



**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. I Semester CIVIL ENGINEERING**

**(for batch admitted in academic session 2023-24)**

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 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.	3100011	BSC	Engineering Mathematics-I (BSC - 1)	50	10	20	20	-	-	-	100	3	1	-	4	Offline	PP	2 Hrs
2.	3110121	ESC	Computer Programming (ESC - 1)	50	10	20	20	40	30	30	200	2	1	2	4	Blended	AO	2 Hrs
3.	3100014	ESC	Engineering Graphics (ESC - 2)	50	10	20	20	-	-	-	100	1	2	-	3	Offline	AO	2 Hrs
4.	3110122	DC	Building Materials & Construction (DC - 1)	50	10	20	20	40	30	30	200	3	-	2	4	Blended	PP	2 Hrs
5.	3110123	DC	Engineering Mechanics (DC - 2)	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs
6.	3100018	ESC	Engineering Graphics Lab (ESC - 3)	-	-	-	-	40	30	30	100	-	-	2	1	Offline	SO	-
<b>Total</b>				<b>250</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>120</b>	<b>90</b>	<b>90</b>	<b>800</b>	<b>12</b>	<b>4</b>	<b>6</b>	<b>19</b>			
7.	3000003	Natural Sciences & Skills	Environmental Engineering	50	10	20	20				100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs

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.

<sup>s</sup>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 Engineering / Language. Credits of natural Sciences & Skills will be added in 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	AO	MCQ	SO	19 Credits %
7		9	3	10	6		3	
37%		49%	16%	51%	33%		16%	

*M. K. Mehta*

*Dr. P. K. Singh*    *Suman*    *[Signature]*





Department of **Civil Engineering**  
**Scheme of Evaluation**  
**B. Tech. III Semester (CIVIL ENGINEERING)**

(for batch admitted in academic session 2023-24)

No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted							Total Marks	Contact Hours per week			Total Credits	Mode of Exam	Duration 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.	3100025	BSC	Engineering Mathematics - II (BSC - 2)	50	10	20	20	-	-	100	2	1	-	3	Blended	PP	2 Hrs	
2.	3110321	DC	Fluid Mechanics - I (DC - 5)	50	10	20	20	40	30	200	2	1	2	4	Blended	PP	2 Hrs	
3.	3110322	DC	Theory of Structure - I (DC - 6)	50	10	20	20	-	-	100	2	1	-	3	Blended	PP	2 Hrs	
4.	3110323	DC	Geotechnical Engineering (DC - 7)	50	10	20	20	40	30	200	2	1	2	4	Blended	MCQ	1.5 Hrs	
5.	3110324	DC	Transportation Engineering (DC - 8)	50	10	20	20	40	30	200	2	1	2	4	Blended	MCQ	1.5 Hrs	
6.	3110325	DLC	Self-learning/Presentation (SWAYAM/NPTEL/MOOC)*	-	-	-	-	-	40	40	-	-	2	1	Online Mentoring	SO	-	
7.	3110326	DLC	Summer Internship Project - I (Institute Level) (Evaluation)	-	-	-	-	60	-	60	-	-	4	2	Online	SO	-	
8.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	50	-	-	2	1	Interactive	SO	-	
Total				250	50	100	100	230	130	90	950	10	5	14	22	-	-	-
9.	1000005	MAC	Project Management & Financing	50	10	20	20	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs	
10.	3000001	Natural Sciences & Skills	Engineering Physics	50	10	20	20	30	10	150	1	-	2	GRADE	Blended	MCQ	1.5 Hrs	

skill

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

<sup>5</sup>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 Engineering/Language, Credits of natural Sciences & Skills will be added in VI Semester.

**NOTE:** Under Natural Science & Skills, Lateral Entry Admitted students have to appear for two courses in this semester: Engineering Physics & Environmental Engineering.

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

Mode of Examination											Total Credits
Theory				Lab/SIP			Theory				
Offline	Online	Blended	Online	Online Mentoring	Interactive	PP	AO	MCQ	Lab	SIP/SIP/NEC	
		15	5	1	1	9		6	3	4	22
		68%	23%	4.5%	4.5%	41%		27%	13%	19%	Credits %

Civil Engineering Department, MITS Gwalior

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 18/07/24  
 19/06/2024  
 16/7/24  
 Faculty of Engineering & Technology  
 MITS-DU



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

*For batches 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 (Offline/ Online)	Mode of Exam	Duration 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.	3100028	BSC	Engineering Mathematics – III (BSC-3)	50	10	20	20	-	-	-	100	3	1	-	4	Offline	PP	2 Hr.
2.	3110421	DC	Fluid Mechanics - II (DC - 9)	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP	2 Hr.
3.	3110422	DC	Theory of Structure - II (DC -10)	50	10	20	20	-	-	-	100	2	1	-	3	Offline	PP	2 Hr.
4.	3110423	DC	Water Supply Engineering (DC - 11)	50	10	20	20	40	30	30	200	2	1	2	4	Blended	PP	2 Hr.
5.	3110424	DC	Water Resources Engineering (DC – 12)	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP	2 Hr.
6.	3110425	DLC	Civil Drawing Lab (DLC – 3)	-	-	-	-	40	30	30	100	-	-	2	1	Offline	SO	-
7.	3110426	MC	Cyber Security	50	10	20	20	-	-	-	100	2	-	-	2	Online	MCQ	1.5 hr.
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>130</b>	<b>60</b>	<b>60</b>	<b>850</b>	<b>13</b>	<b>5</b>	<b>6</b>	<b>21</b>	-	-	-
9.	3000002	Natural Science & Skills	Engineering Chemistry	50	10	20	20	30	10	10	150	1	-	2	Grade	Blended	MCQ	1.5 hrs
10.	1000001	MAC	Indian Constitution & Traditional Knowledge	50	10	20	20	-	-	-	100	2	-	-	Grade	Online	MCQ	1.5 hrs

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

\*\*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)

NOTE: Under Natural Science & Skills, Lateral Entry Admitted students have to appear for two courses in this semester: Engineering Chemistry & Language.

Mode of Teaching					Mode of Examination					Total Credits
Theory		Blended	Lab	NEC	Theory			Lab	NEC	
Offline	Online		Offline	Interactive	PP	A+O	MCQ	SO	SO	
7	2	9	2	1	16	-	2	2	1	21
33%	9%	43%	9%	5%	76%	-	9%	9%	5%	Credits %

16/12/24

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

**B. Tech. V Semester (Civil 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 (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.	3110520	MC	Data Science	50	10	20	20	40	30	30	200	3	0	2	4	Blended	MCQ
2.	3110511	DC	Wastewater Engineering (DC - 10)	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP
3.	3110512	DC	Estimating Costing & Contracting (DC - 11)	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP
4.	3110513	DC	Structural Design & Drawing (RCC) (DC - 12)	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP
5.	3110514	DC	Railway, Airport and Tunnel Engineering (DC - 13)	50	10	20	20	-	-	-	100	2	1	-	3	Blended	PP
6.	3110515	DLC	Minor Project – I (DLC – 3)**	-	-	-	-	40	60	-	100	-	-	4	2	Offline	SO
7.	3110516	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.	3110517	DLC	Summer Internship Project-II (Institute Level) (Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline	SO
<b>Total</b>				<b>250</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>190</b>	<b>130</b>	<b>30</b>	<b>850</b>	<b>11</b>	<b>4</b>	<b>14</b>	<b>22</b>	-	-
10.	1000006	MAC	Disaster Management	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

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/ Robotcs 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 / SIP	Seminar	NEC	Theory			Lab	SIP/SLP/NEC	
Offline	Online	Blended	Offline	Online Mentoring	Interactive	PP	A+O	MCQ	SO	SO	
-	-	15	5	1	1	12	-	3	4	3	22
-	-	68%	23%	4.5%	4.5%	54%	-	14%	18%	14%	Credits %



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

For batches admitted in academic session 2023-24

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted									Contact Hours			Mode of Teaching (Offline/Online)	Mode of Exam	Duration of Exam			
				Theory Slot			Practical Slot			MOOC'S			per week								
				End Sem.	Mid Sem	Quiz/Assignment	End Sem	Lab Work & Sessional	Skill Based Mini Project	Assignment	Exam	Total Marks	L	T	P				Total Credits		
				End Term Evaluation	Proficiency in subject /course																
1.	3110620	MC	Artificial Intelligence & Machine Learning	50	10	20	20	40	30	30	-	-	200	3	-	2	4	Blended	MCQ	1.5 Hrs	
2.	3110621	DC	Solid & Hazardous Waste management (DC-14)	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	MCQ	1.5 Hrs	
3.	3110622	DC	Structural Design & Drawing (Steel) (DC-15)	50	10	20	20	-	-	-	-	-	100	3	1	-	4	Blended	PP	2 Hrs	
4.	31106XX	DE	Departmental Elective - I (DE-1) <sup>*</sup>	-	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	1 Hrs	
5.	910XXX	OC	Open Category Course - I (OC-1)	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs	
6.	3110623	DLC	Minor Project - II (DLC-07)	-	-	-	-	40	60	-	-	-	100	-	-	4	2	Offline	SO	-	
7.	300XXX	C.I.C	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	-	-	50	-	-	2	1	Interactive	SO	-	
8.		NSS	**Natural Sciences & Skills	200	40	80	80	120	40	40	-	-	600	1	-	2	2 <sup>*</sup>	-	-	-	
<b>Total</b>				<b>400</b>	<b>80</b>	<b>160</b>	<b>160</b>	<b>250</b>	<b>130</b>	<b>70</b>	<b>25</b>	<b>75</b>	<b>1350</b>	<b>15</b>	<b>1</b>	<b>8</b>	<b>22</b>				
9.	1000007	MAC	Intellectual Property Rights	50	10	20	20	-	-	-	-	-	100	2	-	-	-	Grade	Online	MCQ	1.5 Hrs

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 - II (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  
 \*\*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)

Mode of Teaching				Mode of Examination					SIP/SLP/NEC	Total Credits
Theory	Blended	Lab	MOOC	NEG	Theory	Lab	MOOC			
Offline	Online	Offline	Online Mentoring	Interactive	PP	A+O	MCQ	50	50	
			1	1	7	-	9	3	1	
			15%	5%	15%	-	45%	15%	5%	
			65%	15%					22	
									Credits %	

Departmental Elective I (SWAYAM/NPTEL) (DE-1)  
 1. 3110661, Geotechnical Engineering II - Foundation Engineering  
 2. 3110662, Remote Sensing and GIS for Rural Development

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Open Category Course - I (OC-1)  
 1. 910XXX, Infrastructure services and maintenance  
 2. 910219, Biomass Conversion Techniques  
 3. 910XXX, Soil Exploration  
 4. 910XXX, Renewable energy resources  
 5. 910XXX, Water Resources and Society