MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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

Department of Electronics Engineering

Scheme of Examination (For Batch admitted in Year 2023-24)

B.Tech. I Semester (Electronics Engineering) *[For batches admitted in Academic Session 2023-24 onwards]*

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.	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.	3100022	BSC	Basic Electrical & Electronics Engineering	50	10	20	20	40	30	30	200	2	1	2	4	Blended	MCQ	1.5 Hrs
2.	3140121	DC	Electronic Engineering Materials	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs
3.	3140122	DC	Electronic Devices	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP	2 Hrs
4.	3140123	DC	Network Theory	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP	2 Hrs
5.	3140125	ESC	Computer Programming	50	10	20	20	40	30	30	200	2	1	2	4	Blended	AO	2 Hrs
6.	3140124	DLC	Devices & Network Lab	-	-	-	-	40	30	30	100	-	-	4	2	Offline	SO	2 Hrs
		Total		250	50	100	100	120	90	90	800	11	4	8	19			
6	3000002	Natural Sciences & Skills	Engineering Chemistry	50	10	20	20	**30**	**10**	**10**	150	1	-	2	**GRADE**	Blended	MCQ	1.5 Hrs
	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/ competency /knowledge level /expertise attained etc. in that particular course/subject Natural Sciences& Skills: Engineering Physics / Engineering Chemistry / Environmental Science/ Language

MCQ: Multiple Choice Question **AO:** Assignment + Oral **OB:** Open Book **PP:** Pen Paper **SO:** Submission + Oral

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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	9	4	4	2	19
0%	0%	52.63%	26.31%	42.10%	47.36%	21.05%	21.05%	10.5%	

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B.Tech. II Semester (Electronics Engineering) *(for batch admitted in academic session 2023-24)*

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.	Duration 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.	3100011	BSC	Engineering Mathematics –I	50	10	20	20	-	-	-	100	3	1	-	4	Offline	PP	2 Hrs
2.	3140221	DC	Digital Circuits & Systems	50	10	20	20	40	30	30	200	2	1	2	4	Blended	PP	2 Hrs
3.	3140222	DC	Electronics Circuits	50	10	20	20	40	30	30	200	2	1	2	4	Blended	PP	2 Hrs
4.	3140223	DC	Signals and Systems	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP	2 Hrs
5.	3140224	DC	Python Programming	50	10	20	20	40	30	30	200	2	1	2	4	Blended	AO	1.5 Hrs
	Total			250	50	100	100	120	90	90	800	11	5	6	**19**			
6	3000001	Natural Sciences and Skills	Engineering Physics	50	10	20	20	-	-	-	-	1	-	2	GRADE	Blended	MCQ	1.5 Hrs
	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/ competency /knowledge level /expertise attained etc. in that particular course/subject

Natural Sciences& Skills: Engineering Physics / Engineering Chemistry / Environmental Science/ Language

Credits of Natural Sciences & Skills will be added in the VI Semester.

MCQ: Multiple Choice Question   **AO:** Assignment + Oral   **OB:** Open Book   **PP:** Pen Paper   **SO:** Submission + Oral

Mode of Teaching					Mode of Examination				Total Credits
Theory				Lab	Theory			Lab	
Offline	Online	Blended		Offline	PP	A+O	MCQ	SO	
		Offline	Online						
4	0	8	4	6	15	4	0	0	19
21.05%	0%	42.10%	21.05%	31.57%	78.94%	21.05%	0%	0%	

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Scheme of Examination (For Batch admitted in Year 2023-24)
B.Tech. (Electronics Engineering) III Semester *[For batches admitted in Academic Session 2023-24 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.	31000025	BSC	Engg Mathematics-II	50	10	20	20	-	-	-	100	2	1	-	3	Offline	PP
2.	3140320	DC	Analog Communication	50	10	20	20	40	30	30	200	2	1	2	4	Blended	PP
3.	3140322	DC	Analog Integrated Circuits	50	10	20	20	40	30	30	200	2	1	2	4	Blended	PP
4.	3140323	DC	Communication Networks	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP
5.	3140324	DC	Data Communication	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP
6.	3140321	DLC	Hardware Lab	-	-	-	-	40	30	30	100	-	-	2	1	Offline	SO
7.	3140316	DLC	Self-learning/ Presentation#	-	-	-	-	-	40	-	40	-	-	2	1	Online +Mentoring	SO
8.		CLC	Novel Engaging Course	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
9.	3140317	DLC	Skill Internship Proje (Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline	SO
			Total	**250**	**50**	**100**	**100**	**290**	**100**	**60**	**950**	**10**	**5**	**14**	**22**		
10.	3000005	Natural Science & Skill	Environmental Engineering	50	10	20	20	-	-	-	100	2	-	-	Grade	Blended	MCQ
11	1000001	MAC	Indian Constitution and Traditional Knowledge	50	10	20	20	-	-	-	100	2	-	-	Grade	Blended	MCQ

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

#**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	Theory			Lab	SIP/ SLP/ NEC	
Offline	Online	Blended		Offline	Interactive	PP	A+O	MCQ	SO	SO	
		Offline	Online								
17	0	0	0	4	1	**17**	**0**	**0**	**2**	**3**	**22**
77.27%	0	0	0	18.1%	4.54%	77.27%	0%	0%	9.09%	13.63%	Credits %

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Scheme of Evaluation
B. Tech IV Semester (Electronics Engineering)

(for batch admitted in academic session 2023-24)

S. No.	Subject Code	Category Code	Subject Name	Theory Slot: End Term Evaluation – End Sem. Exam	Theory Slot: End Term Evaluation – $Proficiency in subject /course	Theory Slot: Continuous Evaluation – Mid Sem. Exam.	Theory Slot: Continuous Evaluation – Quiz/ Assignment	Practical Slot: End Sem. Exam	Practical Slot: Continuous Evaluation – Lab Work & Sessional	Practical Slot: Continuous Evaluation – Skill Based Mini Project	Total Marks	L	T	P	Total Credits	Mode of Teaching	Mode of Exam
1.	3100003	BSC	Engineering Mathematics-III	50	10	20	20	-	-	-	100	3	1	-	4	Blended	PP
2.	3140411	DC	Digital Communication	50	10	20	20	60	20	20	200	2	1	2	4	Blended	PP
3.	3140412	DC	Linear Control Theory	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP
4.	3140413	DC	Microprocessor & Interfacing	50	10	20	20	60	20	20	200	2	1	2	4	Blended	PP
5	3140414	DLC	Software Lab (Introduction to MATLAB)	-	-	-	-	60	20	20	100	-	-	2	1	Offline	SO
5.	3140415	MC	Cyber Security	50	10	20	20	-	-	-	100	2	1	-	3	Blended	MCQ
6.	200xxx	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
			Total	250	50	100	100	230	60	60	850	11	5	8	20	-	-
7.		Natural Sciences & Skills	Language	50	10	20	20	-	-	-	100	1	-	-	Grade	Blended	MCQ
8.	1000005	MAC	Project Management & Financing	50	10	20	20	-	-	-	100	2	-	-	Grade	Online	MCQ
			Summer Internship Project – II (Institute Level) (Qualifier): Minimum two-week duration: Evaluation in V Semester.														

$Proficiency in course/subject – includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in that particular course/subject.
Natural Sciences& Skills: Engineering Physics / Engineering Chemistry / Environmental Science/ Language.
Credits of Natural Sciences & Skills will be added in the VI Semester.
MCQ: Multiple Choice Question   **AO:** Assignment + Oral   **OB:** Open Book   **PP:** Pen Paper   **SO:** Submission + Oral

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 – AO	Mode of Examination – Theory – MCQ	Mode of Examination – Lab – SO	Total Credits
-	-	12	6	1	15	-	3	1	19
-	-	63.15%	31.57%	5.26%	78.94%	-	15.78%	5.26%	100%

Scheme of Examination (For the Batch Admitted in the Year 2023-2024)
B.Tech. (Electronics Engineering) V Semester *[For batches admitted in Academic Session 2023-24 onwards]*

S. No.	Subject Code	Category Code	Subject Name	Theory Slot End Sem. End Term Evaluation	Theory Slot End Sem. $Proficiency in subject /course	Mid Sem. Exam.	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.	3140511	DC	Data Science	50	10	20	20	40	30	30	200	3	-	2	4	Blended	MCQ
2.	3140512	DC	Mobile Communication & 5G Network	50	10	20	20	-	-	-	100	3	1	-	4	Blended	PP
3.	3140515	DC	VLSI Design	50	10	20	20	40	30	30	200	3	-	2	4	Blended	PP
4.	3140519	DC	Electromagnetic Theory	50	10	20	20	-	-	-	100	3	1	-	4	Blended	PP
5.	3140520	DC	Digital Signal Processing	50	10	20	20	-	-	-	100	3	1	-	4	Blended	PP
6.	3140516	DLC	Minor Project-I	-	-	-	-	60	40	-	100	-	-	4	2	Offline	SO
7.	3140517	DLC	Self-learning/ Presentation#	-	-	-	-	-	40	-	40	-	-	2	1	Online +Mentoring	SO
8.		CLC	Novel Engaging Course	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
9.	3140518	DLC	Soft Skill Internship (Institute Level Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline	SO
			Total	250	50	100	100	250	140	60	950	15	3	16	26		
			Additional Courses for obtaining Honors/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	Blended	MCQ

Honors	1. Principles and Techniques of Modern Radar Systems 2. Stochastic Control & Communication	3. Digital VLSI Testing 4. Analog VLSI Design	1. Nano-Technology, Science and Application 2. Microelectronics: Devices to Circuits
Minors	Control System	Fundamental of Wireless communication	

Recommended in the BOS Meeting of Department of Electronics Engineering on 3rd June 2025

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Scheme of Evaluation
B. Tech. VI Semester (Electronics Engineering)

(for batch admitted in academic session 2023-24)

S.No	Subject Code	Category Code	Subject Name	Theory Slot – End Term Evaluation – End Sem. Exam.	Theory Slot – End Term Evaluation – $Proficiency in subject /course	Theory Slot – Continuous Evaluation – Mid Sem. Exam.	Theory Slot – Continuous Evaluation – Quiz/ Assignment	Practical Slot – End Sem. Exam.	Practical Slot – Continuous Evaluation – Lab work & Sessional	Practical Slot – Continuous Evaluation – Skill Based Mini Project	MOOCs – Assignment	MOOCs – Exam	Total Marks	L	T	P	Total Credits	Mode of Teaching	$$Mode of Exam	Duration of Exam
1.	3140616	DC	Microcontroller Systems and Applications	50	10	20	20	40	30	30	-	-	200	3	-	2	4	Blended	PP	2 hours
2.	3140XXX	DE	Departmental Elective* (DE-1)	-	-	-	-	-	-	-	25	75	100	-	-	-	3	Online	MCQ	3 Hrs
3.	900XXX	OC	Open Category (OC-1)**	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP	2 hours
4.	3140617	MC	Artificial Intelligence & Machine Learning	50	10	20	20	40	30	30	-	-	200	3	-	2	4	Blended	MCQ	1.5 hours
5.	3140618	DLC	Minor Project-II#	-	-	-	-	40	60	-	-	-	100	-	-	6	3	Offline	SO	
6.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	-	-	50	-	-	2	1	Interactive	SO	
7		NSS	Natural Sciences & Skills##	200	40	80	80	120	40	40	-	-	600	1	-	2	2*	-	-	-
			Total	**350**	**70**	**140**	**140**	**290**	**160**	**100**	**25**	**75**	**1350**	**10**	**-**	**14**	**20**	**-**	**-**	
8.	1000007	MAC	Intellectual Property Rights (IPR)	50	10	20	20	-	-	-	-	-	100	2	-	-	GRADE	Online	MCQ	1.5 hours

Skill Enhancement Program/Research Internship/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

##Natural Sciences & skills; Engineering Physics / Engineering Chemistry / Environmental Science/ Language

("Natural Sciences & skills; treated as Mandatory Audit Courses from first to fourth semester and cumulative marks converted as a cluster of credits and awarded in the VI semester)

$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   #The minor project-II may be evaluated by an internal committee for awarding sessional marks.

*DE-1 (SWAYAM/NPTEL/ MOOC platform)		**Open Category (OC-1)(For students of other branches)	
3140665	RF and Microwave Networks	2900118	Optical Communication
3140662	Digital IC Design	2900119	MEMS &Mechatronics
3140663	Fuzzy sets, logic and System & Applications		