

Report

on

3-days Workshop on "Python & Data Science"

from 02/08/23 to 04/08/23

Resource Persons Edureka Learning Centre Team Davangere

Placement Coordinator

Mr. Suprith P G

Verified by Dr. Praveen J Head of the Department

Checked by

Dr. Praveen J IQAC-Director Dr. Praveen J Professor & Head Dept. of Electronics and Comm. Engg. GM Institute of Technology Davangere - 577 006.

Checked by Dr. Sunil Kumar B S Dean Academics

Approved by Dr. Sanjay Pande M B Principal PRINCIPAL CM Institute of Technology

Davangere - 577 006,





Department of Electronics and Communication Engineering

Invitation

We cordially invite you for the

3-Days Workshop on "Python"

02th to 04st August 2023

Convener: Dr. Praveen J IQAC-Director Professor& Head Dept. of ECE, GMIT

President: Dr. Sanjay Pande M B Principal GMIT, Davangere

Resource Persons

Edureka Learning Centre Team Davangere

Mr. Tejasvi Kattimani T R Training & Placement Head Mr. Suprith P G Placement Co-ordinator

Organized By:

Department of Electronics and Communication Engineering

in association with Training and Placement Cell, GMIT, Davangere.

Venue: ISE Lab

Date: 02th August 2023 Time: 9:30 AM



Report of 3-Days hands-on workshop on "Python and Data Science"

"If there is no struggle, there is no progress."

The Department of Electronics & Communication Engineering & in association with Placement Department organized "3-Days hands-on Workshop on "**Python**" during 02/08/2023 to 04/08/2023 for 4th A Section in IS&E Department Laboratory.

Workshop Background Information:

The Department of ECE has always believed in a practical learning-based approach entrenched with ethical values. The department is persistently dedicated to provide a technical knowledge with high employability skills to the students. To fulfill the gap between industry and academia and meet our commitments, the department has planned in a pipe line of programs such as STTPs, Workshops, Webinars, remote hand on sessions in collaboration with Industries.

Today, Python improves digital marketing automation and operations. With its features and ability to process data, Python allows businesses to scale. This makes it an excellent tool for professionals today who look to gain a competitive edge in terms of industry skills.

To explore the power and simplicity of python & data science. This workshop was appreciated by all the students as they were able to add another programming language in their technical skill set. The trainer **Mr. Deeraj** and the team member of organization, has given the mix of theory and practical knowledge of python & data analytics.

Dr. Praveen J, HOD, Department of E&CE, **Mr. Tejaswini Kattimani**, Placement & Training Department Head, **Mr. Suprith P G**, Department Placement Co-coordinator and Edureka Learning Centre Team Davangere, inaugurated the workshop by lighting the lamp, also motivated the students with his speech and explained that these kinds of workshops are beneficial for their upcoming placements and technical knowledge.

Why was the Python programming language chosen for this workshop? There were three main reasons.



First, Python has an easy syntax. You won't waste a lot of time memorizing the arcane syntax that other programming languages will present you. Things like declaring variables, printing operations, and running loops have a very easy and intuitive code.

Second, Python has excellent code readability. Its code is so "English-like" that even a nonprogrammer might be able to understand what the code's purpose is. Also, it uses indentation to define separate blocks of code. This further enhances its readability and makes the code look cleaner.

Third, Python has tons of useful libraries like NumPy, Pandas, and Matplotlib. It makes things like computation of multidimensional arrays, creating manipulable objects from simple data and creating publication-quality plots and figures very easy without writing separate code for it. This is also the reason why Python has become very popular in the last few years because of its usefulness in AI and ML related fields.

DAY 1: 02/08/2023

Introduction students to python and were taught that python is simple programming language compared to other programming languages, and the following topics were covered.

1. What is python?

2. Applications of python (web applications, web frameworks, GUI based desktop applications etc.)

- Data types in python with programs.
- 4. Loops & conditions in python with programs.

DAY 2: 03/08/2023

Exception Handling, Multiple Exception Handling, information about Data Science in real life and how python is useful, Sample video based on Data Science which is performed by **Mr. Deeraj** sir.



- Following topics were covered:
- 1. String manipulation.
- 2. Lists in python with program.
- 3. Tuples.
- 4. Dictionaries in python with program.
- 5. Sets in python.
- 6. Range, Functions, Variables in python.
- 7. Modules in python.
- 8. Introduction to data analytics.
- 9. Applications of data analytics.
- 10. Use of data science in real time applications.

DAY 3: 04/08/2023

- 1. Explained how system identifies apple & orange based on texture, shape and weight.
- 2. Explained the mechanism how the Artificial Intelligence is trained by programs.
- 3. Exception handling in python with programs.
- 4. Numpy, Matplotlib, Classifier, Scikit learn.
- 5. GUI pramming in python

PYQT, PYGTK, PYGAME, TKINTER, WXPYTHON

7. GUI programs on:

Configuring widgets, Buttons, Multiple widget, Controlling widget appearance, Use of pack, Grid method, Text box input, Display image.

8. Lastly a task was given to students to make a login verification system using GUI program.

Srishyla Educational Trust (R), Bheemasamudra



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



Day 1: Inaugural



Day 1: Invocation Song





Day1: Workshop Started



Day 2: Python Workshop





Day 3: Hands training



Day 3: Talk by expert