

THE SKILLS YOU'LL GAIN

You will gain the practical technical skills in **Data Science**, including:*

Advanced Excel

- Pivot Tables
- VBA Scripting

Fundamental Statistics

- Modelling
- Forecasting

Python Programming

- Python 3
- NumPy
- Pandas
- Matplotlib
- API Interactions
- Social Media Mining

Databases

- MySQL
- MongoDB
- ETL

Front-End Web Visualization

- HTML
- CSS
- Bootstrap
- Dashboarding
- JavaScript Charting
- D3.js
- Geomapping with Leaflet.js

Business Intelligence Software

- Tableau

Advanced Topics

- Big Data Analytics with Hadoop
- Machine Learning

* Note: These topics are subject to change based on local market demand and the input of hiring partners.

COURSE CURRICULUM BY MODULE

Module	Description	What You'll Learn
Module 1: Excel Crash Course	Learn to do more with Microsoft Excel! In this module we'll cover advanced topics like statistical modeling, forecasting, and prediction; pivot tables, and VBA scripting. You will even learn to model historic stock trends—and hopefully, learn to beat the market!	» Microsoft Excel » VBA Script » Statistics Modeling
Module 2: Python Data Analytics	Gain a strong foothold in one of today's fundamental programming languages. In the course of this module, you'll gain deep proficiencies with core Python, data analytic tools like NumPy, Pandas, Matplotlib, and specific libraries for interacting with web data like Requests and BeautifulSoup.	» Python » APIs » JSON » NumPy » Pandas » Matplotlib » Beautiful Soup » Tweepy
Module 3: Databases	Dive deep into the most prolific database languages: SQL and NoSQL. Work with MySQL and MongoDB to organize data into well-structured and easily retrievable data formats. Work on a case study to combine data from different sources into one database.	» SQL » NoSQL » MySQL » MongoDB » ETL process
Module 4: Web Visualization	Building visualizations is of little benefit without a way to communicate the message. In this module, you'll be learning the core technologies of web development (HTML, CSS, and JavaScript) to create new, interactive data visualizations that you can share with everyone on the web!	» HTML » CSS » JavaScript » AJAX » D3 » Leaflet
Module 5: Advanced Topics	By program's end, you'll be immersed in new and in-demand topics like Tableau, Hadoop, and Machine Learning.	» Tableau » Hadoop » Machine Learning
Module 6: Final Project	Bring everything that you have learned in class altogether to create an impressive data-visualization application with a small team! Get creative and come up with something cool to show off to the whole world!	» Dreaming up something fantastic and understanding the bounds of reasonable and achievable