

MES Asmabi College, P Vemballur, Kodungallur

Department of Computer Application

Add-on Course (2023-24)

## **ARTIFICIAL INTELLIGENCE USING PYTHON**

### **Course Outcome**

#### **Course Outcomes (COs)**

Upon successful completion of this course, students will be able to:

1. **Understand Python Basics** – Demonstrate proficiency in Python programming, including variables, control statements, functions, and file handling.
2. **Implement Data Structures** – Apply data structures like lists, tuples, dictionaries, and sets for data processing.
3. **Manipulate Data Using Libraries** – Utilize libraries such as NumPy and Pandas for data manipulation and analysis.
4. **Perform Data Visualization** – Create meaningful visual representations using Matplotlib and Seaborn.
5. **Apply Machine Learning Algorithms** – Implement fundamental machine learning models using Scikit-learn.
6. **Develop Image Processing Applications** – Work with OpenCV, Pillow, and ImageAI for image analysis and recognition.
7. **Analyze Data Using Statistics & Regression** – Apply statistical concepts and regression techniques to analyze datasets.
8. **Work on NLP & Chatbot Development** – Implement NLP techniques using NLTK and develop chatbots using OpenAI models.
9. **Build Deep Learning Models** – Design and train neural network models using TensorFlow and Keras.
10. **Develop Real-Time AI Applications** – Create AI-based projects, including object recognition, human face analysis, and AI-powered automation.