

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

**Scheme of Examination**  
**GROUP X: I Semester**  
**B. Tech. I Semester (Civil Engineering)**

**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 Term Evaluation		Continuous Evaluation		End Sem Exam	Continuous Evaluation								
				End Sem Exam	Proficiency in subject /course	Mid Sem Exam	Quiz/Assignment		Lab Work & Sessional	Skill Based Mini Project							
1.	100011	BSC	Engineering Mathematics – I	50	10	20	20	-	-	-	100	3	1	-	4	Offline (4/0)	PP
2.	100012	BSC	Engineering Chemistry	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	MCQ
3.	100014	FSC	Engineering Graphics	50	10	20	20	-	-	-	100	1	2	-	3	Offline (3/0)	A+O
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 (1/0)	SO
7.	100018	FSC	Engineering Graphics Lab	-	-	-	-	60	20	20	100	-	-	2	1	Offline (1/0)	SO
<b>Total</b>				<b>250</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>180</b>	<b>60</b>	<b>60</b>	<b>800</b>	<b>12</b>	<b>4</b>	<b>6</b>	<b>19</b>	-	-

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

GROUP X: (Civil, Mechanical, Electrical and Automobile)

GROUP Y: (Electronics, Computer Science & Engineering, Information Technology, Electronics & Telecommunication, Chemical) 01 Theory

Period = 1 Credit; 02 Practical Periods = 1 Credit

MCQ - Multiple Choice Questions, PP - Pen paper Mode, A+O - Assignment + Oral, SO - Submission + Oral, CLC: College Level Course

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

Mode of Teaching					Mode of Examination				
Theory			Lab		Theory			Lab	
Offline	Online	Blended	Offline	PP	Offline	PP	A+O	MCQ	SO
4	3	6	3	-	3	-	6	3	19

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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**  
**GROUP X: II Semester**

**B. Tech. II Semester (Civil Engineering)**

**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 Term Evaluation		Continuous Evaluation		End Sem Exam	Continuous Evaluation								
				End Sem Exam	Proficiency in subject /course	Mid Sem Exam	Quiz/ Assignment		Lab Work & Sessional	Skill Based Mini Project							
1.	110211	DC	Building Planning & Design (DC - 1)	50	10	20	20	-	-	-	100	3	-	-	3	Blended (2/1)	PP
2.	100020	ESC	Basic Civil Engineering & Mechanics (ESC - 3)	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
3.	100021	ESC	Basic Mechanical Engineering (ESC - 4)	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	MCQ
4.	100022	ESC	Basic Electrical & Electronics Engineering (ESC - 5)	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	MCQ
5.	100023	ESC	Basic Computer Engineering (ESC - 6)	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	A+O
6.	100024	ESC	Manufacturing Practices (ESC - 7)	-	-	-	-	60	20	20	100	-	-	2	1	Offline (1/0)	SO
7.	100026	ESC	Basic Civil Engineering Lab (ESC - 8)	-	-	-	-	60	20	20	100	-	-	2	1	Offline (1/0)	SO
<b>Total</b>				<b>250</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>240</b>	<b>80</b>	<b>80</b>	<b>900</b>	<b>11</b>	<b>4</b>	<b>8</b>	<b>19</b>	-	-

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

# The certification/marksheet will be issued separately by examination cell.

Mode of Teaching				Mode of Examination				Total Credits	
Theory		Lab		Theory			Lab		
Offline	Online	Blended		Offline	PP	A+O	MCQ		SO
		Offline	Online						
-	-	10	5	4	6	3	6	4	19
-	-	53%	26%	21%	32%	15%	32%	21%	Credits %



**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**  
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**DEPARTMENT OF CIVIL ENGINEERING**  
**Scheme of Evaluation**

**B. Tech. III Semester (Civil Engineering)**

**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 Term Evaluation		Continuous Evaluation		End Sem Exam	Continuous Evaluation								
				End Sem Exam	Proficiency in subject /course	Mid Sem	Quiz/ Assignment		Lab Work & Sessional	Skill Based Mini Project							
1.	100025	BSC	Engineering Mathematics – II (BSC – 3)	50	10	20	20	-	-	-	100	2	1	-	3	Offline (3/0)	PP
2.	110311	DC	Building Materials & Construction (DC – 2)	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	PP
3.	110312	DC	Fluid Mechanics - I (DC – 3)	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	PP
4.	110313	DC	Surveying (DC – 4)	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
5.	110314	DC	Strength of Materials (DC – 5)	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	PP
6.	110315	DLC	Survey Practice Lab (DLC – 1)	-	-	-	-	60	20	20	100	-	-	2	1	Offline (1/0)	SO
7.	110316	DLC	Self-learning /Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	-	40	-	40	-	-	2	1	Online + Mentoring	SO
8.	200XXX	DC	Novel Engaging Course (Digital Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
9.	110317	DLC	Summer Internship Project-I (Institute Level) (Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline (2/0)	SO
<b>Total</b>				<b>250</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>350</b>	<b>120</b>	<b>80</b>	<b>1050</b>	<b>10</b>	<b>5</b>	<b>16</b>	<b>23</b>	-	-
10.	1000005	MAA	Project Management & Financing	50	10	20	20	-	-	-	100	2	-	-	Grade	Online	MCQ

\* compulsory registration for online course using SWAYAM/NPTEL/MOOC, evaluation through attendance, assignments and presentation

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

MCQ – Multiple Choice Questions, PP – Pen paper Mode, A+O – Assignment + Oral, SO – Submission + Oral

Mode of Teaching							Mode of Examination					Credits %
Theory				Lab/SIP	Seminar	NEC	Theory			Lab	SIP/SLP/NEC	
Offline	Online	Blended		Offline	Online Mentoring	Interactive	PP	A+O	MCQ	SO	SO	
		Offline	Online									
3	-	8	4	6	1	1	15	-	-	4	4	23
13%	-	35%	18%	26%	4%	4%	64%	-	-	18%	18%	Credits %

*Aditya*  
4/7/2022

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Civil Engineering Department, MITS Gwalior

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

*M. Kumar*  
04/07/2022

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

**DEPARTMENT OF CIVIL ENGINEERING**  
**Scheme of Evaluation**

**B. Tech. IV Semester (Civil Engineering)**

**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 Term Evaluation		Continuous Evaluation		End Sem Exam	Continuous Evaluation								
				End Sem Exam	Proficiency in subject /course	Mid Sem	Quiz/ Assignment		Lab Work & Sessional	Skill Based Mini Project							
1.	100028	BSC	Engineering Mathematics – III (BSC - 4)	50	10	20	20	-	-	-	100	2	1	-	3	Offline (3/0)	PP
2.	110411	DC	Geotechnical Engineering - I (DC - 6)	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	MCQ
3.	110412	DC	Theory of Structure - I (DC - 7)	50	10	20	20	-	-	-	100	2	1	-	3	Offline (3/0)	PP
4.	110413	DC	Transportation Engineering (DC - 8)	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	MCQ
5.	110414	DC	Water Resources Engineering (DC - 9)	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
6.	110415	DLC	Civil Drawing Lab (DLC - 2)	-	-	-	-	60	20	20	100	-	-	2	1	Offline (1/0)	SO
7.	100009	MC	Cyber Security	50	10	20	20	-	-	-	100	2	-	-	2	Online (0/2)	MCQ
8.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
<b>Total</b>				<b>300</b>	<b>60</b>	<b>120</b>	<b>120</b>	<b>290</b>	<b>60</b>	<b>60</b>	<b>950</b>	<b>12</b>	<b>5</b>	<b>8</b>	<b>21</b>	-	-
9.	1000001	MAC	Indian Constitution & Traditional Knowledge	50	10	20	20	-	-	-	100	2	-	-	Grade	Online	MCQ

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

<sup>5</sup>Proficiency in course/subject – includes the weightage towards ability/ skill/ competence /knowledge level /expertise attained /attendance etc. in that particular course/subject  
MCQ – Multiple Choice Questions, PP – Pen paper Mode, A+O – Assignment + Oral, SO – Submission + Oral

Mode of Teaching					Mode of Examination					Total Credits	
Theory		Blended	Lab	NEC	Theory			Lab	NEC		
Offline	Online				Offline	Interactive	PP				A+O
6	2	6	3	3	1	9	-	8	3	1	21
29%	10%	29%	14%	14%	4%	44%	-	38%	14%	4%	Credits %

*MHO*  
02/03/2022

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Civil Engineering Department, MITS Gwalior

**DEAN (ACADEMICS)**  
**MITS**  
**GWALIOR**



DEPARTMENT OF CIVIL ENGINEERING  
Scheme of Evaluation

B. Tech. V Semester (Civil Engineering)

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 Term Evaluation		Continuous Evaluation		End Sem Exam	Continuous Evaluation								
				End Sem Exam	Proficiency in subject /course	Mid Sem	Quiz/ Assignment		Lab Work & Sessional	Skill Based Mini Project							
1.	110520	MC	Data Science	50	10	20	20	60	20	20	200	3	0	2	4	Blended (2/1)	MCQ
2.	110511	DC	Water Supply Engineering (DC - 10)	50	10	20	20	60	20	20	200	2	1	2	4	Blended (2/1)	PP
3.	110512	DC	Theory of Structure – II (DC - 11)	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
4.	110513	DC	Structural Design & Drawing (RCC) (DC - 12)	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
5.	110514	DC	Fluid Mechanics – II (DC - 13)	50	10	20	20	-	-	-	100	2	1	-	3	Blended (2/1)	PP
6.	110515	DLC	Minor Project – I (DLC – 3)**	-	-	-	-	60	40	-	100	-	-	4	2	Offline (2/0)	SO
7.	110516	DLC	Self-learning /Presentation (SWAYAM /NPTEL/ MOOC)*	-	-	-	-	-	40	-	40	-	-	2	1	Online + Mentoring	SO
8.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
9.	110517	DLC	Summer Internship Project-II (Institute Level) (Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline (2/0)	SO
Total				250	50	100	100	290	120	40	950	11	4	16	23	-	-
10.	1000006	MAC	Disaster Management	50	10	20	20	-	-	-	100	2	-	-	Grade	Online	MCQ
Additional Courses for obtaining Honours or Minor Specialization				Permitted to opt for <u>maximum 02 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

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

MCQ – Multiple Choice Questions, PP – Pen paper Mode, A+O – Assignment + Oral, SO – Submission + Oral

Note: Students of 2020-21 admitted batch needs to appear and complete an additional MAC course of 30 Hrs. duration on Project Management & Financing / other modules related to futuristic technologies (Drones/ Robotics etc.)

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

Mode of Teaching					Mode of Examination							Total Credits
Theory		Lab	Seminar	NEC	Theory			Lab	SIP/SLP/NEC			
Offline	Online				PP	A+O	MCQ			SO	SO	
-	-	10	5	6	1	1	12	-	3	4	4	23
-	-	43%	22%	27%	4%	4%	52%	-	14%	17%	17%	Credits %

Civil Engineering Department, MITS Gwalior



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

M/O  
03/01/2024  
DEAN (ACADEMICS)  
M.I.T.S  
GWALIOR

**DEPARTMENT OF CIVIL ENGINEERING**  
Scheme of Evaluation  
B. Tech. VI Semester (Civil Engineering)

For batches admitted in academic session 2021-22

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			MOOCs				L	T	P			
				End Sem.	Mid Sem	Quiz/Assignment	End Sem	Lab Work & Sessional	Skill Based Mini Project	Assignment/Online	Exam	Exam							
1.	110620	MC	Artificial Intelligence & Machine Learning	50	10	20	20	60	20	20	Blended (2/1)	200	3	-	2	4	Blended (2/1)	MCQ	
2.	110621	DC	Wastewater Engineering(DC - 14)	50	10	20	20	-	-	-	Blended (2/1)	100	2	1	-	3	Blended (2/1)	PP	
3.	110622	DC	Structural Design & Drawing (Steel) (DC - 15)	50	10	20	20	-	-	-	Blended (2/1)	100	2	1	-	3	Blended (2/1)	PP	
4.	110623	DC	Estimating Costing & Contracting (DC - 16)	50	10	20	20	-	-	-	Blended (2/1)	100	2	1	-	3	Blended (2/1)	PP	
5.	1106XX	DE	Departmental Elective - I (DE - 1)*	-	-	75	-	-	-	-	Blended (2/1)	100	3	-	-	3	Online (0/3)	MCQ	
6.	910XXX	OC	Open Category Course - I (OC - 1)	50	10	20	20	-	-	-	Blended (2/1)	100	3	-	-	3	Blended (2/1)	PP	
7.	110624	DLC	Minor Project - II (DLC - 4)	-	-	-	-	60	40	-	Online (2/0)	100	-	-	4	2	Offline (2/0)	SO	
8.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	Interactive	50	-	-	2	1	Interactive	SO	
<b>Total</b>				<b>250</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>100</b>	<b>170</b>	<b>60</b>	<b>25</b>	<b>75</b>	<b>850</b>	<b>15</b>	<b>3</b>	<b>8</b>	<b>22</b>		
9.	1000007	MAC	Intellectual Property Rights	50	10	20	20	-	-	-	Online	100	2	-	-	Grade	Online	MCQ	

Additional Courses for obtaining Honours or Minor Specialization Permitted to opt for maximum 02 additional courses for the award of Honours or Minor Specialization

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

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

MCQ - Multiple Choice Questions, PP - Pen paper Mode, A+O - Assignment + Oral, SO - Submission + Oral

Course will run through SWAYAM/NPTEL/MOOC with credit transfer

Mode of Teaching					Mode of Examination					Total Credits
Theory		Lab	MOOC	NEC	Theory		Lab	SIP/SLP/NEC		
Offline	Online	Offline	Online Mentoring	Interactive	PP	A+O	MCQ	SO	SO	
-	-		3		3	1	12	-	6	3
-	-	13%	13%	5%	55%	-	27%	13%	5%	
Credits %										22

Departmental Elective I (SWAYAM/NPTEL) (DE-1)

- 110661, Geotechnical Engineering II - Foundation Engineering
- 110662, Concrete Technology
- 110663, Air Pollution & Control

Open Category Course - I (OC-1)

- 910111, Building Maintenance & Services
- 910110, Sustainable Materials & Green Buildings

Civil Engineering Department, MITS Gwalior





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

For batch admitted in academic session 2021 – 22

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			MOOCS			L	T	P			
				End Sem.	Proficiency in subject /course	Mid Sem	Quiz/Assignment	End Sem	Lab Work & Sessional	Skill Based Mini Project	Assignment	Exam							
1.	1107XX	DE	Departmental Elective - II (DE - 2)	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP
2.	1107XX	DE	Departmental Elective - III (DE - 3)*	-	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ
3.	1107XX	DE	Departmental Elective - IV (DE - 4)*	-	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ
4.	910XXX	OC	Open Category Course – II (OC - 2)	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP
5.	110716	DLC	Software Application for Solving Civil Engineering Problem (DLC - 5)	-	-	-	-	60	20	20	-	-	100	-	-	2	1	Offline	SO
6.	110717	DLC	Creative Problem Solving (DLC - 6)	-	-	-	-	25	25	-	-	-	50	-	-	2	1	Offline	SO
7.	110718	DLC	Summer Internship project – III (Evaluation)	-	-	-	-	60	-	-	-	-	60	-	-	4	2	Interactive	SO
Total				100	20	40	40	145	45	20	50	150	610	12	-	8	16	-	-
8.	1000008	MAC	Universal Human Values & Professional Ethics	50	10	20	20	-	-	-	-	-	100	2	-	-	Grade	Blended	MCQ

Additional Courses for obtaining Honours or Minor Specialization

Permitted to opt for maximum 02 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/attendance etc. in that particular course/subject  
 MCQ – Multiple Choice Questions, PP – Pen paper Mode, A+O – Assignment + Oral, SO – Submission + Oral

\*Course will run through SWAYAM/NPTEL/MOOC with credit transfer

Mode of Teaching						Mode of Examination					Total Credits
Theory			Lab	MOOC	SIP	Theory			Lab	SIP/SLP/NEC	
Offline	Online	Blended	Offline	Online Mentoring	Interactive	PP	A+O	MCQ	SO	SO	
-	-	6	2	6	2	6	-	6	2	2	16
-	-	37%	13%	37%	13%	37%	-	37%	13%	13%	Credits %

DE – 2	DE – 3 (Through SWAYAM/NPTEL)	DE – 4 (Through SWAYAM/ NPTEL)	OC – 2
110731. Hydraulic Structure	110761. Municipal Solid Waste Management	110765. Foundation Engineering	910211 Integrated Waste Management for Smart City
110732. Advanced Structural Design (RCC)	110763. Principles of Construction Management	110766. Remote Sensing & GIS	910212 Safety & Quality Management
110734. Industrial Waste Management	110767. Railway Engineering	110768. Indoor Air Pollution: Sources, Effects, Monitoring, Control and Modeling	

*Signature*  
19/10/2021

Civil Engineering Department, MITS Gwalior

*Signature*  
19/10/2021