

FinTech Summer Program NYC

Group classes in NYC and onsite training is available for this course. For more information, email hello@nextgenbootcamp.com or visit: <https://www.nextgenbootcamp.com/certificates/fintech-summer-program>



hello@nextgenbootcamp.com •

[212-226-0884](tel:212-226-0884)

Course Outline

This package includes these courses

- Excel, Finance, & Investing Summer Course NYC (30 Hours)
- Python Data Science Summer Program NYC (45 Hours)

Excel for Business Fundamentals

Introduction

- Interface
- Data Entry

Formulas

- Autofill
- Calculations
- True or False
- AutoSum Functions
- Text Functions
- Multi-Input Functions
- Absolute Cell References

Formatting

- Formatting
- Format Painter
- Conditional Format

Charts & Tables

- Line Chart
- Column Chart
- Pie Chart
- Tables

Workbook Management

- Printing

- Worksheets
- Repeat Action
- Shortcuts

End of Class Project

- Using Formulas to Analyze Financial Data
- Save and Close

Intermediate Excel for Business

Worksheet Management

- Navigation
- Paste Special

Working with Text

- Splitting Text
- Joining Text
- Named Ranges
- Data Validation
- Sort & Filter
- Remove Duplicates

Database Functions

- VLOOKUP
- HLOOKUP
- VLOOKUP - Closet Match

Logical Functions

- AND, OR
- IF statements

Pivot Tables

- Pivot Tables
- Pivot Tables & Grouping
- Multiple Pivot Tables

Statistical Functions

- Ranking
- COUNTIFS
- SUMIFS

Advanced Charts

- Combo Charts
- Use Charts & Functions to Build a Financial Summary Excel Sheet

Advanced Excel for Finance

Excel for Financial Modeling

- Advanced techniques to Expedite Workflow

- Advanced Analytical Tools & Sensitivity Analysis
- Database Functions for Finance
- Functions for Financial Analysis

Stock Market Fundamentals

Introduction to Stocks

- Stock Fundamentals
- Stock indices
- Liquidity
- Dividend Yields
- Exchange Traded Funds (ETFs)

Intermediate Stock Topics

- Market Capitalization
- P/E Ratios
- EV/EBITDA Multiples
- Stock Movement
- Earnings Release
- Interest Rates
- Economic Trends

Bond Investing + Stock Options

- Types of Bonds
- Bond Pricing, Yields, and Spread
- Credit Ratings & Risks
- Call & Put Options
- Option Strategies & Hedging

Foundational Accounting Topics

Intro to Accounting

- Financial Reports
- Types of Financial Statements
- GAAP
- Cash vs. Accrual Accounting

Income Statement, Balance Sheet, and Cash Flow Statement

- Essential Line Items
- Profit Ratios & Margins
- Depreciation and Amortization
- EBITDA
- $\text{Assets} = \text{Liabilities} + \text{Stockholder's Equity}$
- Changes in PP&E
- Working Capital
- Cash flow from Investing, Financing, and Operations

- Indirect Method

Corporate Finance & Financial Modeling

Introduction to Corporate Finance

- Enterprise value
- Financial Accounting & Statement Analysis
- Three Statement Model
- Intro to DCF Modeling
- Sensitivity Analysis

Company Analysis

- Discuss the business model and value drivers of a public restaurant company
- Capital Structure: Calculate the total enterprise value and build a capital structure table
- Ratios: Calculate the financial ratios
- Decide if this is a good or bad investment

Day 1-3

Introduction to Programming

- History of Python
- Understanding Hardware
- Anaconda Distribution
- Jupyter Notebook Fundamentals
- Writing First Program (“Hello World”)

Terminal Commands

- Navigate & Manipulate Directory Structures
- Edit Files
- Basic Scripting

Python Fundamentals

- Data Types
- Operators
- Expression
- Indexing & Slicing
- Strings
- Conditionals
- Functions
- Control Flow
- Nested Loops
- Sets & Dictionaries

Data Science Fundamentals

- Import Data
- Functions
- Basic Data Tool

Advanced Python Fundamentals

- Lists
- Mutating Operations
- Tuples, Sets, Dictionaries
- Loops
- Control Flow
- List Comprehension
- Error Handling

Day 4-5

Processing

- String Methods
- Read & Write to Text Files
- Natural Language Processing
- Mini Project

Object Oriented Programming

- Classes
- Constructors
- Object Methods
- Writing Modules
- Advanced Scripting
- Terminal & Socket Connection

Day 6-8

Numerical Python

- Arrays
- Universal Functions
- Concatenating, Indexing, Slicing
- Arithmetic & Boolean Operations

Day 9-10

Python Data Analysis:Pandas 1

- Data Series
- Data Frames
- Import CSV & Excel Files
- Organize Data Frames
- Data Manipulation
- Descriptive Statistics

Advanced Python

- File Input
- User Input

- List Comprehension
- Packages

Data Analysis

- Cleaning Data
- Filtering Data
- Advanced Grouping
- Pivot Tables

Data Visualization

- Plotting with Matplotlib
- Scatter Plots
- Histograms & Bar Plots
- Custom Visualizations

Final Project

Details

- Curate Data
- Import, Clean, and Merge Data
- Analyze Data
- Visualize Data
- Present Results