NIELIT Chandigarh

Python with Data Science and Machine Learning

About NIELIT

National Institute of Electronics and Information Technology, is an autonomous Scientific Society of Ministry of Electronics & Information Technology (MeitY), Government of India. NIELIT Chandigarh was established in 1978 to provide professional services in the areas of Information, Electronics & Communication Technology (IECT). NIELIT Chandigarh is engaged in development of industry oriented quality education and training programmes in the state-of-the-art areas.

About Course

This course will cover the Python Programming and its fundamental data structures. Students will learn how to program and work on data science libraries like numpy and pandas, apply data analysis, data cleaning techniques, data visualisation. The concept of Machine Learning, its models and implementation of its algorithms will be covered.

Course Objective

The participants will learn Python, its programming and working on various data structures. The libraries for data science will be learnt and use the data to plot graphs. The participant will learn various Machine Learning models and applying them.

Brief Contents

❖ *Python – Introduction, Installation, Anaconda*
❖ *Python Language and its programming constructs*
❖ *Python data structures: Strings, Lists, Tuples and Dictionary*
❖ *Numpy Library for n-dimensional arrays*
❖ *Data Science concepts – Loading data and cleaning data*
❖ *Pandas Library for Analytics, Calling Functions*
❖ *Data Preparation, Feature Engineering, Feature Scaling, Data Munging, Data Cleaning, EDA*

❖ *Visualisation of data through Matplotlib*
❖ *Machine Learning Categories*
❖ *Machine Learning Models, Classification, Regression Concepts, Cost Functions, Gradient Descent*
❖ *Models Evaluation and Performance*
❖ *Applying various models, Introduction to NLTK*

Eligibility	**Open to All**	Duration	**6 Weeks**	Fees	**Rs.3100+ GST 558**

For further details, Contact:

Permanent Campus
Bada Phull, Birla Farms, Ropar-140001
Phone: 01881-257005,257006

Facility at Chandigarh
IETE Building, Sector 30-B, Chandigarh 160030
Phone: 0172-2650121

Faculty : Anita Budhiraja 9815988717   Sarwan Singh 7087235355   Suman 8894014655

Email: dir-chandigarh@nielit.gov.in   *Visit: www.nielit.gov.in/chandigarh*