

AGES
14 - 18

AI XPLORER

BEGINNER

Theme

Learning Objectives

1	AI: Ideas & Concepts	This experiential session provides students with an overview of the ideas and concepts of Artificial Intelligence.
2	Machine Learning in AI	Develop an AI Image Classification program, and train it using computer vision tools and Machine Learning to display human-like reactions.
3	Can AI recognize human actions?	Develop an AI Image classification program that will recognize and identify different human faces based on the data provided by the user.
4	Regular Expressions in Conversational Agents	Develop and train an AI system using regular expressions to understand the differences between past & present scenarios.
5	AI & Perception: Environmental Parameters	Explore the role of Sense Perception by developing an app to sense environmental parameters and program the app to make inquiries if any abnormalities in the environment are sensed.
6	How does AI use data for Video Recommendations?	Develop an app that will analyse video data and suggest similar products/things related to the content of the video data.
7	Create: AI program to obtain weather information	Create an AI program that can get weather information from different places around the world.
8	Create: AI program to track human gestures	Design a program to identify the position of human parts and also make the computer to track the identified human parts.
9	Create: AI program to track human poses	Design an AI system to track different human poses and display comprehension by showing the direction of the human movement.
10	Create: AI program to access internet	Design an AI system that can access internet and get information from wikipedia.
11	Create: AI & voice command recognition	Learn to code and create a program to play the "Find my Birthday" game using Speech Recognition tools.
12	AI and its impact on Society	Explore topics, concepts through various scenarios and Case Studies, and describe the ways that AI systems can be designed for inclusivity.
13	Capstone Projects	Design and work on own projects that incorporate AI to solve a problem using the PBL (Project Based Learning Framework). Instructors will guide the students using the Design Thinking philosophy.
14		