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

Scheme of Examination

GROUP A: I Semester B. Tech. I Semester (Electronics and Telecommunication Engineering)

For batches admitted in Academic Session 2017-18

S.No	Subject	Category	Subject Name			imum Marks	Allotted		Total Marks	Contac	et Hours p	er week	Total Credits
	Code	Code		End	Theory S Mid	Slot Quiz/	End	Lab work	Marks	L	T	P	
				Sem.	Sem Exam.	Assignme	Sem.	& Sessional					
1.	100201	BSC	Engineering Physics (BSC-1)	70	20	10	30	20	150	_ 4	1	2	6
2.	100202	HSMC	Energy, Environment, Ecology & Society	70	20	10		-	100	4	1		5
3.	100203	ESC	(HSMC-1)  Basic Computer  Engineering (ESC-1)	70	20	10	30	20	150	4	1	2	5
4.	100204	ESC	Basic Mechanical Engineering (ESC-2)	70	20	10	30	20	150	4	1	2	6
5.	100205	ESC	Basic Civil Engineering & Mechanics (ESC-3)	70	20	10	30	20	150	4	1	2	6
6.	100206	HSMC	Language Lab. & Seminars (HSMC-2)	-	-	-	30	20	50	-	-	2	1
			Total	350	100	50	150 .	100	750	20	5	10	30
		NSS/NC	C					Qua	lifier			~ · ·	

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)

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

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

# Scheme of Examination

Group A: II Semester For batches admitted in Academic Session 2017-18 B. Tech. II Semester (Electronics and Telecommunication Engineering)

S.No	Subject	Category	Subject Name		Maxi	mum Marks A			Total	Conta	act Hours p	per week	Total
0.1.0	Code	Code			Theory Slo	ot	Prac	tical Slot	Marks	-	-	1	Credit
	June	0000		End Sem.	Mid Sem.	Quiz/ Assignme nt	End Sem.	Lab work & & Sessional		L	Т	P	
1.	100101	BSC	Engineering Chemistry (BSC-2)	70	20	10	30	20	150	4	1	2	6
2.	100102	BSC	Engineering Mathematics-I (BSC-3)	70	20	10		-	100	4	1	-	5
3.	100103	HSMC	Technical English (HSMC-3)	70	20	10	30	20	150	. 4	1	2	6
4.	100104	ESC	Basic Electrical & Electronics	70	20	10	30	20	150	4	1	2	6
5.	100105	ESC	Engineering (ESC-4) Engineering	70	20	10	30	20	150	4	1	2	6
6.	100106	ESC	Graphics (ESC-5)  Manufacturing	-	-	-	30	20	50	-	-	2	1
			Practices (ESC-6) Total	350	100	50	150	100	750	20	5	10	30
		NSS/NC	CC Summer Internsh					Qualifi					

Summer Internship Project -I (Institute Level) (Qualifier): Minimum two-week d

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

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

Scheme of Examination
B. Tech. III Semester (Electronics and Telecommunication Engineering)

S.No.	Subject Code		Subject Name			Maximum Mark	ks Allotted	or batches admit	ted in Acad	demic	Sess	sion 2 Hours	
		Cour			Theory			ractical Slot	Marks		per w		Tota Cred
				End Sem.	Mid Sem.	Quiz/ Assignment	End Sem	Term work		L	·T	P	
1.	100001	BSC	Mathematica II (Mag. a)		Exam.			Lab Work & Sessional		-			
			Mathematics-II (BSC-4)	70	20	10	-	-	100	3	1	-	1
2.	200301	DC	Electronics – I (DC-1)	70	20	10	30	20	-		1		4
3.	200302	DC	Digital Circuits and Systems	70	20	10	. 30	20 20	150	2	1	2	4
4.	200303	DC	(DC-2) Network Theory				30	20	150	3	1-	2	4
			(DC-3)	70	20	10	30	20	150	3	-	2	4
5.	200304	DC	Signals & Systems (DC-4)	70	20	10			,	,	1	2	4
6.	200305		Software Lab	,,,	20	10	-	-	100	3	1	-	4
			Introduction to MATLAB	-		-	30	20	50	-	-	2	1
7. 2		SEMINAR/	Self learning/Presentation	-		**		25	25	-		2	
8. 2	200309		Summer Internship Project-I	-								2	-
-			(Institute Level) (Evaluation)			-	25	-	25			4	2
			Total	350.	100	50	145	105	750		-		
. 10	100002 s	MC I	Biology for Engineers	70	20	10		103	750	14	3	14	2
		1	(Audit Course) (MC)	,,	. 20	10	-	-	100	3		-	
		NSS/NC	C		-	<u> </u>						160	
7	# 0	1	tion for one online	~~~				Qualifier				_	-

<sup>&</sup>quot;Compulsory registration for one online course using SWAYAM/NPTEL/ MOOC, evaluation through attendance, assignments and presentation.

SThis course will run for GroupA/B & Architecture students in III/IV semester respectively (Passing is not mandatory however a separate marksheet will be "Virtual Labels").

\*Virtual Lab to be conducted along with the traditional lab

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

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#### **Scheme of Examination**

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

S. No	Subject Code	Category Code	Subject Name		M	Aaximum Mark	cs Allotted		Total Marks	1	Contac ours p		
1.				1./	Theory S	lot	Pr	ractical Slot		1	week		47
				End Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Term work		L	T	P	
								Lab Work & Sessional					
1.	100003	BSC	Mathematics- III (BSC-5)	70	20	10	1	-	. 100	. 2	2	-	1
2.	200401	DC	Electronics II (DC-5)	70	20	10	30	20	150	2	1	2	
3.	200402	DC	Analog Communication (DC-6)	70	20	10	30	20	150	2	1	2	
4.	200403	DC	Communication Networks (DC-7)	70	20	10	-	-	100	3	1		
5.	200404	DC	Stochastic Processes in Communication (DC-8)	70	20	10	-	-	100	3	1		1
6.	100004	MC	Cyber Security (MC)	70	20	10		-	100	2	1	-	1
7.	200405	DLC	Hardware Lab PCB Design Lab (DLC-2)		-	-	30	20	50	-	-	4	1
			Total	420	120	60	90	60	750	14	7	8	A

Summer Internship Project-II (Softskills Based) for two weeks duration: Evaluation in V Semester

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<sup>\*</sup>Virtual Lab to be conducted along with the traditional lab

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#### Scheme of Examination

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

								For batches	admitted	in Acad	iemic so	25510n 2	017#18
S.	Subject	Category	Subject Name			mum Marks	Allotted		Total .	Contact	Hours p	er week	Total Credit
No.	Code	Code			Theory S	lot		ctical Slot	Marks		1 m		Credits
110.			5	End Sem.	Mid Sem Exam.	Quiz/ Assisgnm ent	End Sem.	Lab work & Sessional		L	T	P	
1.	100005*	HSMC	Ethics, Economics, Entrepreneurship& Management (HSMC-4)	70	20	10	-	•	100	2	-	-	2
2.	200502	DC	Electromagnetic Theory (DC-09)	70	20	10 ·		-	100	2	1	-	3
3.	200503	DC	Microprocessor & Interfacing (DC-10)	70	20	10	30	20	150	2	-	2	3
4.	200504	DC	Linear Control Theory (DC-11)	70	. 20	10	30	20	150	2	-	2	3
5.	200505	DC	Digital Communication (DC-12)	70	20	10	30	20	150	2	-	2	3
6.	200506	DLC	Minor Project-I** (DLC-3)	-	-	-	30	20	50	-	-	2	1
7.	200507	DLC	Summer Internship Project-II (Evaluation) (DLC-4)	-	-		25	-	25	-	- `	4	2
8.	200508	SEMINAR/ SELF STUDY	Self-learning/Presentation (SWAYAM/NPTEL/ MOOC)#	•	-	-	-	25	25	-	-	2	1
			Total	350	100	50	145	105	750	10	1	14	18
9.	100006 <sup>\$</sup>	MC	Indian Constitution & Traditional Knowledge (Audit Course) (MC)	70	20	10			100	3		-	-
								awareness pro D to the Exam					
Honou	onal Course ers or minor lization		Permitted to opt fo	r maxii	mum two ac	lditional cou	rses for	he award of H	lonours or M	linor spec	ialization		

Group A/B programmes will offer this course in V/VI Semester respectively.

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

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

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<sup>&</sup>lt;sup>5</sup>Group A/B programmes will offer this course in V/VI Semester respectively. (Passing is not mandatory however a separate marksheet will be issued to those who pass)

<sup>&</sup>quot;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)

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#### Scheme of Examination

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

S.	Subject	Catego	Subject Name		Maxim	um Mark	s Allotte	ed	MOC		admitte Total		tact H		Total
No	Code	ry			Theory SI			tical Slot	Assign	Exam	Marks		er wee		Credit
		Code		End Sem.	Mid Sem Exam.	Quiz/ Assign ment	End Sem.	Lab work & Sessional	ment			L	Т	P	
1.	200601	DC	Digital Signal Processing (DC-13)	70	20	10	30	20	-	-	150	2	-	2	3
2.	200602	DC	Data Communication (DC-14)	70	20	10	-	-	-	-	100	2	1	-	3
3.	2006XX	DE	DE-1*	70	20	10	-	-	-	-	100	2	-	-	2
4.	2006XX	DE	DE-2*	-	47 F - 1	-	-		25	75	100	2	-	1-1	2
5.		OC	OC-1*	70	20	10	-	-		-	100	2	-	-	2
6.	100007	MC	Disaster Management (MC)	70	20	10	-	-	-	-	100	2	-	-	2
7.	200606	DLC	Minor Project-II (DLC-5)	-	-	-	50	50	-	-	100	-	-	4	2
			Total	350	100	50	80	70	25	75	750	12	1	6	16
			S	ummer	Internshi	p-III (On	Job Tra	ining) for F	our weeks	duration	: Evaluat	ion in	VII Se	mester	r
Hon	litional Con ors or min		Pern	nitted to	opt for m	aximum t	wo add	itional cours	es for the	award of	Honours	or Mi	nor spe	cializa	ition

\*Group A/B programmes will offer this course in V/VI Semester respectively.

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

Telecom Switching and Department Electives-1 (DE-1) **Optical Communication** Antennas and Wave, Propagation (200612) Networks (200613) 200611/ 2006XX Spread Spectrum Communications Digital IC Design (200652) Fuzzy Sets, Logic and Department Electives-2 (DE-2) Systems & Application and Jamming 200651 (MOOC) (200653) 2006XX

Open Course-1 (OC-1) Intelligent Control (900104) Embedded Systems (900105)

Monors Advanced Power Electronics & Control 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. VII Semester (Electronics and Telecommunication Engineering)

S.No.	Subject	Category	Subject Name & Title		Ma	ximum Marks			MOC	OCS	Total	Con	tact	-	Total Credit
5,,	Code	Code			Theor	y Slot	Pra	ctical Slot			Marks		rs pe eek	, ,	Creum S
				End	Mid	Quiz/	End	Term	Assignm	Exam		W	CCK	1	3
				Sem	Sem.	Assignment	Sem	Work	ent			T	T	P	
					Exa m		•	Lab Work &				L	1	1	
1						100		Sessional			100	2	-		2
1	2007XX	DE	DE-3	70	20	10	-	-	-	75	100	2	-		
2.	2007XX	DE	DE-4*	-	-	-	- 1	-	25	75	100	2	1		
	3002XX	OC	OC-2	70	20	10	-	-	-	-		3	1		-
	9002XX	OC	OC-3	70	20	10	-	-	-	-	100	2	-		-
	100008	MC	Intellectual Property	70	20	10	-	-	-	-	100	12	-		
5.	100000	IVIC	Rights (IPR) (MC)					50		-	100	-	1-	4	1
-	200705	DLC	VLSI Lab (DLC-6)	-	-	-	50	50	- 1		100		1-	4	1
	2007025	DLC	Summer Internship Project-III (04 weeks )	-	-		50	50		-	100				
			(DLC-7)			_	25	25	-	-	50	-	-	2	
8.	200707	DLC	Simulation & Fabrication lab (DLC-8)				105	125	25	75	750	11	1	10	+-
			Total	280	80	40	125	125	25	1 /3	130		1	1.0	-

Additional Course for Honours or minor Specialization

Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization

<sup>\*</sup>This course must be run through SWAYAM/NPTEL/ MOOC

(2007XX)  Department Electives-2 (DE-4)	Systems 200/11	200712 Introduction to Wireless Cellular Communication 200752	
(MOOCS) (2007XX)	C. J. W. J. Court	om (900206)	Consumer Electronics (900207)

Open Course-1 (OC-2) Satellite System (900206) Consumer Electronics (900207)
Open Course-1 (OC-3) MEMS & Mechatronics (900208) Multimedia Communication (900209)

 Honors
 Microelectronics Devices to Circuits
 Google Cloud Computing
 Power Electronics

 Minors
 Microwaye Engineering
 Image Signal Processing
 Introduction to Coding Theory

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#### **Scheme of Examination**

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

S.No.	Subject	Category	Subject Name &		Max	cimum Marl	s Allotte	d	MOC	ocs	Total		onta		Credits
D11 (01	Code		Title		Theory S			tical Slot			Mark		lour r we		
			100	End Sem.	Mid Sem.	Quiz/ Assignm	End Sem.	Term Work	Assig nme	Ex	S		r we Fota	-	
				Sem.	Exam	ent	201111	Lab Work	nt		200	L	T	P	
								& Sessional		75	100				2
1.	2008XX	DE	DE-5*	-	- 1	-	- 1		25	75	100	2	-	-	
2.	9006XX	OC	OC-4*	-	- X-	-	-		25	75	100	2	-	-	2
3.	9006XX	OC	OC-5*	-	- 1	P	-	-	25	75	100	2	-	•	2
4.	200801	DLC	Internship/ Project (DLC-9)	-	-	-	250	150	-	-	400	-	-	6	3
5.	200802	-	Professional Development #	-			-	50	-	-	50	-	-	2	1
			Total	-	-		250	200	75	225	750	6	-	8	10

**Additional Course for Honours** or minor Specialization

Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization

List o

Department Electives-5 (DE-5) (2008XX)	Modern Digital Communication Techniques (200851)	Mathematical methods and techniques in Signal Processing (200852)	Power Management Integrated Circuits (200853)
	(20001)		

	Open Course-4	Linear Dynamical Systems (900601)	Sensors and Actuators (900602)
/	OC-4) Open Course-5 (OC-5)	Electronics Equipment Integration and Prototype Building (900603)	Computer Vision and Image Processing - Fundamentals and Applications (900604)

1	Honors	Architectural Design of Digital Integrated	Cloud Computing and Distributed Systems	Biomedical Signal Processing
		Circuits	The state of the s	Computer Vision and Image Processing -
	Minors	Microwave Integrated Circuit	Digital Signal Processing and its Applications	Fundamentals and Applications

<sup>\*</sup>All of these courses will run through SWAYAM/NPTEL/ MOOC

<sup>&</sup>quot;Evaluation will be based on participation/laurels brought by the students to the institution in national/state level technical events during the complete tenure of the UG program