COURSE SYLLABUS

FinTech Bootcamp

Learn Python for financial analysis, machine learning, data visualization, and SQL from experienced finance & engineering professionals in this immersive.

Group classes (NYC) and onsite training are available for this course. For more information, email corporate@nobledesktop.com or visit: https://programwithus.com/certificates/fintech-bootcamp-nyc



hello@nobledesktop.com • (212) 226-0884

Course Outline

This package includes these courses

- Python for Data Science Immersive (30 Hours)
- Python Machine Learning Immersive (30 Hours)
- SQL Bootcamp (18 Hours)
- Python for Automation (6 Hours)
- Python for Finance Immersive (24 Hours)
- Python Data Visualization & Interactive Dashboards (30 Hours)

Python for Data Science Immersive

- Programming foundations including objects, loops, and functions
- The object-oriented programming paradigm
- How to work with different types of data such as strings, lists, and integers
- Selectively alter the control flow of your programming with conditional statements
- Analyze tabular data using Python libraries NumPy and Pandas
- Create data visualizations with Matplotlib
- Predict outcomes using linear regression with scikit-learn

Python Machine Learning Immersive

- How to clean and balance your data using the Pandas library
- Applying machine learning algorithms such as logistic regression and random forest using the scikit-learn library
- Choosing good features to use as input for your algorithms
- Properly splitting data into training, test and cross-validation sets
- Important theoretical concepts like overfitting, variance and bias

- Evaluating the performance of your machine learning models

SQL Bootcamp

- Explore and alter data using a graphical user interface
- Write queries to search through tables programmatically
- Understand various data types and convert between them
- Combine information across tables with join statements
- Advanced techniques like subqueries and timestamp functions

Python for Automation

- Learn the syntax of Python and how to construct programs
- Learn how to run your programs on a regular schedule
- How to handle errors

Python for Finance Immersive

In this advanced course, you will cover the major Python financial libraries to gather and manipulate financial data. You will start by working with financial APIs to fetch financial, company, and economic data. We will analyze financial statements from the SEC website, including financial ratios derived from the income statement and balance sheet. You will build risk management models using Python libraries to create VaR models and Monte Carlo simulation. We will learn how to apply statistical measures such as linear regression to financial uses such as stock prices.

Python Data Visualization & Interactive Dashboards

- Plan & present a data story
- Gather and manipulate data from different sources
- Find data stories through exploratory data analysis
- Manipulate data with NumPy and pandas.
- Use advanced Python visualization libraries Plotly and Dash
- Build a dashboard
- Apply the rules of effective dashboard design to create professional data science solutions
- Go live with your project & deploy the dashboard on a live server