



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 2025

Recommended in the BoS Meeting of “Department of Engineering Mathematics & Computing” held on 06th 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 2025-26 onwards)

Abbreviations Used

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

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Department of Engineering Mathematics & Computing

Scheme of Evaluation

B. Tech. I Semester (MAC)

(for 2025 batch admitted in academic session 2025-26)

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		Lab Work & Sessional									
1.	25251101	DC	Introduction to Computing	25	25	20	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
2.	25251102	ESC	Computer Programming	25	25	20	30	-	-	100	2	-	-	2	Face to Face	MCQ	2 Hrs
3.	25251103	DC	Advanced Calculus	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	25251104	DC	Digital Logic Design	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	25251105	BSC	Differential Equations	25	25	20	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
6.	25251106	DLC	Computer Programming Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	25251107	DLC	Computing Lab for Data Analysis	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	25251108	SP	Semester Proficiency ^{\$}	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
9.	25251109	PBL	Micro Project-I [#]	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
10.	25251110	HSMC	Language Lab	-	-	-	-	70	30	100	-	-	2	1	Blended	AO	-
11.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	-	2	1	Interactive	SO	-
Total				125	125	100	150	380	120	1000	12	02	12	20	-	-	-
12.	25251111	MAC	Universal Human Values & Professional Ethics (UHVPE)	25	25	20	30	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
13.	25251112	MWS	Mandatory Workshop on Report Writing at Department Level	-	-	-	-	30	-	-	-	-	-	GRADE	Interactive	MCQ	-
14.	25251113	MWS	Mandatory Workshop on Indian Constitution and Cultural Values at Department Level	-	-	-	-	30	-	-	-	-	-	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.

^{\$}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

[#] 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	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	
15	0	1	1	1	2	7	3	7	0	3	
75%	0	5%	5%	5%	10%	35%	15%	35%	0	15%	Credits %

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Department of Engineering Mathematics & Computing

Scheme of Evaluation

B. Tech. II Semester (MAC)

(for 2025 batch admitted in academic session 2025-26)



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									
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional									
1.	25251201	DC	Object Oriented Programming & Methodology	25	25	20	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
2.	25251202	DC	Data Structures	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	25251203	DC	Numerical Techniques	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	25251204	DC	Computer Organization & Architecture	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	25251205	DC	Linear Algebra	25	25	20	30	-	-	100	2	-	-	2	Face to Face	MCQ	2 Hrs
6.	25251206	DLC	Data Structures Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	25251207	DLC	Object Oriented Programming & Methodology Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	25251208	DLC	Numerical Computation using MATLAB	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
9.	25251209	SP	Semester Proficiency ^{\$}	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
10.	25251210	PBL	Micro Project-II [#]	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
11.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
12.	SIP1XXXX	SIP	Skill Internship Program (Soft Skill)	-	-	-	-	60	-	60	-	-	-	2**	Experiential	SO	-
Total				125	125	100	150	440	120	1060	11	04	10	22	-	-	-
13.	25251211	MAC	Sustainability & Environmental Science	25	25	20	30	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
14.	25251212	MWS	Mandatory Workshop on Indian Knowledge System at Department Level											GRADE	Interactive	MCQ	-
15.	25251213	MWS	Mandatory Workshop on Career Planning & Goal Setting 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.																	

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

^{\$}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	1	0	0	1	1	2

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	7	3	7	0	5	22
68.18%	0	4.54%	0	13.64%	13.64%	31.81%	13.64%	31.81 %	0	22.72 %	Credits %

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Department of Engineering Mathematics & Computing

Scheme of Evaluation

B. Tech. III 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									
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional									
1.	25252101	BSC	Simulation Modeling and Analysis	25	25	20	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
2.	25252102	DC	Operating Systems	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	25252103	DC	Discrete Mathematical Structures	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	25252104	DC	Design and Analysis of Algorithms	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	25252105	DC	Stochastic Process and Financing Mathematics	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
6.	25252106	DLC	Simulation Modeling and Analysis Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	25252107	DLC	Design and Analysis of Algorithms Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	25252108	DLC	Problem Solving through Python Programming	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
9.	25252109	SP	Semester Proficiency ^{\$}	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
10.	25252110	PBL	Macro Project-I [#]	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
11.	25252111	SLP	Self-learning/Presentation ^{\$\$\$} (SWAYAM/NPTEL/MOOC)	-	-	-	-	40	-	40	-	-	2	1	Mentoring	SO	-
12.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
Total				125	125	100	150	420	120	1040	11	05	12	22	-	-	-
13.	25252112	MAC	Cyber Security	25	25	20	30	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
14.	25252113	MWS	Mandatory Workshop on Mastering Competitive Success at Department Level											GRADE	Interactive	MCQ	-
Skill Internship Program (Institute Level) (Qualifier): Minimum 30 hours duration: To be credited in IV Semester																	

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

^{\$}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

[#] Macro Project-I will be presented and evaluated through an interdisciplinary project evaluation committee.

^{\$\$\$} 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	
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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Department of Engineering Mathematics & Computing

Scheme of Evaluation

B. Tech. IV 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									
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional									
1.	25252101	DC	Data Science	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
2.	25252102	DC	Database Management System	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	25252103	DC	Software Engineering	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	25252104	BSC	Transforms and Vector Calculus	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	25252105	DC	Number Theory and Cryptography	25	25	20	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
6.	25252106	DLC	Data Science Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	25252107	DLC	Database Management System Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	25252108	DLC	Competitive Programming	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
9.	25252109	SP	Semester Proficiency ^{\$}	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
10.	25252110	PBL	Macro Project-II [#]	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
11.	NECXXXX	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	-
Total				125	125	100	150	440	120	1110	11	05	12	23	-	-	-
13.	25252211	MAC	Project Management, Economics & Financing	25	25	20	30	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
14.	25252212	MWS	Mandatory Workshop on Writing Research Articles: Idea to Publication at Department level											GRADE	Interactive	MCQ	-
15.	25252213	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																	

^{\$}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

[#] 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		NEC		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		
66.66 %	0	4.17 %		4.17 %	12.5 %	12.5 %		32.60%	12.5 %	32.60 %	0		21.74 %	Credits %	



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Department of Engineering Mathematics & Computing

Scheme of Evaluation

B. Tech. V 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 Lab Work & Sessional	Major Evaluation	Assignment	Exam								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment													
1.	25253101	DC	Computer Networks and Protocols	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
2.	25253102	DC	Theory of Computation	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
3.	25253103	DC	Artificial Intelligence & Machine Learning	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	25253104	DC	Descriptive Statistics with R programming	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face		2 Hrs
5.	25253105	DE	Departmental Elective* (DE-1)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
6.	25253106	DLC	Descriptive Statistics with R programming Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
7.	25253107	DLC	Artificial Intelligence & Machine Learning Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
8.	25253108	SP	Semester Proficiency ^{\$}	-	-	-	-	50	-	-	-	50	-	-	2	1	Face to Face	SO	-
9.	25253109	PSC	Professional Skill & Competencies-I	-	-	-	-	70	30	-	-	100	-	-	4	2	Face to Face	MCQ	2 Hrs
10.	25253110	PBL	Cornerstone Project	-	-	-	-	70	30	-	-	100	-	-	4	2	Experiential	SO	-
Total				80	80	120	120	330	120	25	75	950	11	04	14	22	-	-	-
11.	25253111	MAC	Supply Chain Management	20	20	30	30	-	-			100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
12.	25253112	MWS	Mandatory Workshop on Internships: Explore, Apply and Excel 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

^{\$}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	
65 %	15 %	0	10 %	10 %	30 %	10 %	45 %	0	15 %	Credits %



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Department of Engineering Mathematics & Computing Scheme of Evaluation

B. Tech. VI 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									
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation	Assignment	Exam								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional											
1.	25253201	DC	Compiler Design	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
2.	25253202	DC	Cloud Computing and Virtualization	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	25253203	DC	Data Mining & Warehouse	20	20	30	30	-	-	-	-	100	3	-	-	3	Face to Face		2 Hrs
4.	25253204	DE	Departmental Elective* (DE-2)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
5.	25253205	OC	Open Category Course (OC-1)	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
6.	25253206	DLC	Cloud Computing and Virtualization Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
7.	25253207	DLC	Data Mining & Warehouse Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
8.	25253208	SP	Semester Proficiency ^{\$}	-	-	-	-	50	-	-	-	50	-	-	2	1	Face to Face	SO	-
9.	25253209	PC	Professional Certification	-	-	-	-	50	-	-	-	50	-	-	2	1	Blended	SO	-
10.	25253210	PSC	Professional Skill & Competencies-II	-	-	-	-	70	30	-	-	100	-	-	4	2	Face to Face	MCQ	2 Hrs
11.	25253211	PBL	Capstone Project	-	-	-	-	70	30	-	-	100	-	-	4	2	Experiential	SO	-
Total				80	80	120	120	380	120	25	75	1000	12	03	16	23	-	-	-
12.	25253212	MAC	Disaster Management	20	20	30	30	-	-	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
13.	25253213	MWS	Mandatory Workshop on Placement Readiness: Building Resume and Mastering Interview 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																			

^{\$}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	6	2	9	0	3	
65 %	15 %	0	10 %	10 %	30 %	10 %	45 %	0	15 %	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 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									
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation	Assignment	Exam								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional											
1.	25254101	DE	Departmental Elective [#] (DE-3)	20	20	30	30	-	-	-	-	100	3	-	-	3	Face to Face	PP	2 Hrs
2.	25254102	DE	Departmental Elective* (DE-4)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
3.	25254103	OC	Open Category Course* (OC-2)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
4.	25254104	SEP	Skill Enhancement Program/Research Internship/On Job Training	-	-	-	-	-	50	-	-	50	-	-	-	1**	Face to Face	SO	-
5.	25254105	DLC	Creative Problem Solving	-	-	-	-	-	50	-	-	50	-	-	2	1	Experiential	SO	-
Total				20	20	30	30	-	100	50	150	400	9	-	02	11	-	-	-
Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree																			

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	6	0	6		2	
71.43 %	21.43 %	0	7.14 %		42.86 %	42.86 %			14.28 %	Credits %



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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									
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation	Assignment	Exam								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment													
1.	25254201	DE	Departmental Elective* (DE-5)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
2.	25254202	OC	Open Category Course* (OC-3)	-	-	-	-	-	-	25	75	100	3	-	-	2	Online	MCQ	3 Hrs
3.	25254203	PBL	Industry Internship/Research Internship/ Innovation & Start-up	-	-	-	-	280	120	-	-	400	-	-	20	10	Experiential	SO	-
4.	25254204	PDC	Professional Development ^{##}	-	-	-	-	-	50	-	-	50	-	-	4	2	Interactive	SO	-
Total				-	-	-	-	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

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	
0	33.33 %	11.11	55.55 %	0	0	0	33.33 %	0	66.67 %	Credits %