		

Honsors	Communication & Signal Processing (Track)	Principles of Signals and Systems (H140606)	Communication Networks (H140607)
	VLSI Design (Track)	Analog IC design (H140608)	Integrated Circuits, MOSFETs, OP-Amps and their Applications (H140609)
	Nano Technology (Track)	Surface Engineering Of Nano-materials (H140610)	Physics of Nanoscale Devices (H140611)
Minors	Communication & Signal Processing (Track)	Communication Networks (M140604)	Fundamentals Of MIMO Wireless Communication (M140605)
	Control & Sensor Technology (Track)	Microprocessors and Microcontrollers (M140606)	Network Analysis (M140607)

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(Deemed to be University)
(Declared Under Distinct Category by Ministry of Education, Government of India)
NAAC Accredited with A++ Grade

Scheme of Examination (B.Tech. Electronics Engineering)
B.Tech. VII Semester *[For batches admitted in Academic Session 2021-22 onwards*

S. N.	Subject Code	Category	Subject Name & Title	Maximum Marks Allotted							MOOCS		Total Marks	Contact Hours per week			Total Credits	Mode of Teaching (Online, Offline, Blended)	$^{\$\$}$Mode of Exam.
				Theory Slot				Practical Slot											
				End Term Evaluation		Continuous Evaluation		End Sem.	Continuous Evaluation										
				End Sem.	Proficiency in Subject Course	Mid Sem. Exam	Quiz/ Assignment		Lab work & Sessionals	Skill based mini project	Assignment	Exams		L	T	P			
1.	1407XX	DE	DE-2	50	10	20	20	-	-	-			100	3	-	-	3	Blended	PP
2.	1407XX	DE	DE -3*	-	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ
3.	1407XX	DE	DE -4*					-	-	-	25	75	100	3	-	-	3	Online	MCQ
4.		OC	OC-2	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP
6.	140704	DLC	Embedded Systems Design lab	-	-	-	-	60	20	20	-	-	100	-	-	6	3	Offline	SO
7.	140702	DLC	SEP/Industry Internship/ Research Internship/ Innovation & Start-up	-	-	-	-	60	-	-	-	-	60	-	-	4	2	Offline	SO
8.	140705	DLC	Creative Problem Solving	-	-	-	-	25	25	-	-	-	50	-	-	6	3	Offline	SO
			Total	100	20	40	40	145	45	20	50	150	610	12	0	16	20		
		MAC	Universal Human Values & professional ethics	50	10	20	20	-	-	-	-	-	100	2	-	-	GRADE	Blended	MCQ

* This course must be run through SWAYAM/NPTEL/ MOOC

Department Electives-2 (DE-2) (1407XX)	Satellite and Radar Communication Systems **(140711)**	Stochastic Processes **(140716)**	Embedded Systems Design **(140715)**
Department Electives-3 (DE-3) (MOOCS) (1407XX)	Digital Image Processing **(140751)**	Microwave Engineering **(140754)**	Analysis and Design Principles of Microwave Antennas **(140755)**
Department Electives-4 (DE-4) (MOOCS)	Fundamental of Wireless Communication	Fiber Optic Communication	Real Time Digital Signal Processing

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(1407XX)	**(140763)**	Technology **(140762)**	**(140764)**
Open Course-2 (OC-2)	Mobile Communication and 5G Standard **(910218)**		Consumer Electronics **(910217)**

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

Honors	Introduction To Adaptive Signal Processing	VLSI Interconnects
Minors	Design of Photovoltaic Systems	Microwave Engineering

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(Deemed University)

(Declared Under Distinct Category by Ministry of Education, Government of India)

NAAC Accredited with A++ Grade

Scheme of Examination (B.Tech. Electronics Engineering)

B.Tech. VIII Semester *[For batches admitted in Academic Session 2021-22 onwards]*

S.N.	Subject Code	Category	Subject Name & Title	Maximum Marks Allotted					MOOCS		Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot								
				End Sem.	Mid Sem. Exam	Quiz/ Assignment	End Sem.	Term Work / Lab Work & Sessional	Assignment	Exams		L	T	P	
1.	**1408XX**	**DE**	**Departmental Elective-5***	-	-	-	-	-	25	75	100	4	-	-	**4**
2.	**9006XX**	**OC**	**Open Course -4**	-	-	-	-	-	25	75	100	3	-	-	**3**
3.	**140804**	**DLC**	**Internship/Project (DLC-9)**	-	-	-	250	150	-	-	400	-	-	12	6
4.	**140805**		**Professional Development#**	-	-	-	-	50	-	-	50	-	-	4	2
			Total	**-**	**-**	**-**	**250**	**200**	**50**	**150**	**650**	**07**	**-**	**16**	**15**
Additional Courses for obtaining Honours or minor Specialization by desirous students			**Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization**												

***All of these courses will run through SWAYAM/NPTEL/ MOOC**

 # 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)

List of DEs and OCs:

Department Electives-1 (DE-5) (1408XX)	**Fundamental of Power Electronics (140854)**	**Biomedical Signal Processing (140855)**	**Photonic integrated circuit (140856)**
Open Course-4 (OC-4)	Linear Dynamical Systems (900601)	Sensors and Actuators (900602)	