



**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**  
**(Deemed University)**  
**(Declared Under Distinct Category by Ministry of Education, Government of India)**  
**NAAC Accredited with A++ Grade**  
**Department of Engineering Mathematics & Computing**



**B.Tech. Scheme Admitted Batch 2024**

Recommended in the BoS Meeting of “Department of Engineering Mathematics & Computing” held on 06<sup>th</sup> June, 2025



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**Department of Engineering Mathematics & Computing**

**Semester-Wise General Scheme Structure & Important Guidelines for Flexible Curriculum**

**(Batch admitted in Academic Session 2024-25)**

**Abbreviations Used**

<b>L</b>	Lecture
<b>T</b>	Tutorial
<b>P</b>	Practical
<b>HSMC</b>	Humanities and Social Sciences including Management Courses
<b>BSC</b>	Basic Science Courses
<b>ESC</b>	Engineering Science Courses
<b>DC</b>	Departmental Core
<b>DE</b>	Departmental Elective
<b>OC</b>	Open Category
<b>DLC</b>	Departmental Laboratory Courses
<b>MOOC</b>	Massive Open Online Course
<b>MWS</b>	Mandatory Workshop
<b>SP</b>	Semester Proficiency
<b>SIP</b>	Skill Internship Program
<b>SLP</b>	Self-learning Presentation
<b>PSC</b>	Professional Skills & Competencies
<b>PDC</b>	Professional Development Component
<b>PBL</b>	Project Based Learning
<b>PC</b>	Professional Certification
<b>MAC</b>	Mandatory Audit Course
<b>NEC</b>	Novel Engaging Course

Recommended in the BoS Meeting of "Department of Engineering Mathematics & Computing" held on 06<sup>th</sup> June, 2025



# MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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## Department of Engineering Mathematics & Computing

Scheme of Evaluation

### B. Tech. I Semester (MAC)

(Tentative for 2024 batch admitted)



S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation
				Theory Block				Practical Block			L	T	P				
				Continuous Evaluation			Major Evaluation	Continuous Evaluation Lab Work & Sessional	Major Evaluation								
				Minor Evaluation I	Minor Evaluation II	Quiz/Assignment											
1.	25241101	DC	Introduction to Computing	20	20	30	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
2.	25241102	ESC	Computer Programming	20	20	30	30	-	-	100	2	-	-	2	Face to Face	MCQ	2 Hrs
3.	25241103	DC	Advanced Calculus	20	20	30	30	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
4.	25241104	DC	Digital Logic Design	20	20	30	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	25241105	BSC	Differential Equations	20	20	30	30	-	-	100	3	-	-	3	Face to Face	PP	2 Hrs
6.	25241106	DLC	Computer Programming Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	25241107	DLC	Computing Lab for Data Analysis	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	25241108	SP	Semester Proficiency <sup>§</sup>	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
9.	25241109	PBL	Micro Project-I <sup>#</sup>	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
10.	25241110	HSMC	Language Lab	-	-	-	-	70	30	100	-	-	2	1	Blended	AO	-
11.	NECXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
<b>Total</b>				<b>100</b>	<b>100</b>	<b>150</b>	<b>150</b>	<b>380</b>	<b>120</b>	<b>1000</b>	<b>12</b>	<b>03</b>	<b>10</b>	<b>20</b>	-	-	-
12.	25241111	MAC	Universal Human Values & Professional Ethics (UHVPE)	20	20	30	30	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
13.	25241112	MWS	Mandatory Workshop on Indian Constitution and Traditional Knowledge at Department Level (Duration: Two Days)										GRADE	Interactive	MCQ	-	
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.																	
Skill Internship Program (Soft Skill): Minimum 45 hours duration: To be credited in II Semester.																	

<sup>§</sup>Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

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

<sup>#</sup>Micro Project-I will be presented and evaluated through an interdisciplinary project evaluation committee.

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
1	1	1	3	0	0	0	2	1	1	0	0	0	1	1	1

Mode of Learning						Mode of Examination					Total Credits
Theory		NEC		Lab		Theory				Lab	
Face to Face	Online	Interactive	Blended	Experiential	Experimental	PP	AO	MCQ	OB	SO	
15	0	1	1	1	2	6	3	8	0	3	20
75%	0	5%	5%	5%	10%	30%	15%	40%	0	15%	Credits %



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**Department of Engineering Mathematics & Computing**  
**Scheme of Evaluation**

**B. Tech. II Semester (MAC)**

**(Tentative for 2024 batch admitted)**

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation
				Theory Block			Practical Block				L	T	P				
				Continuous Evaluation			Major Evaluation	Continuous Evaluation Lab Work & Sessional	Major Evaluation								
				Minor Evaluation I	Minor Evaluation II	Quiz/Assignment											
1.	25241201	DC	Object Oriented Programming & Methodology	20	20	30	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
2.	25241202	DC	Data Structures	20	20	30	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	25241203	DC	Numerical Techniques	20	20	30	30	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
4.	25241204	DC	Computer Organization & Architecture	20	20	30	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	25241205	DC	Linear Algebra	20	20	30	30	-	-	100	2	-	-	2	Face to Face	PP	2 Hrs
6.	25241206	DLC	Data Structures Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	25241207	DLC	Object Oriented Programming & Methodology Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	25241208	DLC	Numerical Computation using MATLAB	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
9.	25241209	SP	Semester Proficiency <sup>§</sup>	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
10.	25241210	PBL	Micro Project-II <sup>#</sup>	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
11.	NECXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
12.	SIPXXXX	SIP	Skill Internship Program (Soft Skill)	-	-	-	-	60	-	60	-	-	-	2**	Experiential	SO	-
<b>Total</b>				<b>100</b>	<b>100</b>	<b>150</b>	<b>150</b>	<b>440</b>	<b>120</b>	<b>1060</b>	<b>11</b>	<b>04</b>	<b>10</b>	<b>22</b>	-	-	-
13.	25241211	MAC	Sustainability & Environmental Science	20	20	30	30	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
14.	25241212	MWS	Mandatory Workshop on Indian Knowledge System at Department Level (Duration: Two Days)	-	-	-	-	-	-	-	-	-	-	GRADE	Interactive	MCQ	-

**Summer Semester of six-eight week duration will be conducted for makeup of I & II semester examination.**

<sup>§</sup>Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

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

**\*\*** These credits will be transferred from Skill Internship Program (Soft Skill).

**#** Micro Project-II will be presented and evaluated through an interdisciplinary project evaluation committee.

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	0	0	5	0	0	0	3	1	1	0	0	0	1	1	1

Mode of Learning						Mode of Examination					Total Credits
Theory		NEC		Lab		Theory				Lab	
Face to Face	Online	Interactive	Blended	Experiential	Experimental	PP	AO	MCQ	OB	SO	
15	0	1	0	3	3	5	3	9	0	5	22
68.18%	0	4.54%	0	13.64%	13.64%	22.72%	13.64%	40.91%	0	22.72%	Credits %

Recommended in the BoS Meeting of "Department of Engineering Mathematics & Computing" held on 06<sup>th</sup> June, 2025

**Scheme of Evaluation**



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**Department of Engineering Mathematics & Computing**  
**B. Tech. III Semester (MAC)**

**(Tentative for 2024 batch admitted)**

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation
				Theory Block				Practical Block			L	T	P				
				Continuous Evaluation			Major Evaluation	Continuous Evaluation Lab Work & Sessional	Major Evaluation								
				Minor Evaluation I	Minor Evaluation II	Quiz/Assignment											
1.	25242101	BSC	Simulation Modeling and Analysis	25	25	20	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
2.	25242102	DC	Operating Systems	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	2524103	DC	Discrete Mathematical Structures	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	25242104	DC	Design and Analysis of Algorithms	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	25242105	DC	Stochastic Process and Financing Mathematics	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
6.	25242106	DLC	Simulation Modeling and Analysis Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	25242107	DLC	Design and Analysis of Algorithms Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	25242108	DLC	Problem Solving through Python Programming	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
9.	25242109	SP	Semester Proficiency <sup>§</sup>	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
10.	25242110	PBL	Macro Project-I <sup>#</sup>	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
11.	25242111	SLP	Self-learning/Presentation <sup>\$\$\$</sup> (SWAYAM/NPTEL/MOOC)	-	-	-	-	40	-	40	-	-	2	1	Mentoring	SO	-
12.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
<b>Total</b>				<b>125</b>	<b>125</b>	<b>100</b>	<b>150</b>	<b>420</b>	<b>120</b>	<b>1040</b>	<b>11</b>	<b>05</b>	<b>12</b>	<b>22</b>	-	-	-
13.	25242112	MAC	Cyber Security	25	25	20	30	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs.
14.	25242113	MWS	Mandatory Workshop on Indian Knowledge System at Department Level	-	-	-	-	-	-	-	-	-	-	GRADE	Interactive	MCQ	-

**Skill Internship Program (Institute Level) (Qualifier): Minimum 30 hours duration: To be credited in IV Semester**

<sup>§</sup>Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

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

<sup>#</sup> Macro Project-I will be presented and evaluated through an interdisciplinary project evaluation committee.

<sup>\$\$\$</sup> Compulsory registration for one online course using SWAYAM/NPTEL/ MOOC, evaluation through attendance and presentation.

HSMC	BSC	ESC	DC	DE	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	1	0	4	0	0	3	1	1	0	1	0	1	1	1

Mode of Learning						Mode of Examination					Total Credits
Theory		NEC		Lab		Theory			Lab		
Face to Face	Online	Interactive	Mentoring	Experiential	Experimental	PP	AO	MCQ	OB	SO	
16	0	1	1	1	3	7.5	3	7.5	0	4	22
72.73%	0	4.54%	4.54 %	4.54 %	13.64%	34.09 %	13.64%	34.09 %	0	18.18 %	Credits %



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**Scheme of Evaluation**

**B. Tech. IV Semester (MAC)**

**(Tentative for 2024 batch admitted)**

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation	
				Theory Block			Practical Block			L	T	P					
				Continuous Evaluation			Major Evaluation	Continuous Evaluation									Major Evaluation
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment											
1.	25242201	DC	Data Science	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
2.	25242202	DC	Database Management System	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	25242203	DC	Software Engineering	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	25242204	BSC	Transforms and Vector Calculus	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	25242205	DC	Number Theory and Cryptography	25	25	20	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
6.	25242206	DLC	Data Science Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	25242207	DLC	Database Management System Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	25242208	DLC	Competitive Programming	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
9.	25242209	SP	Semester Proficiency <sup>§</sup>	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
10.	25242210	PBL	Macro Project-II <sup>#</sup>	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
11.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
12.	SIP3XXXX	SIP	Skill Internship Program (Evaluation)	-	-	-	-	60	-	60	-	-	-	2**	Experiential	SO	-
<b>Total</b>				<b>125</b>	<b>125</b>	<b>100</b>	<b>150</b>	<b>440</b>	<b>120</b>	<b>1110</b>	<b>11</b>	<b>05</b>	<b>10</b>	<b>23</b>	-	-	-
13.	25242211	MAC	Project Management, Economics & Financing	-	-	-	-	100	-	100	2	-	-	GRADE	Blended	SO	-
14.	25242212	MWS	Mandatory Workshop on Intellectual Property Rights at Department Level	-	-	-	-	-	-	-	-	-	-	GRADE	Interactive	MCQ	-

Summer Semester of six-eight week duration will be conducted for makeup of previous semester examination.

Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree

<sup>§</sup>Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

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

<sup>#</sup> Macro Project-II will be presented and evaluated through an interdisciplinary project evaluation committee. **\*\*** These credits will be transferred from Skill Internship Programme.

PC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	1	0	4	0	0	0	3	1	1	1	0	0	1	1	2
Mode of Learning							Mode of Examination							Total Credits	
Theory		Lab		Theory			Lab								
Face to Face	Online	Interactive	Blended	Experiential	Experimental	PP	AO	MCQ	OB	SO					
16	0	1	1	3	3	7.5	3	7.5	0	5	23				
66.66 %	0	4.17 %	4.17 %	12.5 %	12.5 %	32.60%	12.5 %	32.60 %	0	21.74 %	Credits %				

**Scheme of Evaluation**



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**Department of Engineering Mathematics & Computing**

**B. Tech. V Semester (MAC)**

**(Tentative for 2024 batch admitted)**

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted								Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation
				Theory Block				Practical Block		MOOCs			L	T	P				
				Continuous Evaluation			Major Evaluation	Continuous Evaluation Lab Work & Sessional	Major Evaluation	Assignment	Exam								
				Minor Evaluation I	Minor Evaluation II	Quiz/Assignment													
1.	25243101	DC	Computer Networks and Protocols	25	25	20	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
2.	25243102	DC	Theory of Computation	25	25	20	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	25243103	DC	Artificial Intelligence & Machine Learning	25	25	20	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	25243104	DC	Descriptive Statistics with R programming	25	25	20	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	25243105	DE	Departmental Elective* (DE-1)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
6.	25243106	DLC	Descriptive Statistics with R programming Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
7.	25243107	DLC	Artificial Intelligence & Machine Learning Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
8.	25243108	SP	Semester Proficiency <sup>§</sup>	-	-	-	-	50	-	-	-	50	-	-	2	1	Face to Face	SO	-
9.	25243109	PSC	Professional Skill & Competencies-I	-	-	-	-	70	30	-	-	100	-	-	4	2	Face to Face	MCQ	2 Hrs
10.	25243110	PBL	Cornerstone Project	-	-	-	-	70	30	-	-	100	-	-	4	2	Experiential	SO	-
<b>Total</b>				<b>100</b>	<b>100</b>	<b>80</b>	<b>120</b>	<b>330</b>	<b>120</b>	<b>25</b>	<b>75</b>	<b>950</b>	<b>11</b>	<b>04</b>	<b>14</b>	<b>22</b>	-	-	-
11.	25243111	MAC	Supply Chain Management	-	-	-	-	100	-	-	-	100	2	-	-	GRADE	Blended	SO	-
12.	25243112	MWS	Mandatory Workshop as per Annexure at Department Level	-	-	-	-	-	-	-	-	-	-	-	-	GRADE	Interactive	MCQ	-

**Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree**

<sup>§</sup>Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

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

\* Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PSC	PBL	MAC	MWS
0	0	0	4	1	0	0	2	0	1	0	0	0	1	1	1	1

Mode of Learning					Mode of Examination					Total Credits
Theory		Lab			Theory				Lab	
Face to Face	Online	Blended	Experiential	Experimental	PP	AO	MCQ	OB	SO	
13	3	0	2	2	6	2	9	0	3	20
65 %	15 %	0	10 %	10 %	30 %	10 %	45 %	0	15 %	Credits %



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**Scheme of Evaluation**

**B. Tech. VI Semester (MAC)**

**(Tentative for 2024 batch admitted)**

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted							Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation	
				Theory Block				Practical Block		MOOCs		L	T	P					
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation	Assignment									Exam
				Minor Evaluation I	Minor Evaluation II	Quiz/Assignment													
1.	25243201	DC	Compiler Design	25	25	20	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
2.	25243202	DC	Cloud Computing and Virtualization	25	25	20	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	25243203	DC	Data Mining & Warehouse	25	25	20	30	-	-	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
4.	25243204	DE	Departmental Elective* (DE-2)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
5.	25243205	OC	Open Category Course (OC-1)	25	25	20	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
6.	25243206	DLC	Cloud Computing and Virtualization Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
7.	25243207	DLC	Data Mining & Warehouse Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
8.	25243208	SP	Semester Proficiency <sup>\$</sup>	-	-	-	-	50	-	-	-	50	-	-	2	1	Face to Face	SO	-
9.	25243209	PC	Professional Certification	-	-	-	-	50	-	-	-	50	-	-	2	1	Blended	SO	-
10.	25243210	PSC	Professional Skill & Competencies-II	-	-	-	-	70	30	-	-	100	-	-	4	2	Face to Face	MCQ	2 Hrs
11.	25243211	PBL	Capstone Project	-	-	-	-	70	30	-	-	100	-	-	4	2	Experiential	SO	-
<b>Total</b>				<b>100</b>	<b>100</b>	<b>80</b>	<b>120</b>	<b>380</b>	<b>120</b>	<b>25</b>	<b>75</b>	<b>1000</b>	<b>12</b>	<b>03</b>	<b>16</b>	<b>23</b>	-	-	-
12.	25243212	MAC	Disaster Management and Preparedness	-	-	-	-	100	-	-	-	100	-	2	-	GRADE	Blended	SO	-
13.	25243213	MWS	Mandatory Workshop as per Annexure at Department Level	-	-	-	-	-	-	-	-	-	-	-	-	GRADE	Interactive	MCQ	-
Skill Enhancement Program/Research Internship/On Job Training for Four weeks duration																			
Summer Semester of six-eight week duration will be conducted for makeup of Previous semester examination.																			
Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree																			

<sup>\$</sup>Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

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

\* Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform

HSMC	BSC	ESC	DC	DE	PC	OC	DLC	NEC	SP	SIP	SLP	PDC	PSC	PBL	MAC	MWS
0	0	0	3	1	1	1	2	0	1	0	0	0	1	1	1	1

Mode of Learning					Mode of Examination				Total Credits	
Theory		Lab			Theory		Lab			
Face to Face	Online	Blended	Experiential	Experimental	PP	AO	MCQ	OB		SO
13	3	0	2	2						23
65 %	15 %	0	10 %	10 %						Credits %



**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**  
**(Deemed University)**  
**(Declared Under Distinct Category by Ministry of Education, Government of India)**



NAAC Accredited with A++ Grade

**Department of Engineering Mathematics & Computing**  
**Scheme of Evaluation**

**B. Tech. VII Semester (MAC)**

**(Tentative for 2024 batch admitted)**

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted								Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation
				Theory Block				Practical Block		MOOCs			L	T	P				
				Continuous Evaluation			Major Evaluation	Continuous Evaluation Lab Work & Sessional	Major Evaluation	Assignment	Exam								
				Minor Evaluation I	Minor Evaluation II	Quiz/Assignment													
1.	25244101	DE	Departmental Elective <sup>#</sup> (DE-3)	25	25	20	30	-	-	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
2.	25244102	DE	Departmental Elective* (DE-4)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
3.	25244103	OC	Open Category Course* (OC-2)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
4.	25244104	SEP	Skill Enhancement Program/Research Internship/On Job Training	-	-	-	-	-	50	-	-	50	-	-	-	1**	Face to Face	SO	-
5.	25244105	DLC	Creative Problem Solving	-	-	-	-	-	50	-	-	50	-	-	2	1	Experiential	SO	-
<b>Total</b>				<b>25</b>	<b>25</b>	<b>20</b>	<b>30</b>	<b>-</b>	<b>100</b>	<b>50</b>	<b>150</b>	<b>400</b>	<b>9</b>	<b>-</b>	<b>02</b>	<b>11</b>	<b>-</b>	<b>-</b>	<b>-</b>

Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree

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

\*Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform

\*\* These credits will be transferred from Skill Enhancement Program/Research Internship/On Job Training

# Course run through MITS-DU MOOCs

HSMC	BSC	ESC	DC	DE	OC	DLC	NEC	SEP	SIP	SLP	PDC	PBL	MAC	MWS
0	0	0	0	2	1	1	0	1	0	0	0	0	0	0

Mode of Learning					Mode of Examination				Total Credits
Theory		Lab			Theory			Lab	
Face to Face	Online	Blended	Experiential	Experimental	PP	AO	MCQ	OB	SO
10	3	0	1	0					
71.43 %	21.43 %	0	7.14 %						
<b>11</b>									
<b>Credits %</b>									



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**Department of Engineering Mathematics & Computing**  
**Scheme of Evaluation**

**B. Tech. VIII Semester (MAC)**

**(Tentative for 2025 batch admitted)**

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted								Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation
				Theory Block				Practical Block		MOOCs			L	T	P				
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation	Assignment	Exam								
				Minor Evaluation I	Minor Evaluation II	Quiz/Assignment													
1.	25244201	DE	Departmental Elective* (DE-5)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
2.	25244202	OC	Open Category Course* (OC-3)	-	-	-	-	-	-	25	75	100	3	-	-	2	Online	MCQ	3 Hrs
3.	25244203	PBL	Industry Internship/Research Internship/ Innovation & Start-up	-	-	-	-	280	120	-	-	400	-	-	20	10	Experiential	SO	-
4.	25244204	PDC	Professional Development <sup>##</sup>	-	-	-	-	-	50	-	-	50	-	-	4	2	Interactive	SO	-
<b>Total</b>				-	-	-	-	280	170	50	150	650	06	-	24	17	-	-	-

Summer Semester of six-eight week duration will be conducted to complete any backlog courses.

Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree

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

\*Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform

<sup>##</sup> 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 programme (participation in professional chapter activities, club activities, cultural events, sports, personality development activities, collaborative events, MOOCs, technical events, institute/department committees, etc.)

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0

Mode of Learning					Mode of Examination					Total Credits
Theory		Lab			Theory			Lab		
Face to Face	Online	Interactive	Experiential	Experimental	PP	AO	MCQ	OB	SO	
0	6	2	10	0	0	0	6	0	12	17
0	33.33 %	11.11	55.55 %	0	0	0	33.33 %	0	66.67 %	Credits %