MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous Institute& NAAC AccreditedInstitute Affiliated to RGPV, Bhopal MP)
Department of Electronics Engineering

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

B.Tech. (Electronics Engineering/ Electronics and Telecommunication Engineering) I Semester

S. No.	Subject Code	Category Code	Subject Name	Theory Slot — End Sem. — End Term Evaluation	Theory Slot — End Sem. — $Proficiency in subject /course	Theory Slot — Mid Sem. Exam.	Theory Slot — Quiz/ Assignment	Practical Slot — End Sem	Practical Slot — Lab Work & Sessional	Practical Slot — Skill Based Mini Project	Total Marks	L	T	P	Total Credits	Mode of Teaching (Offline/ Online)	Mode of Exam.
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/ 200111	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 — Theory — Offline	Mode of Teaching — Theory — Online	Mode of Teaching — Theory — Blended — Offline	Mode of Teaching — Theory — Blended — Online	Mode of Teaching — Lab — Offline	Mode of Examination — Theory — PP	Mode of Examination — Theory — A+O	Mode of Examination — Theory — MCQ	Mode of Examination — Lab — SO	Total Credits
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

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

Department of Electronics Engineering

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

B.Tech. (Electronics Engineering/ Electronics and Telecommunication 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				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.	100011	BSC	Engineering Mathematics –I	50	10	20	20	-	-	-	100	3	1	-	4	Offline (4/0)	PP
2.	140211/ 200211	DC	Electronics Devices	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	PP
3.	140212/ 200212	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

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)
B.Tech. (Electronics and Telecommunication Engineering) III Semester

Effective for academic session 2021-22 & 2022-23

S. No.	Subject Code	Category Code	Subject Name	Theory Slot — End Sem. — End Term Evaluation	Theory Slot — End Sem. — $Proficiency in subject/course	Theory Slot — Mid Sem. Exam.	Theory Slot — Quiz/Assignment	Practical Slot — End Sem	Practical Slot — Lab Work & Sessional	Practical Slot — Skill Based Mini Project	Total Marks	L	T	P	Total Credits	Mode of Teaching (Offline/Online)	Mode of Exam.
1.	100025	BSC	Engineering Mathematics-II	50	10	20	20	-	-	-	100	2	1	-	3	Offline (3/0)	PP
2.	200311	DC	Electronics Circuit Design	50	10	20	20	60	20	20	200	2	1	2	4	Blended (3/1)	PP
3.	200318	DC	Network Theory	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
4.	200319	DC	Digital Circuits & Systems	50	10	20	20	60	20	20	200	2	1	2	4	Blended (3/1)	PP
5.	200320	DC	Analog Communication	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
6.	200321	DLC	Hardware lab	-	-	-	-	60	20	20	100	-	-	2	1	Offline(1/0)	SO
7.	200316	DLC	Self-learning/Presentation*	-	-	-	-	-	40	-	40	-	-	2	1	Online +Mentoring	SO
8.		CLC	Novel Engaging Course	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
9.	200317	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.
$PP: Pen Paper $SO: Submission + Oral $AO: Assignment + Oral
$MCQ: Multiple Choice Question
*compulsory registration for one online course using SWAYAM/NPTEL/ MOOC, evaluation through attendance, assignments and presentation

Mode of Teaching — Theory — Offline	Mode of Teaching — Theory — Online	Mode of Teaching — Theory — Blended Offline	Mode of Teaching — Theory — Blended Online	Mode of Teaching — Lab — Offline	Mode of Teaching — NEC — Interactive	Mode of Examination — Theory — PP	Mode of Examination — Theory — A+O	Mode of Examination — Theory — MCQ	Mode of Examination — Lab — SO	Mode of Examination — SIP/ SLP/ NEC — SO	Total Credits
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%	

(handwritten) Codes changed as proposed

DEAN (ACADEMICS)
M.I.T.S 23/8/
GWALIOR

B. Tech. (Electronics and Telecommunication Engineering) IV Semester

S. No.	Subject Code	Category Code	Subject Name	End Term Evaluation	Proficiency in subject /course	Mid Sem. Exam.	Quiz/ Assignment	End Sem	Lab Work & Sessional	Skill Based Mini Project	Total Marks	L	T	P	Total Credits	Mode of Teaching (Offline/ Online)	Mode of Exam	Duration of Exam.
				Theory Slot				**Practical Slot**				**Contact Hours per week**						
1.	100003	BSC	Engineering Mathematics-III	50	10	20	20	-	-	-	100	2	1	-	3	Offline	PP	2 Hrs.
2.	200416	DC	Digital Communication	50	10	20	20	60	20	20	200	2	1	2	4	Blended	PP	2 Hrs
3.	200417	DC	Linear Control Theory	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs
4.	200418	DC	Analog Integrated Circuits	50	10	20	20	60	20	20	200	2	1	2	4	Blended	PP	2 Hrs
5.	200419	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.	1000001	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

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

Department of Electronics Engineering
MITS Gwalior

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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

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

B.Tech. (Electronics and Telecommunication 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				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.	200511	DC	Data Science	50	10	20	20	60	20	20	200	3	-	2	4	Offline	MCQ
2.	200512	DC	Microprocessor & Interfacing	50	10	20	20	60	20	20	200	2	1	2	4	Offline	PP
3.	200515	DC	Electromagnetic Fields	50	10	20	20	-	-	-	100	2	1	-	3	Offline	PP
4.	200519	DC	Data Communication	50	10	20	20	-	-	-	100	2	1	-	3	Offline	PP
5.	200520	DC	Digital Signal Processing	50	10	20	20	-	-	-	100	2	1	-	3	Offline	PP
6.	200516	DLC	Minor Project-I	-	-	-	-	60	40	-	100	-	-	4	2	Offline	SO
7.	200517	DLC	Self-learning/ Presentation#	-	-	-	-	-	40	-	40	-	-	2	1	Online +Mentoring	SO
8.		CLC	Novel Engaging Course	-	-	-	-	50	0	-	50	-	-	2	1	Interactive	SO
9.	200518	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 Honours/Minor Specialization by desirous students						**Permitted to opt for <u>maximum two additional courses</u> 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		Principles and Techniques of Modern Radar Systems					Hardware modeling using verilog									
	Minors		Control System					Introduction to Wireless and Cellular Communications									

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute affiliated to RGPV, Bhopal)
Department of Electronics Engineering
Scheme of Evaluation
B. Tech. VI Semester (Electronics & Telecommunication Engineering)

(for batch admitted in academic session 2020-21)

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted									Total Marks	Contact Hours per week			Total Credits	Mode of Teaching	$$Mode of Exam.
				Theory Slot				Practical Slot			MOOCs			L	T	P			
				End Term Evaluation		Continuous Evaluation		End Sem. Exam.	Continuous Evaluation		Assignment	Exam								
				End Sem. Exam.	$Proficiency in subject /course	Mid Sem. Exam.	Quiz/ Assignment		Lab work & Sessional	Skill Based Mini Project									
1.	200619	DC	Mobile Communication & 5G Networks	50	10	20	20	-	-	-	-	-	100	4	-	-	4	Blended	PP
2.	200616	DC	VLSI Design	50	10	20	20	60	20	20	-	-	200	3	-	2	4	Blended	PP
3.	2006XX	DE	Departmental Elective* (DE-1)	-	-	-	-	-	-	-	25	75	100	3	-	-	3	Blended	PP
4.	900XXX	OC	Open Category (OC-1)**	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP
5.	200617	MC	Artificial Intelligence & Machine Learning	50	10	20	20	60	20	20	-	-	200	3	-	2	4	Blended	MCQ
6.	200618	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	290	100	60	25	75	950	16	-	10	21	-	-
8.	1000007	MAC	Intellectual Property Rights (IPR)	50	10	20	20	-	-	-	-	-	100	2	-	-	GRADE	Online	MCQ
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.

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

*Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform with credit transfer

** Course run in traditional mode

This course run through SWAYAM/NPTEL/ MOOC platform

*DE-1 (SWAYAM/NPTEL/ MOOC platform)		**Open Category (OC-1)(For students of other branches)	
200661	Spread Spectrum Communication and Jamming	900116	Embedded Systems
200662	Digital IC Design	900117	Intelligent Control
200663	Fuzzy sets, logic and System & Applications		
200664	Analysis and Design Principle of Microwave Antennas		

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 & Telecommunication 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		Assignment	Exams		L	T	P			
				End Sem.	Proficiency in Subject Course	Mid Sem. Exam	Quiz / Assignment		Lab work & Sessionals	Skill based mini project									
1.	**2007XX**	DE	**DE-2**	50	10	20	20	-	-	-			100	3	-	-	**3**	**Blended**	**PP**
2.	**2007XX**	DE	**DE -3***	-	-	-	-	-	-	-	25	75	100	3	-	-	**3**	**Online**	**MCQ**
3.	2007XX	DE	DE -4*					-	-	-	25	75	100	3	-	-	**3**	**Online**	**MCQ**
4.	900XXX	OC	OC-2	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP
6.	**200704**	DLC	**Embedded Systems Design lab**	-	-	-	-	60	20	20	-	-	100	-	-	6	3	Offline	SO
7.	**200702**	DLC	**SEP/Industry Internship/ Research Internship/ Innovation & Start-up**	-	-	-	-	60	-	-	-	-	60	-	-	4	2	Offline	SO
8.	**200705**	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**		
	1000008	MAC	**Universal Human Values & professional ethics**	50	10	20	20	-	-	-	-	-	100	2	-	-	**GRADE**	**Blended**	**MCQ**

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

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

Department Electives-2 (DE-2) (2007XX)	Satellite and Radar Communication Systems (200711)	Telecommunication Switching and Network (200716)	Embedded Systems Design (200715)
Department Electives-3 (DE-3) (MOOCS) (2007XX)	Microwave Engineering (200754)	An Introduction to Coding Theory (200755)	Fundamentals of Nano and Quantum Photonics (200756)
Department Electives-4 (DE-4) (MOOCS) (2007XX)	Fiber Optic Communication Technology (200762)	Pattern Recognition and Applications (200763)	Simulation of Communication Systems using MATLAB (200764)
Open Course-2 (OC-2)	Mobile Communication and 5G Standard (910218)	Consumer Electronics (910217)	
Honors	Introduction To Adaptive Signal Processing	VLSI Interconnects	
Minors	Design of Photovoltaic Systems	Microwave Engineering	

B.Tech Electronics & Telecommunication Engineering
Scheme of Examination 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	Assignment	Exams		L	T	P	
								Lab Work & Sessional							
1.	2008XX	DE	Departmental Elective-5*	-	-	-	-	-	25	75	100	-	-	-	3
2.	9006XX	OC	Open Course -3	-	-	-	-	-	25	75	100	3	-	-	3
3.	200804	DLC	Internship/Project (DLC-9)	-	-	-	250	150	-	-	400	-	-	18	9
4.	200805		Professional Development#	-	-	-	50	-	-	-	50	-	-	4	2
			Total	-	-	-	300	150	50	150	650	3	0	22	17

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) (2008XX)	Fundamental of Power Electronics (200854)	Biomedical Signal Processing (200855)	Power Management Integrated Circuits (200853)

Open Course-3 (OC-3)	Linear Dynamical Systems (900601)	Sensors and Actuators (900602)