

# Madhav Institute of Technology & Science Gwalior (M.P.) (A Govt. Aided UGC Autonomous Institute Affiliated to RGPV, Bhopal)

NAAC Accredited with A++ Grade

## **Centre for Artificial Intelligence**

#### **Scheme of Evaluation**

B. Tech. VI Semester (Information Technology (Artificial Intelligence and Robotics))

										(for	batch adı	mitted	in acad	emic	e ses.	sion	2021 -	22)	
							Maximur	n Mark	s Allotted					C	onta	ct			
					Theor	y Slot		1	Practical Si	ot	моо	Cs		1	ours p week				
S. No.	Subject Code	Category Code		End Term Evaluation			inuous uation	End	Contir Evalu				Total				Total	Mode of	Mode of
				End Sem. Exam.	sProficiency in subject /course	Mid Sem. Exam	Quiz/ Assign ment	Sem. Exam.	Lab work & Sessional	Skill Based Mini Project	Assignme nt	Exam	Marks	L	Т	P	Credits	Teaching	Exam.
1.	240601	DC	AI for Robotics	50	10	20	20	-	-	-	-	-	100	3	1	-	4	Blended	PP
2.	240602	DC	Image Processing	50	10	20	20	60	20	20	-	-	200	3	-	2	4	Blended	PP
3.	240603	DC	Artificial Intelligence & Machine Learning	50	10	20	20	60	,20	20	-	-	200	3	-	2	4	Blended	PP
4.	DE	DE	Departmental Elective* (DE-1)	-	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ
5.	OC	OC	Open Category (OC-1)	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP
6.	240604	DLC	Minor Project-II**	-	-	-	-	60	40	-	-	-	100	-	-	4	2	Offline	so
7.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	-	-	50	-	-	2	1	Interactive	
	Total				40	80	80	230	80	40	25	75	850	15	1	10	21	_	
8.	1000007	MAC	Intellectual Property Rights (IPR)	50	10	20	20	-	-	-	-	-	100	2	-	-	GRADE	Online	MCQ

Summer Internship-III (On Job Training) for Four weeks duration: Evaluation in VII Semester

Additional Course for Honours or minor Specialization

Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization

SProficiency in course/subject - includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in that particular course/subject MCQ: Multiple Choice Question AO: Assignment + Oral PP: Pen Paper SO: Submission + Oral

					•							
		Mode of Teach	ng									
0.00	Theory		Lab	NEC		Theory Lab NEC						
Offline	Offline Online Blended		Offline	Interactive	PP	AO	MCQ	so	so	Total Credits		
-	3	13	4	1	13	-	3	4	1	21		
	14.29	61.9	19.05	4.76	61.9	-	14.29	19.05	4.76	Credits %		











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### B. Tech. VI Semester (Information Technology (Artificial Intelligence and Robotics)) GWALIOR

		DE -1*
S. No.	Subject Code	Subject Name
1	240661	Embedded System Design With ARM
2	240662	Robotics: Basics and Selected Advanced Concepts
3	240663	Blockchain and its Applications
4	240664	Compiler Design

	OC-1											
S. No.	Subject Code	Subject Name										
1		Information Security										
2		Data Mining & Warehousing										

## List of courses to be opted for Honours in VI Semester

	Ho (to be opted by studen	<b>nours*</b> ats of Parent Departi	ment)
Course Code	Course Name	Course Code	Course Name
	Track 1: Information Security		Track 2: Internet of Things
HAI06241	Secure Computation: Part I	HAI06243	Sensors and actuators
HAI06242	Information Security- 5 - Secure Systems Engineering	HAI06244	Microprocessors and Microcontrollers
		HAI05233	Introduction To Internet Of Things
	Track 3: High Pe	rformance Computir	ng
HAI06245	Parallel Computer Architecture		
HAI06246	GPU Architectures and Programming		

<sup>\*</sup> 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.





Subject

Code

270601

270602

270603

DE

OC

270604

200XXX

1000007

1.

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4.

5.

7.

Category

Code

DC

DC

DC

DF.

OC

DLC

CLC

MAC

Total

Rights (IPR)

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## Centre for Artificial Intelligence

### **Scheme of Evaluation**

B. Tech. VI Semester (Artificial Intelligence (AI) and Data Science)



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								(fo	r batch a	idmitte	ed in ac	ader	nic s	essi	on 202.	(1 - 22)	
					Maximum	Marks	Allotted					-	onta				
		Theory Slot				1	Practical S	lot	МОС	OCs		Hours per week					
ry	Subject Name	End Term Evaluation			inuous uation	End	Contir Evalu				Total Marks		WEEK		Total Credits	Mode of Teaching	Mode of
		End Sem. Exam.	<sup>s</sup> Proficienc y in subject /course		Quiz/ Assign ment	Sem. Exam.	Lab work & Sessional	Skill Based Mini	Assignm ent	Exam	Marks	L	Т	P	Credits	reaching	·
	Data Mining & Warehousing	50	10	20	20	60	20	20	-,	-	200	2	I	2	4	Blended	PP
	Image Processing	50	10	20	20	60	20 .	20	-	-	200	3	-	2	4	Blended	PP
	Deep Learning	50	10	20	20	60	20	20	-	-	200	3	-	2	4	Blended	PP
	Departmental Elective* (DE-1)		-	-	-:	-	-	-	25	75	100	3	-	-	3	Online	MCQ
	Open Category (OC-1)	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP
	Minor Project-II**	-	-	-	, -	60	40	-	-	-	100	-	-	4	2	Offline	so
	Novel Engaging Course (Informal Learning)	-	<u>-</u>	-	-	50	-	-	-	-	50	-	-	2	1	Interactive	so
tal		200	40	80	80	290	100	60	25	75	950	14	1	12	21	-	-
	Intellectual Property	50	10	20	20	-	-	-	-	-	100	2	-	-	GRADE	Online	MCQ

Summer Internship-III (On Job Training) for Four weeks duration: Evaluation in VII Semester

Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization Additional Course for Honours or minor Specialization

Sproficiency in course/subject - includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in that particular course/subject PP: Pen Paner SO: Submission + Oral MCO: Multiple Chaige Question AO: Assignment + Oral

MCQ: Multiple	e Unoice Ouestior	1 AU: AS	signinem + Orai	Tr. renra	JCI 30. 5ul	mission · Orai					
	· N	Mode of Teach	ing								
	Theory		Lab	NEC		Theory	NEC	Total Credits			
Offline	Online	Blended	Offline	Interactive	PP	AO	MCQ	so	so		
_	2	12	5	1	12	-	3	5	1	21	
	14.29	57.14	23.81	4.76	57.14		14.29	23.81	4.76	Credits %	





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B. Tech. VI Semester (Artificial Intelligence (AI) and Data Science)

	DE -1*											
S. No.	Subject Code	Subject Name										
1	270661	Data Science for Engineers										
2	270662	Business Intelligence & Analytics										
3	270663	Blockchain and its Applications										
4	270664	Compiler Design										

		OC-1 GWALIOR
S. No.	Subject Code	Subject Name
1		Information Security
2		Data Mining & Warehousing

## List of courses to be opted for Honours or Minor specialization in VI Semester

	Honours <sup>3</sup> (to be opted by students of F		ent)			
Course Code	Course Name	Course Code	Course Name			
	Track 1: Information Security	Track 2: Internet of Things				
HAI06241	Secure Computation: Part I	HAI06243	Sensors and actuators			
HAI06242	Information Security- 5 - Secure Systems Engineering	HAI06244	Microprocessors and Microcontrollers			
		HAI05233	Introduction To Internet Of Things			
	Track 3: High Performa	nce Computing				
HA106245	Parallel Computer Architecture					
HAI06246	GPU Architectures and Programming					

<sup>\*</sup> 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.

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#### **Centre for Artificial Intelligence**

#### **Scheme of Evaluation**

B. Tech. VI Semester (Artificial Intelligence (AI) and Machine Learning) MITS

DEAN (ACADEMICS)

(for batch admitted in academic session 2021 - 22)

Γ							ľ	Maximum	Marks	Allotted		n builen			C	onta					
						Theory	Slot		P	ractical SI	ot	моо	Cs		1	Hours per week					
S		Subject Code	Categor v Code	Subject Name		Term uation	Conti Evalu		End	Contir Evalu				Total Marks				Total Credits	Mode of Teaching	Mode of Exam	
					End Sem. Exam.	<sup>s</sup> Proficienc y in subject /course	Mid Sem. Exam.	Quiz/ Assign ment	Sem. Exam.	Lab work & Sessional	Skill Based Mini Project	Assignm ent	Exam		L	Т	P				5
1	1.	280601	DC	Data Mining & Warehousing	50	10	20	20	60	20	20	-	-	100	2	1	2	4	Blended	PP	_
	2.	280602	DC	Image Processing	50	10	20	20	60	· 20	20	-"	-	200	3	-	2	4	Blended	PP	
3	3.	280603	DC	Deep Learning	50	10	20	20	60	20	20	-	-	200	3	-	2	4	Blended	PP	
-	١.	DE	DE	Departmental Elective* (DE-1)		-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	
5	5.	OC	ОС	Open Category (OC-1)	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP	
1	5.	280604	DLC	Minor Project-II**	-	-	-	-	60	40	-	-	-	100	-	-	4	2	Offline	so	
	7.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	-	-	50	-	-	2	1	Interactive	so	
	Total				200	40	80	80	290	100	60	25	75	950	14	1	12	21	-	-	
	Intellectual Property			Intellectual Property	50	10	20	20	-	-	-	-	-	100	2	-	-	GRADE	Online	MCQ	

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Additional Course for Honours or minor Specialization Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization

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MCO: Multiple Choice Question

AO: Assignment + Oral

PP: Pen Paper

SO: Submission + Oral

MCQ. N											
		Tode of Tenen		NEC		Theory		Lab	NEC	Total Credits	
Ota:		Blanded		Interactive	PP	AO	MCQ	SO	SO		
Offfine	Online	12	5	. 1	12	-	3	5	1	21	
-	3	57.14	22.01	4.76		-	14.29	23.81	4.76	Credits %	
	Offline	Theory	Mode of Teach   Theory	Mode of Teaching     Lab	Mode of Teaching	Mode of Teaching	Theory         Lab         NEC         Theory           Offline         Online         Blended         Offline         Interactive         PP         AO           -         3         12         5         1         12         -	Mode of Teaching	Mode of Teaching	Mode of Examination	

Town

X.

B-CAB

3 Pfs



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DEAN (ACADEMICS)

## B. Tech. VI Semester (Artificial Intelligence (AI) and Machine Learning)

DE -1*						
S. No.	Subject Code	Subject Name				
1	280661	Data Analytics with Python				
2	280662	Artificial Intelligence: Knowledge Representation And Reasoning				
3	280663	Blockchain and its Applications				
4	280664	Compiler Design				

OC-1 CWALIOR						
S. No.	Subject Code	Subject Name				
1		Information Security				
2		Data Mining & Warehousing				

## List of courses to be opted for Honours or Minor specialization in VI Semester

Honours* (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				
HAI06241	Secure Computation: Part I	HAI06243	Sensors and actuators			
HAI06242	Information Security- 5 - Secure Systems Engineering	HAI06244	Microprocessors and Microcontrollers			
		HAI05233	Introduction To Internet Of Things			
Track 3: High Performance Computing						
HAI06245	Parallel Computer Architecture	<u> </u>				
HAI06246	GPU Architectures and Programming	·				

\* 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.

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