National Institute of Electronics and Information Technology

(An ISO 9001:2015 certified Organization)
Ministry of Electronics and Information Technology
Government of India

Online Course Prospectus

Data Science using Python

Course Description

Explore the dynamic realm of data science with Python in this comprehensive course. Acquire essential skills in data manipulation, statistical analysis, and machine learning using popular Python libraries such as NumPy, Pandas, and Scikit-learn. Dive into hands-on projects, mastering data cleaning, visualization, and predictive modeling. Harness the power of Python for effective data exploration and gain proficiency in extracting meaningful insights from complex datasets. Whether you're a beginner or an aspiring data scientist, this course provides a solid foundation for leveraging Python's versatility in transforming raw data into actionable intelligence. Elevate your analytical prowess and embark on a rewarding journey into the world of data science.

Click Here to Register

OR

Scan QR Code

Who can attend?

Anyone who is interested to build their career in Python Programming, including:
- Beginners
- Professionals looking to upgrade their knowledge and expertise in this area.
- Students who wish to pursue a career in Python Programming.

Course Content

- ❖ Introduction to Python
  - History of Python
  - Python Installation, Identifier
  - Indentation, variables and Operators
- ❖ Conditional Statements, Looping, Control Statements
  - If Statements
  - for and while loops
  - continue and break Statements
- ❖ String Manipulation
  - String
  - Build-in-methods
- ❖ Collections
  - Lists, Tuples
  - Set, Dictionary
- ❖ Functions
  - Function Definition, Calling Function
  - Function Arguments, Anonymous Function
- ❖ Modules/Packages
  - Pre-define
  - User define
- ❖ Input-Output
  - Input function
  - File object Attributes
  - Directories in Python
- ❖ Classes and Object
  - Class
  - Inheritance
- ❖ Database Connectivity
- ❖ GUI Programming
  - Tkinter Programming
- ❖ NumPy
  - Introduction to Numpy
  - Numpy Array
- ❖ Matplotlib
  - Introduction to Matplolib
  - Visualizing using Python
  - Matplotlib Pyplot, Plotting, Markers, Labels and Title, Grid Lines, Subplot, Scatter etc.
- ❖ Pandas
  - Introduction to Pandas
  - Pandas Series, Data Frames, Read CSV, Read JSON & Analyzing Data

Prerequisite
 Basic Computer Knowledge.

Duration
- ❖ 4 Weeks (without project) / 6 Weeks (with project)

The internship/industrial training programme includes about 40 Hrs of intensive interactive instructor-led online sessions and about 60 Hrs of practical assignments that student can perform at their end. In some training programmes, the facility of virtual lab can also be extended subject to availability. The six weeks programme includes two weeks (20 Hrs.) of project that student is required to develop and a presentation is to be made by student (in Online mode) to the faculty.

Certificate
e-certificate will be issued to each participant after completion of the training. The participant needs to maintain minimum 75% attendance during the online classes and is required to score minimum 50% marks in the online test in order to successfully complete the course.

Preferable Requirements
- ❖ A computer with an internet connection and download privileges.
- ❖ Student must latest computer/laptop with preferably 4 GB RAM or higher
- ❖ Software: Python (can be downloaded from official website – https://python.org)

How to Apply

Interested candidates may apply online on the link https://nielit.gov.in/haridwar/content/online-courses after submitting the Course Fee in following account:

Name	NIELIT Haridwar
Account Number	12922122001331
IFSC Code	PUNB0129210
Bank Name	Punjab National Bank
Branch	Pentagon Mall, SIDCUL, Haridwar

NOTE: Copy of transaction slip is required to be uploaded at the time of filling online form. Candidate may keep a copy of the same for future reference.

Terms and Conditions

1. In case, any registered candidate could not attend the online session due to technical issue at their side there will not be any refund of the course fee and the sessions will not be repeated.

2. In case, the online course is cancelled/postponed due to some technical issue at NIELIT side and new date is not convenient to the candidate, our liability is limited to the refund of the course fee and NIELIT shall not be responsible for any consequential damages.

Course Coordinator

Mr. Kailash Chandra Joshi
Ph: 8171627088
Email : haridwar@nielit.gov.in

Faculty Profile

Mr. Vinod Kumar Gupta, BCA, MCA and 20 years Experience in field of Python Programming & Data Science.

NIELIT Haridwar is the Regional Centre of NIELIT in the state of Uttarakhand and is situated in SIDCUL Haridwar. It is well known for the advanced training programmes in the areas of Future Skills such as **Cloud Computing, Machine Learning, Artificial Intelligence, Internet of Things, MATLAB, Big Data, Embedded Systems etc** in addition to the various National Skill Qualification Framework (NSQF) aligned long-term and short-term courses in Electronics & Information Technology. The Centre has **MOUs** with various prestigious institutions and Universities of Uttarakhand for academic collaboration, technical support, summer/industrial training and internships of the students. The Centre provides a conductive learning environment with the state-of-the-art infrastructure and expert faculties.

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