Centre for Artificial Intelligence
Scheme of Evaluation
B. Tech. V Semester *(Information Technology (Artificial Intelligence and Robotics))*
(for batch admitted in academic session 2023 – 24)

S. No.	Subject Code	Category Code	Subject Name	Theory Slot — End Term Evaluation — End Sem. Exam.	Theory Slot — End Term Evaluation — $Proficiency in subject /course	Theory Slot — Continuous Evaluation — Mid Sem. Exam.	Theory Slot — Continuous Evaluation — Quiz/ Assignment	Practical Slot — End Sem. Exam.	Practical Slot — Continuous Evaluation — Lab work & Sessional	Practical Slot — Continuous Evaluation — Skill Based Mini Project	Total Marks	L	T	P	Total Credits	Mode of Teaching	Mode of Exam.
1.	3240521	DC	Software Engineering	50	10	20	20	-	-	-	100	3	-	-	3	Blended	MCQ
2.	3240522	DC	Data Science	50	10	20	20	40	30	30	200	3	-	2	4	Blended	MCQ
3.	3240523	DC	Theory of Computation	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP
4.	3240524	DC	Robot Operating System	50	10	20	20	40	30	30	200	3	-	2	4	Blended	PP
5.	3240525	DC	Soft Computing Techniques	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP
6.	3240526	DLC	Minor Project-I **	-	-	-	-	40	60	-	100	-	-	4	2	Offline	SO
7.	3240527	Seminar/ Self-Study	Self-learning/Presentation (SWAYAM/NPTEL/ MOOC)#	-	-	-	-	40	-	-	40	-	-	2	1	Online and Mentoring	SO
8.	300XXX	**CLC**	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
9.	3240528	DLC	Summer Internship Project-II (Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline	SO
			Total	250	50	100	100	270	120	60	950	15	-	16	23	-	-
10.	1000006	MAC	Disaster Management	50	10	20	20	-	-	-	100	2	-	-	GRADE	Blended	MCQ
Additional Course for Honours or minor Specialization			Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization														

$Proficiency in course/subject – includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in that particular course/subject

** The minor project-I may be evaluated by an internal committee for awarding sessional marks.

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

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	
4	1	17	1	10	0	7	6	23
17.39	4.35	73.91	4.35	43.48	0	30.43	26.09	**Credits %**

माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर (म.प्र.), भारत
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA
Deemed University
(Declared under Distinct Category by Ministry of Education, Government of India)
NAAC ACCREDITED WITH A++ GRADE

Centre for Artificial Intelligence
Scheme of Evaluation
B. Tech. V 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.
				Theory Slot				Practical Slot									
				End Term Evaluation		Continuous Evaluation		End Sem. Exam.	Continuous Evaluation			L	T	P			
				End Sem. Exam.	$Proficiency in subject /course	Mid Sem. Exam.	Quiz/ Assignment		Lab work & Sessional	Skill Based Mini Project							
1.	3270521	DC	Data Mining & Warehousing	50	10	20	20	-	-	-	100	3	-	-	3	Blended	MCQ
2.	3270522	DC	Data Science	50	10	20	20	40	30	30	200	3	-	2	4	Blended	MCQ
3.	3270523	DC	Compiler Design	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP
4.	3270524	DC	Statistical Programming with R	50	10	20	20	40	30	30	200	3	-	2	4	Blended	MCQ
5.	3270525	DC	Machine Learning & Optimization	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP
6.	3270526	DLC	Minor Project-I **	-	-	-	-	40	60	-	100	-	-	4	2	Offline	SO
7.	3270527	Seminar/ Self-Study	Self-learning/Presentation (SWAYAM/NPTEL/ MOOC)#	-	-	-	-	40	-	-	40	-	-	2	1	Online and Mentoring	SO
8.	300XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
9.	3270528	DLC	Summer Internship Project-II (Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline	SO
			Total	250	50	100	100	270	120	60	950	15	-	16	23	-	-
10.	1000006	MAC	Disaster Management	50	10	20	20	-	-	-	100	2	-	-	GRADE	Blended	MCQ
Additional Course for Honours or minor Specialization								Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization									

$Proficiency in course/subject – includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in that particular course/subject
** The minor project-I may be evaluated by an internal committee for awarding sessional marks.
# Compulsory registration for one online course using SWAYAM/NPTEL/ MOOC, evaluation through attendance, assignments and presentation
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	
4	1	17	1	9	0	8	6	23
17.39	4.35	73.91	4.35	39.13	0	34.78	26.09	Credits %

Centre for Artificial Intelligence
Scheme of Evaluation
B. Tech. V Semester *(Artificial Intelligence (AI) and Machine Learning)*
(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.
				Theory Slot				Practical Slot									
				End Term Evaluation		Continuous Evaluation		End Sem. Exam.	Continuous Evaluation			L	T	P			
				End Sem. Exam.	$Proficiency in subject /course	Mid Sem. Exam.	Quiz/ Assignment		Lab work & Sessional	Skill Based Mini Project							
1.	3280521	DC	Data Mining & Warehousing	50	10	20	20	-	-	-	100	3	-	-	3	Blended	MCQ
2.	3280522	DC	Data Science	50	10	20	20	40	30	30	200	3	-	2	4	Blended	MCQ
3.	3280523	DC	Compiler Design	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP
4.	3280524	DC	Statistical Programming with R	50	10	20	20	40	30	30	200	3	-	2	4	Blended	MCQ
5.	3280525	DC	Machine Learning & Optimization	50	10	20	20	-	-	-	100	3	-	-	3	Blended	PP
6.	3280526	DLC	Minor Project-I **	-	-	-	-	40	60	-	100	-	-	4	2	Offline	SO
7.	3280527	Seminar/ Self-Study	Self-learning/Presentation (SWAYAM/NPTEL/ MOOC)#	-	-	-	-	40	-	-	40	-	-	2	1	Online and Mentoring	SO
8.	300XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	50	-	-	2	1	Interactive	SO
9.	3280528	DLC	Summer Internship Project-II (Evaluation)	-	-	-	-	60	-	-	60	-	-	4	2	Offline	SO
			Total	250	50	100	100	270	120	60	950	15	-	16	23	-	-
10.	1000006	**MAC**	Disaster Management	50	10	20	20	-	-	-	100	2	-	-	GRADE	Blended	MCQ
	Additional Course for Honours or minor Specialization			Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization													

$**Proficiency in course/subject** – includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in that particular course/subject
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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	
4	1	17	1	9	0	8	6	23
17.39	4.35	73.91	4.35	39.13	0	34.78	26.09	Credits %

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Centre for Artificial Intelligence

B. Tech. V Semester *(Information Technology (Artificial Intelligence and Robotics)/ Artificial Intelligence (AI) and Data Science/ Artificial Intelligence (AI) and Machine Learning)*
(for batch admitted in academic session 2023 – 24)

	List of courses offered under Self-learning/Presentation (SWAYAM/ NPTEL/MOOC)*	
1.	Business Analytics & Data Mining Modeling using R Part II (4 weeks)	
2.	Demystifying Networking (4 weeks)	
3.	Introduction to Computer and Network Performance Analysis using Queuing Systems (4 weeks)	
4.	Introduction to Quantum Computing: Quantum Algorithms and Qiskit (4 weeks)	
5.	Mobile Virtual Reality and Artificial Intelligence(4 weeks)	
6.	Software Conceptual Design(4 weeks)	

Centre for Artificial Intelligence

List of courses to be opted for Honours in V Semester*

	B. Tech. V Semester *(Information Technology (Artificial Intelligence and Robotics)), (Artificial Intelligence (AI) and Data Science), (Artificial Intelligence (AI) and Machine Learning)* (for batch admitted in academic session 2023 – 24) *(to be opted by students of Parent Department)*		
Course Code	**Course Name**	**Course Code**	**Course Name**
Track 1: Information Security		**Track 2: Internet of Things**	
H24052701	Cyber Security and Privacy (12 Weeks)	H24052703	Introduction to Internet of Things (12 Weeks)
H24052702	Ethical Hacking (12 Weeks)	H24052704	Sensor Technology: Physics, Fabrication and Circuits (8 Weeks)
Track 3: High Performance Computing			
H24052705	Multi-Core Computer Architecture (12 Weeks)		
H24052706	Distributed System (12 Weeks)		

* Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform
Note: In each semester (starting from V to VIII semester), it is required to opt for new subjects towards Honours Degree/ Minor Specialization.

B. Tech. V Semester
(for batch admitted in academic session 2023 – 24)

Minor Specialization in Artificial Intelligence and Machine Learning* *(to be opted by students of other Department)*	
S. No.	**Course Name**
1	Fundamentals of Artificial Intelligence
2	Reinforcement Learning

* Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform
Note: In each semester (starting from V to VIII semester), it is required to opt for new subjects towards Honours Degree/ Minor Specialization.