

**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

(A Govt. Aided UGC Autonomous Institute Affiliated to RGPV, Bhopal)

NAAC Accredited with A++ Grade

**Flexible  
Scheme  
2023-2024  
B.Tech.**

in

***Mathematics and Computing***



***Department of Engineering Mathematics and Computing***

**Madhav Institute of Technology & Science**

**Gwalior-474005**

# MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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## *Mathematics and Computing*

### Abbreviations used

<b>L</b>	<b>Lecture</b>
<b>T</b>	<b>Tutorial</b>
<b>P</b>	<b>Practical</b>
<b>HSMC</b>	<b>Humanities and Social Sciences including Management Courses</b>
<b>BSC</b>	<b>Basic Science Courses</b>
<b>ESC</b>	<b>Engineering Science Courses</b>
<b>DC</b>	<b>Departmental Core</b>
<b>DE</b>	<b>Departmental Elective</b>
<b>OC</b>	<b>Open Category</b>
<b>DLC</b>	<b>Departmental Laboratory Courses</b>
<b>MC</b>	<b>Mandatory Course</b>
<b>MOOC</b>	<b>Massive Open Online Courses</b>

### Definition of Credit:

<b>1 Hr. Lecture (L) per week</b>	<b>1 credit</b>
<b>1 Hr. Tutorial (T) per week</b>	<b>1 credit</b>
<b>2 Hours Practical(Lab)/week</b>	<b>1 credit</b>

*\*\*Minor variation is allowed as per need of the respective disciplines. Please consult the AICTE model curriculum as a standard reference, if needed.*

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## Department of Engineering Mathematics & Computing

### Scheme of Examination

### B. Tech. I Semester

(Admitted batch 2023)

S.No	Subject Code	Category Code	Subject Name	Maximum Marks Allotted							Total Marks	Contact Hours per week			Total Credits	Mode of Exam	Mode of Teaching
				Theory Slot				Practical Slot				L	T	P			
				End Sem.	Proficiency in subject /course	Mid Sem Exam.	Quiz/ Assignment	End Sem.	Lab work & Sessional	Skill Based Mini Project							
1.	3250121	DC	Introduction to Computing	50	10	20	20	-	-	-	100	3	-	-	3	MCQ	Blended (2/1)
2.	3250122	DC	Computer Programming	50	10	20	20	60	20	20	200	2	1	2	4	A+O	Blended (2/1)
3.	3250123	DC	Statistical Methods	50	10	20	20				100	3	1	-	4	PP	Off line
4.	3250124	DC	Element of Calculus	50	10	20	20	-	-	-	100	3	1	-	4	PP	Off line
5.	3250125	DC	Digital Logic Deign	50	10	20	20	-	-	-	100	3	-	-	3	MCQ	On line
6.	3250126	DLC	Computing Lab					60	20	20	100			2	1	SO	Off line
<b>Total</b>				<b>250</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>120</b>	<b>40</b>	<b>40</b>	<b>700</b>	<b>14</b>	<b>03</b>	<b>02</b>	<b>19</b>	<b>-</b>	
<b>7</b>	<b>3000004</b>	Natural Sciences & Skills	Language	50	10	20	20	30	10	10	150	1	-	2	Grade	Online	MCQ

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

Mode of Teaching						Mode of Examination					Total Credits
Theory				Lab	NEC	Theory			Lab	SIP/ SLP/ NEC	
Offline	Online	Blended		Offline	Interactive	PP	A+O	MCQ	SO	SO	
		Offline	Online								
8	3	4	2	2	-	2	1	2	1	-	19
42%	16%	21%	10.5%	10.5%	-	33.33%	16.66%	33.33%	16.66%	-	Credits %

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## Department of Engineering Mathematics & Computing

### Scheme of Examination

#### B. Tech. II Semester

(Admitted batch 2023)

S. No.	Subject Code	Category Code	Subject Name	End Sem.	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Exam	Mode of Teaching	Duration of Exam.
					Theory Slot			Practical Slot				L	T	P				
					<sup>3</sup> Proficiency in subject /course	Mid Sem Exam.	Quiz / Assignment	End Sem .	Lab work & Sessional	Skill Based Mini Project								
1	3250221	DC	Computer Architecture & Organization	50	10	20	20	-	-	-	100	2	1	-	3	PP	Offline	2
2	3250222	DC	Differential Equations	50	10	20	20	-	-	-	100	3	1	-	4	PP	Offline	2
3	3250223	DC	Object Oriented Methodology and Programming with C++	50	10	20	20	40	30	30	200	2	1	2	4	A+O	Offline	2
4	3250204	BSC	Linear Algebra	50	10	20	20	-	-	-	100	3	1	-	4	PP	Offline	2
5	3250225	DC	Simulation Modeling and Analysis	50	10	20	20	-	-	-	100	2	1	-	3	PP	Offline	2
6	3250226	DC	Computing Lab (R programming)					40	30	30	100			2	1	SO	Offline	
<b>Total</b>				<b>250</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>80</b>	<b>60</b>	<b>60</b>	<b>700</b>	<b>12</b>	<b>5</b>	<b>2</b>	<b>19</b>	-		
7	3000003	Natural Science & Skill	Environmental Engineering	50	10	20	20	30	10	10	150	1	-	2	<b>Grade</b>	Blended	MCQ	1.5

MCQ: Multiple Choice Question, AO: Assignment + Oral, OB: Open Book, P: Pen Paper, SO: Sessional and Oral

Mode of Teaching				Mode of Examination							Total Credits
Theory		Blended		Lab	Theory			Lab	SIP/ SLP/ NEC		
Offline	Online	Offline	Online	Offline	Interactive	PP	A+O	MCQ	SO	SO	
17	-	-	-	2	-	4	1	-	1	-	19
89.5%	-	-	-	10.5%	-	66.67%	16.66%	-	16.66%	-	Credits %

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