5 Days (9th Dec 2024 – 14th Dec 2024) Workshop cum Training program on AI and ML by NIELIT Kurukshetra

This five-day training program organized at PM SHRI Kendriya Vidyalaya Paluwas, Bhiwani under PM Shri Yojana introduced the students to the emerging field of Artificial Intelligence (AI) and Machine Learning (ML).

The students who participated in this program not only gained technical knowledge but also got practical experience on advanced topics like Python Programming, Data Analytics, and Machine Learning Algorithms.

With the efforts of the Principal Sh. Mohinder Singh and the trainers of NIELIT, this program will play an important role in building the future of the students. Such initiatives not only provide technical skills to the students but also encourage confidence, innovation and creativity in them.

Day-Wise Training Summary

Day	Date	Topics Covered	Activities & Hands-on Work
Day 1	9th Dec 2024	**Introduction to AI** - What is AI? - AI Fundamentals - AI in Everyday Life - History & Evolution of AI - Types of AI: Narrow, General & Super AI - AI Applications	**Interactive Discussion**: Students discussed examples of AI from their daily lives (e.g., Alexa, Google Assistant). **Engagement Task:** Students were asked to identify AI-driven systems at home, school, and public areas. **Exploration of AI Sites**: Students explored AI-based platforms such as Quick Draw, Teachable Machine, and other AI-powered interactive sites to understand AI applications practically.
Day 2	10th Dec 2024	**Problem-Solving through Programming** - Need for Programming - Steps in Problem Solving - Concept of	**Hands-on Activity**: Students created flowcharts for simple problems(both daily life and mathematical), enabling them to visualize logical steps clearly and cultivate a structured, analytical mindset essential for effective algorithm design.

		Algorithms & Flowcharts - Flowchart Symbols	**Activity Work**: Students created simple algorithms for daily tasks (e.g., Brush Your Teeth, Cross the road) to understand the logical flow of instructions.
Day 3	11th Dec 2024	**Python Programming w.r.t. AI** - Overview of Python Language for AI/ML - Basics of Python: Variables, Data Types (numbers, strings, lists), and simple I/O operations	**Hands-on/Activity Work**: Students wrote basic Python scripts for simple tasks like printing messages, calculating sums, and handling simple I/O operations and simple string operations.
Day 4	13th Dec 2024	**Python Programming Constructs** - Lists in Python - Creating Lists, Accessing Elements, Adding/Removing Items - Control Structures	**Hands-on Task**: Students implemented programs using lists and control structures, such as looping over lists and modifying them. Practical exercises involved solving basic problems like CRUD operation on lists, reversing a list, and counting occurrences of elements, etc.
Day 5	14th Dec 2024	**Introduction to Machine Learning & Generative AI** - Machine Learning Concepts: Supervised vs. Unsupervised Learning - Workflow for Building an ML Model - Generative AI Overview - Introduction to AI Ethics	**Hands-on/Activity Work**: Students used the Teachable Machine tool to build a simple image classification model. **Interactive Exploration**: Students explored Generative AI applications and discussed AI ethics and its importance in modern AI systems.