

Module 1: Excel Crash Course

Weeks 1-2

Description:

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'll even learn to model historic stock trends -- and hopefully, learn to beat the market!

What You Will Learn:

▪ Microsoft Excel

▪ VBA Script

▪ Statistics Modeling

Module 2: Python Data Analytics

Weeks 3-8

Description:

Gain a solid foothold in one of today's fundamental programming languages. You'll develop proficiency in core Python; data analytic tools like NumPy, Pandas, and Matplotlib; and specific libraries for interacting with web data, like Requests and BeautifulSoup.

What You Will Learn:

▪ Python, APIs

▪ JSON, NumPy

▪ Pandas, Matplotlib

▪ Beautiful Soup

Module 3: Databases

Weeks 9-13

Description:

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.

What You Will Learn:

▪ SQL

▪ NoSQL

▪ MySQL

▪ MongoDB

▪ ETL Process

Module 4: Web Visualization

Weeks 14-19

Description:

Building visualizations is of little benefit without a way to communicate the message. In this module, you'll learn how to use the core web development technologies (HTML, CSS, and JavaScript) to create new and interactive data visualizations that you can share with everyone on the web!

What You Will Learn:

▪ HTML

▪ CSS

▪ JavaScript

▪ AJAX

▪ D3

▪ Leaflet

Module 5: Advanced Topics

Weeks 20-23

Description:

By program's end, you'll be immersed in new and in-demand topics like Tableau, Hadoop, and Machine Learning.

What You Will Learn:

▪ Tableau

▪ Hadoop

▪ Machine Learning

Module 6: Final Project

Week 24

Description:

As part of a small team, you'll draw upon everything you have learned in the program to create an impressive data visualization application. Get creative and come up with something cool to show off to the whole world!

What You Will Learn:

▪ Dreaming up something fantastic and pushing the bounds of reasonable and achievable