



**Python & Machine learning**

**VALUE ADDED COURSE**

**2019-20**

**SUMMARY REPORT**

**Name of the Course:** Python & Machine learning

**Course Code:** VCPML011

**Offering Body:** SAINTGITS COLLEGE OF APPLIED SCIENCES

**No: of students who opted the course:** 60

**Batch, class and semester to which the course was offered:**

Batch	Class	Semester
2018-2021	BCA	3 <sup>rd</sup> semester

**Duration of the course:** 30 Hours

**Topics Covered:**



**CAMPUS**

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**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 0, 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 in data mining, Clustering

**Resource materials, Teaching Methodology:**

Power Point Presentation, Colab, Pycharm, Lab Session

**Outcome of the course:**

The course enables students to get proficiently in Python programming language and they will get strong foundation to the latest information on AI.

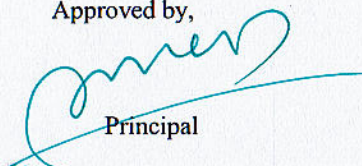
Prepared by,



VAC Coordinator



Approved by,



Principal

Dr. K. K. John  
Principal

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