

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

**Scheme of Examination (B.Tech.)**

**GROUP B: I Semester & Group A: II Semester [For batch admitted in Academic Session 2017-18]**

Subject wise distribution of marks and corresponding credits

S.No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Periods 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-1)	70	20	10	30	20	150	4	1	2	6
2.	100102	BSC	Engineering Mathematics – I (BSC-2)	70	20	10	-	-	100	4	1	-	5
3.	100103	HSMC	Technical English (HSMC-1)	70	20	10	30	20	150	4	1	2	6
4.	100104	ESC	Basic Electrical & Electronics Engineering (ESC-1)	70	20	10	30	20	150	4	1	2	6
5.	100105	ESC	Engineering Graphics (ESC-2)	70	20	10	30	20	150	4	1	2	6
6.	100106	ESC	Manufacturing Practices (ESC-3)	-	-	-	30	20	50			2	1
<b>Total</b>				<b>350</b>	<b>100</b>	<b>50</b>	<b>150</b>	<b>100</b>	<b>750</b>	<b>20</b>	<b>5</b>	<b>10</b>	<b>30</b>

Induction programme of 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, Information technology, Electronics & telecommunication)**

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

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

*(Handwritten signatures and initials)*

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**Scheme of Examination (B.Tech.)**

**GROUP A: I Semester & GROUP B: II Semester** *[For batch admitted in Academic Session 2017-18]*

Subject wise distribution of marks and corresponding credits

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

Summer Internship Project –I (Institute Level) (Qualifier): Minimum two-week duration : Evaluation in III Semester.

**GROUP A:** (Electrical, Electronics, Computer Science, Information technology, Electronics & telecommunication)

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

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

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**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**  
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**Scheme of Examination**  
**B. Tech. III Semester (Civil Engineering)**

**[For batch admitted in Academic Session 2017-18]**

S. No.	Subject Code	Category Code	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.	100001	BSC	Engineering Mathematics-II (BSC-4)	70	20	10	-	-	100	3	1	-	4
2.	110302	DC	Building Planning & Design (DC-1)	70	20	10	-	-	100	3	1	-	4
3.	110303	DC	Building Materials & Construction (DC-2)	70	20	10	30	20	150	3	-	2	4
4.	110304	DC	Surveying (DC-3)	70	20	10	30	20	150	3	-	2	4
5.	110305	DC	Strength of Materials (DC-4)	70	20	10	30	20	150	3	-	2	4
6.	110306	DLC	Software Lab (DLC-1)*	-	-	-	30	20	50	-	-	2	1
7.	110307	Seminar / Self Study	Self Learning/Presentation (Through Swayam/NPTEL/MOOC)#	-	-	-	-	25	25	-	-	2	1
8.	110308	DLC	Summer Internship Project - I (Institute Level) (Evaluation)	-	-	-	25	-	25	-	-	4	2
<b>Total</b>				<b>350</b>	<b>100</b>	<b>50</b>	<b>145</b>	<b>105</b>	<b>750</b>	<b>15</b>	<b>2</b>	<b>14</b>	<b>24</b>
<b>NSS / NCC</b>				<b>Qualifier</b>									

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

\*Virtual Lab to be conducted along with traditional Lab.

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

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

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**Scheme of Examination**  
**B. Tech. IV Semester (Civil Engineering)**

***[For batch admitted in Academic Session 2017-18]***

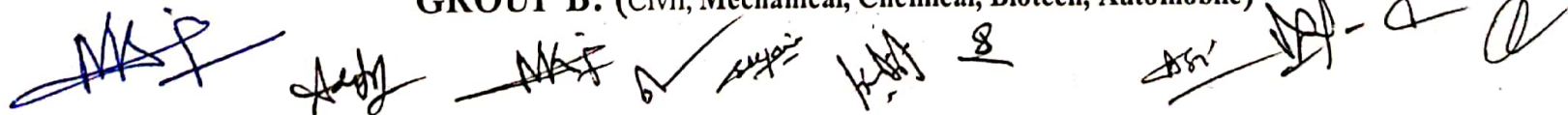
S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Periods per Week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem.	Quiz/ Assignment	End Sem.	Lab Work / Sessional					
1.	100003	BSC	Engineering Mathematics – III (BSC-5)	70	20	10	-	-	100	2	2	-	4
2.	110402	DC	Geotechnical Engineering (DC-5)	70	20	10	30	20	150	2	1	2	4
3.	110403	DC	Fluid Mechanics – I (DC-6)	70	20	10	30	20	150	2	1	2	4
4.	110404	DC	Structural Analysis (DC-7)	70	20	10	-	-	100	3	1	-	4
5.	110405	DC	Engineering Hydrology (DC-8)	70	20	10	-	-	100	3	1	-	4
6.	100004	MC	Cyber Security (MC)	70	20	10	-	-	100	2	1	-	3
7.	110407	DLC	Survey Practice Lab (DLC-2)*	-	-	-	30	20	50	-	-	4	2
<b>Total</b>				<b>420</b>	<b>120</b>	<b>60</b>	<b>90</b>	<b>60</b>	<b>750</b>	<b>14</b>	<b>7</b>	<b>8</b>	<b>25</b>
8.	100002 <sup>s</sup>	MC	Biology for Engineers (Audit Course) (MC)	70	20	10	-	-	100	3	-	-	-
<b>NSS/NCC</b>				<b>Qualifier</b>									
<b>Summer Internship Project – II (Soft Skills Based) for two weeks duration: Evaluation in V Semester</b>													

<sup>s</sup> This course will run for Group B/A in IV/III semester respectively. (Passing is optional, however a separate marksheet will be issued to those who qualify).

\*Virtual Lab to be conducted along with traditional Lab.

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

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



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**Scheme of Examination**  
**B. Tech. V Semester (Civil Engineering)**

**[For batch admitted in Academic Session 2017-18]**

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Total Marks	Contact Periods per Week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem.	Quiz/ Assignment	End Sem.	Lab work / Sessional					
1.	110501	DC	Estimating, Costing & Contracting (DC-9)	70	20	10	-	-	100	2	-	-	2
2.	110502	DC	Structural Design & Drawing (RCC) (DC-10)	70	20	10	-	-	100	2	1	-	3
3.	110503	DC	Fluid Mechanics – II (DC-11)	70	20	10	30	20	150	2	-	2	3
4.	110504	DC	Environmental Engineering – I (DC-12)	70	20	10	30	20	150	2	-	2	3
5.	110505	DC	Transportation Engineering (DC-13)	70	20	10	30	20	150	2	-	2	3
6.	110506	DLC	Minor Project – I** (DLC-3)	-	-	-	30	20	50	-	-	4	2
7.	110507	DLC	Summer Internship Project – II (Evaluation) (DLC-4)	-	-	-	25	-	25	-	-	4	2
8.	110508	Seminar / Self Study	Self Learning/ Presentation (Through Swayam/NPTEL/MOOC)#	-	-	-	-	25	25	-	-	2	1
<b>Total</b>				<b>350</b>	<b>100</b>	<b>50</b>	<b>145</b>	<b>105</b>	<b>750</b>	<b>10</b>	<b>1</b>	<b>16</b>	<b>19</b>
Department Level activity / workshop / awareness programme to be conducted;				certificate of compliance to be submitted by HoD to the Exam controller through Dean Academics									
9.				Additional Courses for obtaining Honours or Minor Specialization by desirous students				Permitted to opt for <u>maximum 02 additional courses</u> for the award of Honours or Minor Specialization					

\*\* The Minor Project – I may be evaluated by an internal committee for awarding sessional marks.

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

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

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

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**Scheme of Examination**  
**B. Tech. VI Semester (Civil Engineering)**

**[For batch admitted in Academic Session 2017-18]**

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted						Total Marks	Contact Periods per Week			Total Credits	
				Theory Slot			Practical Slot		MOOCS		L	T	P		
				End Sem.	Mid Sem.	Quiz / Assignment	End Sem.	Lab Work / Sessional	Assignment						Exam
1.	100005*	HSMC	Ethics, Economics, Entrepreneurship & Management (HSMC-4)	70	20	10	-	-	-	-	100	2	-	-	2
2.	110602	DC	Structural Design & Drawing (Steel) (DC-14)	70	20	10	-	-	-	-	100	2	1	-	3
3.		DE	(DE-1)*	70	20	10	-	-	-	-	100	2	-	-	2
4.		DE	(DE-2)*	-	-	-	-	-	25	75	100	2	-	-	2
5.		OC	(OC-1)*	70	20	10	-	-	-	-	100	2	-	-	2
6.	100007	MC	Disaster Management (MC)	70	20	10	-	-	-	-	100	2	-	-	2
7.	110607	DLC	Minor Project - II (DLC-5)	-	-	-	100	50	-	-	150	-	-	4	2
<b>Total</b>				<b>350</b>	<b>100</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>25</b>	<b>75</b>	<b>750</b>	<b>12</b>	<b>1</b>	<b>4</b>	<b>15</b>
8.	100006*	MC	Indian Constitution & Traditional Knowledge (Audit Course) (MC)	70	20	10	-	-	-	-	100	3	-	-	-
9.	Additional Courses for obtaining Honours or Minor Specialization by desirous students		Permitted to opt for <u>maximum 02 additional courses</u> for the award of Honours or Minor Specialization												
<b>Summer Internship Project - III (On Job Training) for Four Weeks Duration : Evaluation in VII Semester</b>															

\* This course will run for Group B/A in VII semester respectively.

\* This course will run for Group B/A in VII semester respectively. (Passing is optional, however a separate marksheet will be issued to those who qualify)

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

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

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SEMESTER - VI		
DE - 1	DE - 2 (Through SWAYAM/NPTEL)	OC - 1
110611 Wastewater Engineering	110651. Maintenance & Repair of Concrete Structures.	1. Building Physics
110612. Solid Waste Management	110652. Geotechnical Engineering II (Foundation Engineering).	2. Prefabricated Construction Technology
110613. Construction Planning & Management	110653. Energy Efficiency, Acoustics & Day lighting in Building.	

DEAN (ACADEMICS)

M.I.T.S

GWALIOR

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**Scheme of Examination**  
**B. Tech. VII Semester (Civil Engineering)**

**[For batch admitted in Academic Session 2017-18]**

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted						Total Marks	Contact Periods per Week			Total Credits	
				Theory Slot			Practical Slot		MOOCs		L	T	P		
				End Sem.	Mid Sem.	Quiz / Assignment	End Sem.	Lab Work / Sessional	Assignment						Exam
1.		DE	(DE-3)*	70	20	10	-	-			100	2	-	-	2
2.		DE	(DE-4)*	-	-	-	-	-							
3.		OC	(OC-2)*	70	20	10	-	-	25	75	100	2	-	-	2
4.		OC	(OC-3)*	70	20	10	-	-			100	2	1	-	3
5.	100008	MC	Intellectual Property rights (IPR) (MC)	70	20	10	-	-			100	3	-	-	3
6.	110701	DLC	Software Application for Solving Civil Engineering Problems (DLC-6)	-	-	-	50	50			100	-	-	4	2
7.	110702	DLC	Summer Internship Project - III (04 weeks) (Evaluation) (DLC-7)	-	-	-	50	50			100	-	-	4	2
8.	110703	DLC	Creative Problem Solving (Evaluation) (DLC-8)	-	-	-	25	25			50	-	-	2	1
<b>Total</b>				<b>280</b>	<b>80</b>	<b>40</b>	<b>125</b>	<b>125</b>	<b>25</b>	<b>75</b>	<b>750</b>	<b>11</b>	<b>1</b>	<b>10</b>	<b>17</b>
9.		Additional Courses for obtaining Honours or Minor Specialization by desirous students		Permitted to opt for <u>maximum 02 additional courses</u> for the award of Honours or Minor Specialization											

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

SEMESTER - VII			
DE - 3	DE - 4 (Through SWAYAM/NPTEL)	OC - 2	OC - 3
110711. Irrigation Engineering	110751. Matrix Methods of Structural Analysis	900201. Integrated Waste Management for Smart City	900213. Urban Planning & Transportation Systems
110712. Industrial Waste Treatment	110752. Advanced Concrete Technology	900202. Project Planning & Control	
110713. Advanced Structural Design (RCC)	110753. Remote Sensing & GIS		

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

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Scheme of Examination

B. Tech. VIII Semester (Civil Engineering)

[For batch admitted in Academic Session 2017-18]

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted						Total Marks	Contact Periods per Week			Total Credits	
				Theory Slot			Practical Slot		MOOCs		L	T	P		
				End Sem.	Mid Sem.	Quiz / Assignment	End Sem.	Lab Work / Sessional	Assignment						Exam
1.		DE	(DE-5)*	-	-	-	-	-	25	75	100	2	-	-	2
2.		OC	(OC-4)*	-	-	-	-	-	25	75	100	2	-	-	2
3.		OC	(OC-5)*	-	-	-	-	-	25	75	100	2	-	-	2
4.	110801 110804	DLC	Internship / Project (DLC-9)	-	-	-	250	150	-	-	400	-	-	-	6+2 = 8 3+1 = 4
5.	110802 110805	PD	Professional Development*	-	-	-	-	50	-	-	50	-	-	-	2-1 = 1 1
			<b>Total</b>	-	-	-	250	200	75	225	750	6	-	-	8+2 = 10 10+1 = 11
6.		Additional Courses for obtaining Honours or Minor Specialization by desirous students		Permitted to opt for <u>maximum 02 additional courses</u> for the award of Honours or Minor Specialization											

\*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, MOOCs and technical events)

SEMESTER - VIII		
DE - 5 (Through SWAYAM/NPTEL)	OC - 4 (Through SWAYAM/NPTEL)	OC - 5 (Through SWAYAM/NPTEL)
110851. Safety in Construction	900613 Plastic Waste Management	900617 Remote Sensing: Principles & Applications
110852. Introduction to Accounting & Finance for Civil Engineers	900614 Natural Hazards	DEAN (ACADEMICS) M.I.T.S GWALIOR
110853 Strategies for Sustainable Design		
110854 Natural Hazards		

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