

SAINTGITS COLLEGE OF APPLIED SCIENCES PATHAMUTTOM, KOTTAYAM

Python and Machine Learning

Module 1:

Introduction to python, Variables, List, Tuple & Set, Help Path, Installation of Python, Data types in Python, Operators in Python: Arithmetic, Logic, Relational, Bitwise Operators, Swap two numbers using Single line, Constants, Mapping & Dictionaries in Python

Module 2:

Import statements, Working with Pycharm, Input statements in Python using input box (), Control statements: Decision Statements: if, if...else, else...if.... ladder, Switch, Iteration: While and for loop, Break & Continue.

Module 3:

Arrays in Python, Declaration of Array as List in One Dimension and Two-Dimension Array, Functions in Python-With and Without arguments. Arrays: Read values from users, Recursion in Python, Create and Import Python Libraries.

Module 4:

Data Visualization using Pyplot: Line Chart, Pie Chart and Bar Chart. Data Structures in Python: Lists, Stacks and Queues. Create Simple Games: Use Pygame.

Module 5:

What is Machine Learning, Applications, steps in ML, Which Technologies are used? Major issues in Data Mining, Data Mining Stages, Selection of target data, Introduce Dataset sources, Need for data preprocessing, Major tasks in preprocessing, Data Cleaning Learning Methods, Supervised Learning, Unsupervised Learning, Data mining), Clustering