



International Institute of Geospatial Science & Technology
(IIGST)

(A constituent unit of SAIARD)

Presents

Three Months Online Certificate Course on

7th Batch

Python Libraries

For GIS and Mapping

28th January, 2023 onwards



GOOGLE MEET

Knowledge Support

Areas to be covered are:

1. Introduction • 1.1 Why Python - Advantages and Disadvantages • 1.2 Why is Python called interpreted? • 1.3 Interesting facts and Features of Python • 1.4 Python Installation and various IDE • 1.5 Use of Python in GIS • 1.6 Let's start Python program

2. Basic Concepts • 2.1 Syntax and comments • 2.2 Variables, Data Types & Type Casting • 2.3 Basic operators and operations • 2.4 Decision Making and loops • 2.5 Data Structures & their methods • 2.5.1 Lists • 2.5.2 Tuples • 2.5.3 Sets • 2.5.4 Dictionary • 2.6 Functions • 2.7 Scope & Modules

3. Advanced Concepts • 3.1 OOP concepts • 3.2 Class & Objects • 3.3 Constructors in Python • 3.4 Method Overloading in Python • 3.5 isinstance in Python • 3.6 Descriptors • 3.7 Multiprocessing and multithreading in Python • 3.8 Database Access • 3.9 XML processing

4. Python In GIS • 4.1 Introducing Python Using the Python Window in ArcGIS • 4.2 Introducing ArcPy and using ArcPy Modules • 4.3 GIS data access and manipulation with Python • 4.4 Python for GIS analysts • 4.5 Approach of python scripting in GIS • 4.6 Introduction of PyQgis • 4.7 Introduction to open-source Libraries handling Geospatial data • 4.8 GDAL/OGR • 4.9 GEOPANDAS • 4.10 RASTERIO • 4.11 OPENCV

The course curriculum followed

This two weeks capacity building program includes: theory practical (hands on training sessions) with interactive sessions with experts and project work.

- 📄 Tutorials with data
- 📄 Teaching and learning resources

The main features of this program is : Structured curriculum with a tentative program schedule.

Class Timing: 7.00–8.30 pm

Application Link: <https://forms.gle/tG4QXfP8vh2q9F1n6>

Registration Fees: 1200/- (INR)

Bank Details:

Just scan the QR code & pay or pay in the given bank account

Bank- SBI

Account No- 38377901244

IFSC Code- SBIN0016629

Beneficiary Name- SAIARD



E-Certificate will be provided on behalf of IIGST

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