



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

Deemed to be University

(Declared under Distinct Category by Ministry of Education, Government of India)

NAAC Accredited with A++ Grade

**Centre for Artificial Intelligence**

**ANNEXURE-VIII**

**Scheme**  
**of**  
**B. Tech III Semester**  
**[Information Technology (Artificial Intelligence and**  
**Robotics)/ Artificial Intelligence (AI) and Data**  
**Science/ Artificial Intelligence (AI) and Machine**  
**Learning]**  
*for batch admitted in 2023-24*  
**(under the flexible curriculum)**



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## Scheme of Evaluation

### B. Tech. III Semester (*Information Technology (Artificial Intelligence and Robotics)*)

*(for batch 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	Mode of Exam.	Duration of Exam.	
				Theory Slot			Practical Slot				End Sem. Exam.	L	T					P
				End Term Evaluation		Continuous Evaluation		Continuous Evaluation										
				End Sem. Exam	<sup>s</sup> Proficiency in subject /course	Mid Sem. Exam.	Quiz/ Assignment	Lab Work & Sessional	Skill Based Mini Project									
1.	250106	BSC	Probability and Random Process	50	10	20	20	-	-	-	100	3	1	-	4	Blended	PP	2 Hrs
2.	3240321	DC	Design & Analysis of Algorithms	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs
3.	3240322	DC	Python Programming	50	10	20	20	40	30	30	200	3	-	2	4	Blended	AO	2 Hrs
4.	3240323	DC	Robot Kinematics	50	10	20	20	40	30	30	200	3	-	2	4	Blended	PP	2 Hrs
5.	3240324	DC	Operating Systems	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs
6.	3240325	DLC	Robot Modeling and Simulation Lab	-	-	-	-	40	30	30	100	-	-	2	1	Offline	SO	-
7.	3240326	DLC	Self-learning/Presentation (SWAYAM/ NPTEL/MOOC)	-	-	-	-	-	40	-	40	-	-	2	1	Online and Mentoring	SO	-
8.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO	-
9.	3240327	DLC	Skill Internship Project-I (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>230</b>	<b>130</b>	<b>90</b>	<b>950</b>	<b>15</b>	<b>1</b>	<b>14</b>	<b>23</b>	-	-	-
10.	3000003	Natural Sciences & Skills	Environmental Engineering	50	10	20	20				100	2	-	-	Grade	Blended	MCQ	1.5 Hrs
11.	1000005	MAC	Project Management & Financing	50	10	20	20	-	-	-	100	2	-	-	Grade	Blended	MCQ	1.5 Hrs

<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 the VI Semester.

MCQ: Multiple Choice Question

AO: Assignment + Oral

PP: Pen Paper

SO: Submission + Oral

Mode of Teaching				Mode of Examination				Total Credits
Offline	Online and Mentoring	Blended	Interactive	PP	AO	MCQ	SO	
3	1	18	1	14	4	0	5	
<b>13.04</b>	<b>4.35</b>	<b>78.26</b>	<b>4.35</b>	<b>60.87</b>	<b>17.39</b>	<b>0</b>	<b>21.74</b>	<b>Credits %</b>



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## Scheme of Evaluation

### B. Tech. III Semester (*Artificial Intelligence (AI) and Data Science*)

**(for batch 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	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.	250106	BSC	Probability and Random Process	50	10	20	20	-	-	-	100	3	1	-	4	Blended	PP	2 Hrs
2.	3270321	DC	Design and Analysis of Algorithms	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs
3.	3270322	DC	Python Programming	50	10	20	20	40	30	30	200	3	-	2	4	Blended	AO	2 Hrs
4.	3270323	DC	Database Management System	50	10	20	20	40	30	30	200	3	-	2	4	Blended	PP	2 Hrs
5.	3270324	DC	Computer Networks	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs
6.	3270325	DLC	Competitive Programming Lab	-	-	-	-	40	30	30	100	-	-	2	1	Offline	SO	-
7.	3270326	DLC	Self-learning/Presentation (SWAYAM/ NPTEL/MOOC)	-	-	-	-	-	40	-	40	-	-	2	1	Online and Mentoring	SO	-
8.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO	-
9.	3270327	DLC	Skill Internship Project-I (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>230</b>	<b>130</b>	<b>90</b>	<b>950</b>	<b>15</b>	<b>1</b>	<b>14</b>	<b>23</b>	-	-	-
10.	3000003	Natural Sciences & Skills	Environmental Engineering	50	10	20	20	-	-	-	100	2	-	-	Grade	Blended	MCQ	1.5 Hrs
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**Credits of Natural Sciences & Skills will be added in the VI Semester**

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**AO: Assignment + Oral**

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Mode of Teaching				Mode of Examination				Total Credits
Offline	Online and Mentoring	Blended	Interactive	PP	AO	MCQ	SO	
3	1	18	1	14	4	0	5	<b>23</b>
<b>13.04</b>	<b>4.35</b>	<b>78.26</b>	<b>4.35</b>	<b>60.87</b>	<b>17.39</b>	<b>0</b>	<b>21.74</b>	<b>Credits %</b>



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				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.	250106	BSC	Probability and Random Process	50	10	20	20	-	-	-	100	3	1	-	4	Blended	PP	2 Hrs
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7.	3280326	DLC	Self-learning/Presentation (SWAYAM/ NPTEL/MOOC)	-	-	-	-	-	40	-	40	-	-	2	1	Online and Mentoring	SO	-
8.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO	-
9.	3280327	DLC	Skill Internship Project-I (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>230</b>	<b>130</b>	<b>90</b>	<b>950</b>	<b>15</b>	<b>1</b>	<b>14</b>	<b>23</b>	-	-	-
10.	3000003	Natural Sciences & Skills	Environmental Engineering	50	10	20	20				100	2	-	-	Grade	Blended	MCQ	1.5 Hrs
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### **B. Tech. III Semester (*Information Technology (Artificial Intelligence and Robotics)/ Artificial Intelligence (AI) and Data Science/ Artificial Intelligence (AI) and Machine Learning*)**

<b>List of courses offered under Self-learning/Presentation (SWAYAM/ NPTEL/MOOC)*</b>	
1.	C Programming and Assembly Language (4 Weeks)
2.	Demystifying Networking (4 Weeks)
3.	Introduction to Quantum Computing (4 Weeks)
4.	Foundation of Cognitive Robotics (4 Weeks)
5.	Ethics in Engineering Practice (8 Weeks)

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