COURSE SYLLABUS

Data Analytics Certificate

Learn the skills you'll need to become a Data Analyst or Business Analyst, including data analysis, visualization, statistical analysis, and how to work with relational databases. Build a portfolio of projects and prepare for a career.

> Group classes (NYC) and onsite training are available for this course. For more information, email corporate@nobledesktop.com or visit: https://www.careercenters.com/certificates/data-analytics



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Course Outline

This package includes these courses

- Excel for Data Analytics (18 Hours)
- Data Analytics Foundations (12 Hours)
- Python for Data Science Bootcamp (30 Hours)
- PostgreSQL Bootcamp (18 Hours)
- Python for Automation (6 Hours)
- Python Machine Learning Bootcamp (30 Hours)
- Tableau Bootcamp (12 Hours)

Excel for Data Analytics

- Learn fundamental database and statistical functions
- Use PivotTables and lookup functions (including VLOOKUP)
- Create simple macros to speed up your workflow

Data Analytics Foundations

- Fundamentals of data analytics and statistics
- How to use data for forecasting & decision-making
- How businesses use data analytics in their processes

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

PostgreSQL Bootcamp

- Explore information stored in a database (tables, columns, rows, etc.) using the graphical interface of DBeaver (a popular free database app)
- Write SQL queries to retrieve data from tables in a database
- Combine information from multiple tables with JOIN statements
- Filter data, group it, and sort it to extract the specific info you need
- Advanced techniques like Subqueries, String Functions, and IF-Else logic with CASE
- How to use Views and Functions with parameters instead of directly querying tables

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 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

Tableau Bootcamp