

Vishwakarma Institute of Technology

Issue 1 Rev No 09 Dt 03/07/26

Title : Course Structure

FF No. 653_A

Branch : Artificial Intelligence and Data Science

Year: SY 2026-27

Academic Year :

Semester: I

Module: 3

Pattern:

SY 2025

Year: SY 2026-27																						
Level : 5																						
Course Code	NEP Course Category	Course Name	Teaching Scheme (Hrs./week)			Examination Scheme and Marks												Credits				
			Theory	Tutorial	Practical	CVV	CP	LAB/TUT	GD/PT	HA	MSE(W)	MSE(R)	MSE(O)	ESE(R)	ESE(W)	ESE(O)	PRACT+CVV	ESE-Direct Evaluation	Theory	Tutorial	Practical	Total
Semester I																						
AI2301	PCC	Data Structures	3		2		20								40		40		3		1	4
AI2302	PCC	Foundations of Intelligent Digital Systems	2		2	20	30	10							40				2		1	3
AI2303	PCC	Database Management Systems	2		2	20	30	10							40				2		1	3
AI2304	PCC	Discrete Structures and Computational Theory	2		2	20	30	10			40								2		1	3
MM0105	MDM	Augmented Reality and Virtual Reality	2	1		20	20			20	40								2	1		3
MM0106	MDM	Image Processing	2	1		20	20			20	40								2	1		3
MM0107	MDM	Computer Graphics	2	1		20	20			20	40								2	1		3
HS2002	HSSM-FCTC	From Campus to Corporate	2									50		50					1			2
HS2001	AEC-RAD	Reasoning and Aptitude Development-3	1														100		1			2
AI2305	VSEC-DT	Design Thinking- III		1													100		1			1
AI2306	FP-EDI	Engineering Design and Innovation-III										30		70								1
Total																						22

Abbreviations Used

PPT	Powerpoint Presentation
GD	Group Discussion
CVV	Comprehensive Viva Voce
LAB	Laboratory
TUT	Tutorial
CP	Course Project
PR	Practical
HA	Home Assignment
MSE	Mid Semester Examination
ESE	End Semester Examination
R /W /O	Review /Written/Online

BOS Chairman

Head, Department of Artificial Intelligence & Data Science
Vishwakarma Institute of Technology,
Pune-411037.



Dean Academics

Vishwakarma Institute of Technology

Title : Course Structure

Issue : 1 Rev No: 00 Dt: 03/07/26
FF No: 053_A

Branch :

Artificial Intelligence and Data Science

Year: TY Academic Year 26-27

Semester: I

Module: 5

Pattern: TY:2024

Level : 5.5																							
Course Code	NEP Course Category	Course Name	Teaching Scheme (Hrs./week)			Examination Scheme and Marks													Credits				
			Theory	Tutorial	Practical	CVV	CP	LAB/TUT	GD/PT	HA	MSE(W)	MSE(R)	MSE(O)	ESE(R)	ESE(W)	ESE(O)	PRACT+ CVV	ESE-Direct Evaluat	Theory	Tutorial	Practical	Total	
Semester __1																							
AI3201	PCC	Artificial Intelligence	3		2										40		40+20		3		1	4	
AI3202	PCC	Machine Learning	2		2	20	30	10							40				2		1	3	
AI3206C	PEC1	Machine Learning and Operations	3		2	20	40		20	20									3		1	4	
AI3206A	PEC1	Operating System	3		2	20	40		20	20									3		1	4	
AI3206B	PEC1	System programming	3		2	20	40		20	20									3		1	4	
ID3001	PEC1	Basics of Game Development	3		2	20	40		20	20									3		1	4	
AI04COURSERA	PEC2 (Coursera)	Coursera (MOOC Course)															100					3	
AI05COURSERA	OE1(Coursera)	Open Elective I (Coursera)															100					4	
MM0108A	MDM3	Blockchain	2	1			30		20	10					40				2		1	3	
MM0108B	MDM3	Internet of Things	2	1			30		20	10					40				2		1	3	
AI3205	VESC-DT	Design Thinking – 5		1													100			1		1	
AI3204	ERI	Engineering Research and Innovation										30				70		100				2	
Total			10	1	6																	24	

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R/W/O	Review / Written/Online

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Dean Academics

Vishwakarma Institute of Technology

Title : Course Structure

Issue 1 Rev No. 06 Dt: 03/07/24

FF No. 653_A

Branch : Artificial Intelligence and Data Science

Year: Btech Academic Year :2026-27

Semester: I

Module: 7

Pattern:

Btech : 2023

2026-27

Level :6

Course Code	NEP Course Category	Course Name	Teaching Scheme (Hrs./week)			Examination Scheme and Marks												Credits				
			Theory	Tutorial	Practical	CVV	CP	IA/RTU	GD/PT	HA	MSE (W)	MSE(R)	MSE(O)	ESE(R)	ESE (W)	ESE (O)	PRACT+ CVV	ESE-Direct Evaluation	Theory	Tutorial	Practical	Total
Semester I																						
AI4025	OE2	High Performance Computing								30						30						2
AI4015	OE2	Network Security								30						30						2
AI4007	OE3(Swayam)	Reinforcement Learning								30						30						2
AI4028	OE3(Swayam)	Introduction to Large Language Models								30						30						2
AI4005		Major Project								30						30						2
AI4023		Design Thinking - 7														30						9
MD4274	Linkedin	Large Language Models Skill Development																				1
MD4275		Mastering Microsoft Power BI																				
MD4276		Generative AI Skills for Developers																				
MD4277		Career in Data Analysis																				
MD4278		Concepts of Data Visualization and Storytelling																				
MD4279		AWS Certified Solutions Architect																				
MD4280		IT Security Specialist																				
MD4281		Technical Program Management																				
MD4282		Natural Language Processing Skill																				
MD4283		Prompt Engineering Skills																				
MD4284		Essentials in Generative AI																				
MD4285		Python in Finance																				
MD4286		Understanding Quantum Computing																				
MD4287		Foundational Maths for Machine Learning																				
Total																						16

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BOS Chairman

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Dean Academics

Vishwakarma Institute of Technology

Issue 1 : Rev No. 00 Dt: 03/07/26

Title : Course Structure

FF No. 653_A

Branch : Artificial Intelligence and
Data Science

Year:
Btech

Academic Year Semester: I
:2026-27

Module: 8

Pattern: Btech : 2023

Level :6																						
Course Code	NEP Course Category	Course Name	Teaching Scheme (Hrs./week)			Examination Scheme and Marks													Credits			
			Theory	Tutorial	Practical	CVV	CP	LAB/TUT	GD/PT	HA	MSE(W)	MSE(R)	MSE(O)	ESE(R)	ESE(W)	ESE(O)	PRACT + CVV	ESE-Direct Evaluation	Theory	Tutorial	Practical	Total
Semester I																						
AI4008		Industry Internship									30		70								15	
AI4009		Project Internship									30		70								15	
AI4010		Research Internship									30		70								15	
AI4011		International Internship									30		70								15	
AI4023		Design Thinking-7															100				1	
Total																					16	

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