

DAYANANDA SAGAR UNIVERSITY

SCHOOL OF ENGINEERING



**SCHEME & SYLLABUS FOR
MASTER OF TECHNOLOGY (M. Tech)**

**Artificial Intelligence
(1st to 4th Semester)**

Graduation Batch: 2026-2028

SCHEME - M. TECH – 2026-28
I SEM – ARTIFICIAL INTELLIGENCE

SL.NO	Course Type	Course Code	Course Name	Teaching Hours / Week				Examination			
				Lecture	Tutorial	Practical	Project	CIE Marks	SEE Marks	Total Marks	Credit
				L	T	P	J				
1	PCC	26AI5101	Mathematics for Machine Learning	3	1	0	0	60	40	100	04
2	IPCC	26AI5102	Advanced Data Structure	3	0	2	0	60	40	100	04
3	IPCC	26AI5103	Advanced Machine Learning	2	0	2	2	60	40	100	04
4	IPCC	26AI5104	Python for AI and Data Science	3	0	2	0	60	40	100	04
5	PCC	26AI5105	Responsible AI	3	0	0	0	60	40	100	03
6	PCC	26AI5106	Research Methodology & IPR	3	0	0	0	100	--	100	03
7	PrSI	26AI5107	Seminar-I	0	0	0	4	100	--	100	02
			Total	17	01	06	06				24

IPCC-Integrated Professional Core Course, PCC-Professional Core Courses, SEM-Seminar, L – Lecture, T – Tutorial, P – Practical, J –Project, C – No. Of Credits

II SEM – ARTIFICIAL INTELLIGENCE

SL	Course Type	Course Code	Course Name	Teaching Hours / Week				Examination			
				Lecture	Tutorial	Practical	Project	CIE Marks	SEE Marks	Total Marks	Credit
				L	T	P	J				
1	IPCC	26AI5201	Image Processing and Computer Vision	3	0	2	-	60	40	100	04
2	IPCC	26AI5202	Deep Learning	2	0	2	2	60	40	100	04
3	IPCC	26AI5203	Generative-AI	3	0	2	-	60	40	100	04
4	IPCC	26AI5204	MLOPS for Enterprises	3	0	2	-	60	40	100	04
5	PEC	26AI52XX	Professional Elective-I*	2	0	0	2	100	--	100	03
6	PEC	26AI52XX	Professional Elective-II*	2	0	0	2	100	--	100	03
7	PrSI	26AI5205	Seminar-II	-	-	-	4	100	--	100	02
			Total	15	00	08	10				24

IPCC-Integrated Professional Core Course, PEC-Professional Elective Courses, PrSI-Seminar, L – Lecture, T – Tutorial, P – Practical, J– Project, C – No. Of Credits

*indicates students need to carry out a mini project in the subject.

Professional Elective Courses –I (PEC-I) Domain										
Sl.No	Course Type	Course Name	Lecture	Tutorial	Practical	Project	CIE Marks	SEE Marks	Total Marks	Credit
			L	T	P	J				
1	PEC	Natural Language Models	2	0	0	2	100	--	100	03
2	PEC	Large Language Models	2	0	0	2	100	--	100	03
3	PEC	Social Media Analytics	2	0	0	2	100	--	100	03
4	PEC	Text and Speech Generation using Advanced Models	2	0	0	2	100	--	100	03
5	PEC	Computational Models	2	0	0	2	100	--	100	03
6	PEC	Cognitive Linguistics	2	0	0	2	100	--	100	03

Professional Elective Courses –II (PEC-II) Domain										
Sl. No	Course Type	Course Name	Lecture	Tutorial	Practical	Project	CIE Marks	SEE Marks	Total Marks	Credit
			L	T	P	J				
1	PEC	Accelerated Computing	2	0	0	2	100	--	100	03
2	PEC	Multi-Agent AI Systems	2	0	0	2	100	--	100	03
3	PEC	Visual Computing and Graphics	2	0	0	2	100	--	100	03
4	PEC	Robot Operating Systems (ROS)	2	0	0	2	100	--	100	03
5	PEC	AI for Autonomous Vehicles & Smart Mobility	2	0	0	2	100	--	100	03
6	PEC	Conversational AI and Spoken Language Understanding	2	0	0	2	100	--	100	03

III SEM – ARTIFICIAL INTELLIGENCE

Sl.No	Course Type	Course Code	Course Name	Teaching Hours / Week				Examination			
				Lecture	Tutorial	Practical	Project	CIE Marks	SEE Marks	Total Marks	Credit
				L	T	P	J				
1	PrSI	26AI6301	Capstone Project-I	-	-	-	12	60	40	100	06
2	PEC	26AI63XX	Professional Elective-III*	3	0	0	2	100	--	100	04
3	PEC	26AI63XX	Professional Elective-IV*	3	0	0	2	100	--	100	04
			Total	6	0	0	16				14

PrSI-Project Seminar and Internship, PEC-Professional Elective Courses, L – Lecture, T – Tutorial, P – Practical, J-Project, C – No. of Credits

*indicates students need to carry out a mini project in the subject.

Professional Elective Courses –III (PEC-III) Domain										
Sl. No	Course Type	Course Name	Lecture	Tutorial	Practical	Project	CIE Marks	SEE Marks	Total Marks	Credit
			L	T	P	J				
1	PEC	Edge AI and Robotics	3	0	0	02	100	--	100	04
2	PEC	Autonomous Agent AI systems	3	0	0	02	100	--	100	04
3	PEC	Intelligent Computational Imaging and Reconstruction	3	0	0	02	100	--	100	04
4	PEC	Autonomous Robotic Systems	3	0	0	02	100	--	100	04
5	PEC	AI for Agriculture	3	0	0	02	100	--	100	04
6	PEC	Building AI Applications with Large Language Models	3	0	0	02	100	--	100	04

Professional Elective Courses –IV (PEC-IV) Domain										
Sl. No	Course Type	Course Name	Lecture	Tutorial	Practical	Project	CIE Marks	SEE Marks	Total Marks	Credit
			L	T	P	J				
1	PEC	Deep Learning for Science and Engineering	3	0	0	02	100	--	100	04
2	PEC	Ethics, Safety & Governance of Agentic AI	3	0	0	02	100	--	100	04
3	PEC	Intelligent Video Surveillance Systems	3	0	0	02	100	--	100	04
4	PEC	Foundation Models for Robotics	3	0	0	02	100	--	100	04
5	PEC	Blockchain for Data Security	3	0	0	02	100	--	100	04
6	PEC	Multi modal and Multi lingual Language Perception	3	0	0	02	100	--	100	04

IV SEM – ARTIFICIAL INTELLIGENCE

SL	Course Type	Course Code	Course Name	Teaching Hours / Week				Examination			
				Lecture	Tutorial	Practical	Project	CIE Marks	SEE Marks	Total Marks	Credit
				L	T	P	J				
1	PrSI	26AI6401	Capstone Project-II	-	-	-	28	60	40	100	14
2	PrSI	26AI6402	Industry/Research Internship	-	-	-	8	100	-	100	04
			Total	-	-	-	36				18

PrSI-Project Seminar and Internship, L – Lecture, T – Tutorial, P – Practical, J – Project, C – No. Of Credits