

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Scheme of Examination (B.Tech. Electronics Engineering)
GROUP A:I Semester

[For batches admitted in Academic Session 2018-19 onwards]

S.No	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem Exam.	Quiz/Assignment	End Sem.	Lab work & Sessional					
1.	100201	BSC	Engineering Physics (BSC-1)	70	20	10	30	20	150	2	1	2	4
2.	100202	HSMC	Energy, Environment, Ecology & Society (HSMC-1)	70	20	10	-	-	100	3	-	-	3
3.	100203	ESC	Basic Computer Engineering (ESC-1)	70	20	10	30	20	150	3	-	2	4
4.	100204	ESC	Basic Mechanical Engineering(ESC-2)	70	20	10	30	20	150	3	-	2	4
5.	100205	ESC	Basic Civil Engineering & Mechanics(ESC-3)	70	20	10	30	20	150	3	-	2	4
6.	100206	HSMC	Language Lab. & Seminars(HSMC-2)	-	-	-	30	20	50	-	-	4	2
			Total	350	100	50	150	100	750	14	1	12	21

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

GROUP A: (Electrical, Electronics, Computer Science & Engineering, Information Technology, Electronics & Telecommunication)

GROUP B: (Civil, Mechanical, Chemical, Biotech, Automobile)

01 Theory Period = 1 Credit; 02 Practical Periods = 1 Credit

R. K. Ravi

P. A. Gupta

Sanjiv V. P.

S. S. R.

H. M. Gupta

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Scheme of Examination (B.Tech. Electronics Engineering)

GROUP A: II Semester

[For batches admitted in Academic Session 2018-19 onwards]

S.No	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem.	Quiz/Assignment	End Sem.	Lab work & Sessional					
1.	100101	BSC	Engineering Chemistry (BSC-2)	70	20	10	30	20	150	3	-	2	4
2.	100102	BSC	Mathematics-I (BSC-3)	70	20	10	-	-	100	3	1	-	4
3.	100103	HSMC	Technical English (HSMC-3)	70	20	10	30	20	150	3	-	2	4
4.	100104	ESC	Basic Electrical & Electronics Engineering(ESC-4)	70	20	10	30	20	150	3	-	2	4
5.	100105	ESC	Engineering Graphics(ESC-5)	70	20	10	30	20	150	2	-	2	3
6.	100106	ESC	Manufacturing Practices(ESC-6)	-	-	-	30	20	50	-	-	2	1
			Total	350	100	50	150	100	750	14	1	10	20
Summer Internship Project –I (Institute Level) (Qualifier): Minimum two-week duration													

GROUP A: (Electrical, Electronics, Computer Science & Engineering, Information Technology, Electronics & Telecommunication)

GROUP B: (Civil, Mechanical, Chemical, Biotech, Automobile)

R. K. Kulkarni

Pala P. P.

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Scheme of Examination (B.Tech. Electronics Engineering)

III Semester /For batches admitted in Academic Session 2018-19 onwards/

S.No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem	Term work					
								Lab Work & Sessional					
1.	100001	BSC	Mathematics-II (BSC-4)	70	20	10	-	-	100	3	1	-	4
2.	140301	DC	Electronics – I (DC-1)	70	20	10	20	20	100	1	1	2	4
3.	140302	DC	Digital Circuits and Systems (DC-2)	70	20	10	20 30	20 20	150	3	-	2	4
4.	140303	DC	Network Theory (DC-3)	70	20	10	30	20	150	3	-	2	4
5.	140304	DC	Signals & Systems (DC-4)	70	20	10	30	20	150	3	1	-	4
6.	140305*	DLC	Software Lab Introduction to MATLAB (DLC-1)	-	-	-	30	20	50	-	-	2	1
7.	140306#	SEMINAR/ SELF STUDY	Self learning/Presentation (SWAYAM/NPTEL/ MOOC)#	-	-	-	-	25	25	-	-	2	1
8.	140307	DLC	Summer Internship Project-I (Institute Level (Evaluation))	-	-	-	25	-	25	-	-	4	2
Total				350	100	50	145	105	750	14	3	14	24
9.	100002 ^s	MC	Biology for Engineers(Audit Course) (MC)	70	20	10	-	-	100	3	-	-	-
NSS/NCC				Qualifier									

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

^s Course will run for GroupA/B in III/IV semester respectively (This is a non-credit course and it is optional to appear & pass in the end semester examination. However, a separate mark sheet will be issued to those who will qualify)

* Virtual Lab to be conducted along with the traditional lab

GROUP A: (Electrical, Electronics, Computer Science & Engineering, Information Technology, Electronics & Telecommunication) & GROUP B: (Civil, Mechanical, Chemical, Biotech, Automobile)

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Scheme of Examination (B.Tech. Electronics Engineering)

IV Semester For batches admitted in Academic Session 2018-19 onwards

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Term work					
								Lab Work & Sessional					
1.	100003	BSC	Mathematics- III (BSC-5)	70	20	10	-	-	100	2	2	-	4
2.	140401	DC	Electronics II (DC-5)	70	20	10	30	20	150	2	1	2	4
3.	140402	DC	Analog Communication (DC-6)	70	20	10	30	20	150	2	1	2	4
4.	140403	DC	Communication Networks (DC-7)	70	20	10	-	-	100	3	1	-	4
5.	140404	DC	Electronics Measurement and Instrumentation (DC-8)	70	20	10	-	-	100	3	1	-	4
6.	100004	MC	Cyber Security (MC)	70	20	10	-	-	100	2	1	-	3
7.	140405	DLC	Hardware Lab PCB Design Lab (DLC-2)	-	-	-	30	20	50	-	-	6	3
Total				420	120	60	90	60	750	14	7	10	26
NSS/NCC				Qualifier									
Summer Internship Project-II (Soft Skills Based) for two weeks duration: Evaluation in V Semester													

*Virtual Lab to be conducted along with the traditional lab

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Honours:-

- 1) cloud computing - H140501
- 2) solid state physics - H140502
- 3) solar photovoltaic fundamentals technology A application - H140503

Minors:-

- 1) Power electronics
- 2) Digital circuits
- 3) Analog communication

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Scheme of Examination (B.Tech. Electronics Engineering)

V Semester **[For batches admitted in Academic Session 2018-19 onwards]**

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem Exam.	Quiz/Assignment	End Sem.	Lab work & Sessional					
1.	100005*	HSMC	Ethics, Economics, Entrepreneurship & Management (HSMC-4)	70	20	10	-	-	100	3	-	-	3
2.	140502	DC	Electromagnetic Theory (DC-09)	70	20	10	-	-	100	3	1	-	4
3.	140502	DC	Data Communication (DC-10)	70	20	10	30	20	150	2	1	2	4
4.	140503	DC	Linear Control Theory (DC-11)	70	20	10	30	20	150	2	1	2	4
5.	140504	DC	Digital Communication (DC-12)	70	20	10	30	20	150	2	1	2	4
6.	140506	DLC	Minor Project-I** (DLC-3)	-	-	-	30	20	50	-	-	2	1
7.	140507	DLC	Summer Internship Project-II (Evaluation) (DLC-4)	-	-	-	25	-	25	-	-	6	3
8.	140508	SEMINAR/ SELF STUDY	Self-learning/Presentation (SWAYAM/NPTEL/ MOOC)*	-	-	-	-	25	25	-	-	2	1
Total				350	100	50	145	105	750	12	4	16	24
9.	100006 ³	MC	Indian Constitution & Traditional Knowledge (Audit Course) (MC)	70	20	10	-	-	100	3	-	-	-

Department level activity/workshop/awareness programme to be conducted; certificate of compliance to be submitted by HoD to the Exam Controller through Dean Academics

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

* Group A/B programmes will offer this course in V/VI Semester respectively.
³ Group A/B programmes will offer this course in V/VI Semester respectively. (This is a non-credit course and it is optional to appear & pass in the end semester examination. However, a separate mark sheet will be issued to those who will qualify)

** The minor project-I may be evaluated by an internal committee for awarding sessional marks.

⁴ Compulsory registration for one online course using SWAYAM/NPTEL/ MOOC, evaluation through attendance, assignments and presentation
 GROUP A: (Electrical, Electronics, Computer Science & Engineering, Information Technology, Electronics & Telecommunication) &
 GROUP B: (Civil, Mechanical, Chemical, Biotech, Automobile)

R. K. K. K.

R. K. K. K.

V. K.

R. K. K. K.

R. K. K. K.

R. K. K. K.

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Scheme of Examination (B.Tech. Electronics Engineering)

VI Semester For batches admitted in Academic Session 2018-19 onwards

Corrected

S. No	Subject Code	Category	Subject Name	Maximum Marks Allotted					MOOCS		Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot		Assignment	Marks		L	T	P	
				End Sem.	Mid Sem Exam.	Quiz/Assignment	End Sem.	Lab work & Sessional							
1.	140601	DC	Microprocessors & Interfacing (DC-13)	70	20	10	30	20	-	-	150	2	1	2	4
2.	140602	DC	Digital Signal Processing (DC-14)	70	20	10	-	-	-	-	100	3	1	-	4
3.	1406XX	DE	DE-1*	70	20	10	-	-	-	-	100	4	-	-	4
4.	1406XX	DE	DE-2*	-	-	-	-	-	25	75	100	4	-	-	4
5.		OC	OC-1*	70	20	10	-	-	-	-	100	2	1	-	3
6.	100007	MC	Disaster Management (MC)	70	20	10	-	-	-	-	100	3	-	-	3
7.	140606	DLC	Minor Project-II (DLC-5)	-	-	-	50	50	-	-	100	-	-	4	2
Total				350	100	50	80	70	25	75	750	18	3	6	24

Summer Internship-III (On Job Training) for Four weeks duration: Evaluation in VII Semester

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

* At least one of these courses must be run through SWAYAM/NPTEL/ MOOC

Department Electives-1 (DE-1) 1406XX	Optical Communication 140611	Antennas and Wave Propagation 140612	Telecom Switching and Networks 140613
Department Electives-2 (DE-2) (MOOC) 1406XX	Spread Spectrum Communications and Jamming 140651	Digital IC Design 140652	Fuzzy Sets, Logic and Systems & Application 140653

Open Course-1 (OC-1)	Intelligent Control 900104	Embedded Systems 900105
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Honors	Electromagnetic Waves in Guided and Wireless Media	Integrated Circuits, MOSFETs, Op-Amps and their Application	High Power multilevel converter
Minors	Integrated Circuits, MOSFETs, Op-Amps and their Application		High Power multilevel converter

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Scheme of Examination (B.Tech. Electronics Engineering)

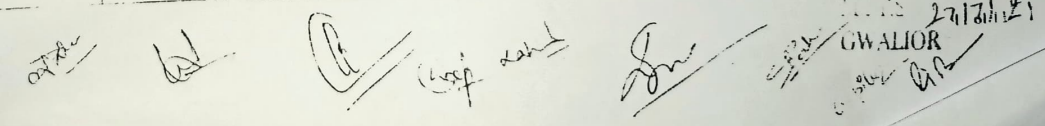
2018-19 1st Batch

Sl. No.	Subject Code	Category	Subject Name & Title	Maximum Marks Allotted						MOOCS	Total Marks	Contact Hours per week			Total Credits		
				Theory Slot			Practical Slot					Assignment	Exams	L		T	P
				End Sem	Mid Sem.	Quiz/Assignment	End Sem	Term Work	Lab Work & Sessional								
1.	1407XX	DE	DE-3	70	20	10	-	-	-	-	100	3	-	-	3		
2.	1407XX	DE	DE-4*	-	-	-	-	-	25	75	100	2	-	-	2		
3.		OC	OC-2	70	20	10	-	-	-	-	100	2	1	-	3		
4.		OC	OC-3	70	20	10	-	-	-	-	100	3	-	-	3		
5.	100008	MC	Intellectual Property Rights (IPR) (MC)	70	20	10	-	-	-	-	100	2	-	-	2		
6.	140701	DLC	VLSI Lab (DLC-6)	-	-	-	50	50	-	-	100	-	-	4	2		
7.	140702	DLC	Summer Internship Project-III (DLC-7) (04 weeks)	-	-	-	50	50	-	-	100	-	-	4	2		
8.	140703	DLC	Creative Problem Solving (DLC-8)	-	-	-	25	25	-	-	50	-	-	2	1		
	140704		Total	280	100	50	125	125	25	75	750	12	1	10	18		

Admission to courses for obtaining Honours or Minor Specialization is restricted to eligible students. The courses must be run through SWAYAM NIPTEL MOOC.

Department Electives-1 (DE-3) (1407XX)	Satellite and Radar Communication Systems 140711	VLSI Design 140712	Microwave Engineering 140713
Department Electives-2 (DE-4) (MOOCS) (1407XX)	Digital Image Processing 140751	Introduction to Wireless Cellular Communication 140752	Millimeter wave Technology 140753
Open Course-1 (OC-2)	Satellite System (900206)	Consumer Electronics (900207)	
Open Course-1 (OC-3)	MEMS & Mechatronics (900218)	Multimedia Communication (900-19)	

Honors: Microelectronics Devices to Circuits	Data Science for Engineers	Design of photovoltaic systems
Minor: Microwave Engineering	Image Signal Processing	Control Engineering



 GWALIOR
 27/11/21

Scheme of Examination B.Tech. VIII Semester

For batches admitted in Academic Session 2018-19 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		Assignment	Exams		L	T	P	
				End Sem.	Mid Sem. Exam	Quiz/Assignment	End Sem.	Term Work							
									Lab Work & Sessional						
1.	1408XX	DE	Departmental Elective-5*	-	-	-	-	-	25	75	100	4	-	-	4
2.	1408XX	DE	Departmental Elective-6*	-	-	-	-	-	25	75	100	3	-	-	3
3.	9006XX	OC	Open Course -4	-	-	-	-	-	25	75	100	2	-	-	2
5.	140804	DLC	Internship/Project (DLC-9)	-	-	-	250	150	-	-	400	-	-	6	3
6.	140805		Professional Development#	-	-	-	-	50	-	-	50	-	-	2	1
Total				-	-	-	250	200	125	225	750	09	-	08	13
Additional Courses for obtaining Honours or minor Specialization by desirous students				Permitted to opt for <u>maximum two additional courses</u> 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-I (DE-5) (1408XX)	Fundamental of power electronics (140854)	Biomedical Signal Processing (140855)	Power Management Integrated Circuits (140853)
Department Electives-I (DE-6) (1408XX)	Design and Analysis of VLSI Subsystems (140861)	An Introduction to Information Theory (140862)	Fundamentals of MIMO Wireless Communication (140863)
Open Course-4 (OC-4)	Linear Dynamical Systems (900601)	Sensors and Actuators (900602)	

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