

Audit Course (Engineering)
Faculty of Science and Technology,
Savitribai Phule Pune University, Pune

Machine Learning Using Python

Module 1: Basics of Python

The course will cover the basics of Python which include Object and Data Structure, Comparison Operators, Statements, Loops, Methods and Functions, Control Statement, Modules and Packages, Multithreading, Built in Functions with example, Python Operators, Generators, Python Database Operations, Data Analysis, Numpy, Data Analysis- Pandas with small projects in Python.

Module 2: Neural Networks Using Python:

Neural networks and algorithm using Python, which include,

Algorithm 1: Introduction to Machine Learning, Linear Regression in Machine Learning and Benefits of Linear Regression in real world scenario.

Algorithm 2: Logistic Regression in Machine Learning, working with logistic regression, nearest neighbour algorithm, how to do calculation to find neighbour node, puzzle and solution, decision tree algorithm, decision to find random node in data structure, case study and solution K mean cluster algorithm, K mean theory, Python Programming on K mean, K mean assignment and solution, natural language processing, NLP example and case study part 1, NLP real time case study from reporting project of MNC, assignment and solution, neural nets and deep learning, neural network theory, deep learning section, tensor flow, Multilayer perception, assignment and solution.