

# Python Project for Data Science

by IBM

### About this Course

This mini-course is intended to for you to demonstrate foundational Python skills for working with data. This course primarily involves completing a project in which you will assume the role of a Data Scientist or a Data Analyst and be provided with a real-world data set and a real-world inspired scenario to identify patterns and trends.

You will perform specific data science and data analytics tasks such as extracting data, web scraping, visualizing data and creating a dashboard. This project will showcase your proficiency with Python and using libraries such as Pandas and Beautiful Soup within a Jupyter Notebook. Upon completion you will have an impressive project to add to your job portfolio.

PRE-REQUISITE: \*\*Python for Data Science, AI and Development\*\* course from IBM is a pre-requisite for this project course. Please ensure that before taking this course you have either completed the Python for Data Science, AI and Development course from IBM or have equivalent proficiency in working with Python and data.

NOTE: This course is not intended to teach you Python and does not have too much instructional content. It is intended for you to apply prior Python knowledge.

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IBM Developer Skills Network

	<b>Basic Info</b>	Course 5 of 12 in the <a href="#">IBM Data Science Specialization</a>
	<b>Level</b>	Intermediate
	<b>Language</b>	English, <b>Subtitles:</b> Arabic, French, Bengali, Ukrainian, Chinese (Simplified), Greek, Italian, Portuguese (Brazil), Vietnamese, Dutch, Korean, German, Pashto, Urdu, Russian, Thai, Indonesian, Swedish, Turkish, Azerbaijani, Spanish, Dari, Hindi, Japanese, Kazakh, Hungarian, Polish
	<b>How To Pass</b>	Pass all graded assignments to complete the course.
	<b>User Ratings</b>	Average User Rating 4.5

## Syllabus

Module 1

### Crowdsourcing Short squeeze Dashboard

In this module, you will demonstrate your skills in Python - the language of choice for Data Science and Data Analysis. You will apply Python fundamentals, Python data structures, and work with data in Python. By working on a real project, you will model a Data Scientist or Data Analyst's role, and build a dashboard using Python and popular Python libraries using Jupyter notebook.

2 videos, 8 readings

- Reading:** Course Introduction
- Reading:** Intro to Web Scraping
- Video:** [HTML for Webscraping](#)
- Video:** Webscraping
- App Item:** Intro to Web Scraping Using BeautifulSoup
- Reading:** Project Overview
- Reading:** Stock shares
- App Item:** Extracting Stock Data Using a Python Library
- Ungraded Plugin:** Reading: yfinance Library
- App Item:** Extracting Stock Data Using Web Scraping
- Reading:** Optional: Gamestop stock vs Tesla
- App Item:** Hands-on Lab: Analyzing Historical Stock/Revenue Data and Building a Dashboard
- App Item:** (Optional)Obtain IBM Cloud Feature Code and Activate Trial Account
- Ungraded Plugin:** (Optional)Hands-on Lab: Create IBMCloud account and Watson Studio instance
- Reading:** (Optional)Jupyter Notebook to complete your final project
- Ungraded Plugin:** (Optional)Hands-on Lab: Add notebook to Watson Studio
- Reading:** (Optional)Hands-on Lab: Analyzing Historical Stock/Revenue Data and Building a Dashboard
- Ungraded Plugin:** (Optional)Hands-on Lab: Share your notebook from Watson Studio
- Reading:** Next Steps

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**Graded:** Extracting Stock Data Using a Python Library

**Graded:** Extracting Stock Data Using a Web Scraping

**Graded:** Analyzing Historical Stock/Revenue Data and Building a Dashboard

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## How It Works

### General

**How do I pass?**

To earn your Certificate, you'll need to earn a passing

[^ More](#)

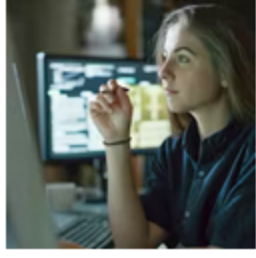
### Peer-graded assignments

**Peer-graded assignments require you and your classmates to grade each other's work.**

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## Course 5 of Specialization

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