COURSE SYLLABUS

Data Science Certificate

Master the tools to become a data scientist: Python, SQL, automation, and machine learning. Learn Python programming fundamentals and analyze data with Pandas, NumPy, and Matplotlib, and query databases with SQL. Use machine learning to apply regressions and other statistical analysis to create predictive models.

Group classes in NYC and onsite training is available for this course.
For more information, email hello@nobledesktop.com or visit:
nobledesktop.com/certificates/data-science

hello@nobledesktop.com • 212-226-4149

Course Outline

This certificate includes these courses

- Python for Data Science Bootcamp (30 Hours)
- Python Machine Learning Bootcamp (18 Hours)
- SQL Bootcamp (18 Hours)
- Python for Automation (6 Hours)

Python for Data Science Bootcamp

- Handle different types of data, such as integers, floats, and strings
- Control the flow of your programs with conditional statements, loops, and functions
- Reuse and simplify code with object-oriented programming
- Analyze tabular data with Numpy and Pandas
- Create graphs and visualizations with Matplotlib
- Make predictions with linear regression, using scikit-learn

Python Machine Learning Bootcamp

- 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