

IntelliCademy Python for Data Science

IntelliCademy Authorized Training · Applied Technology Academy

Python for Data Science builds directly on introductory Python and introduces the essential tools and workflows for applying Python to real data. Over 40 hours learners handle, analyse and visualise data with the industry-standard libraries — NumPy, pandas, SciPy, matplotlib and seaborn — working in Jupyter against real datasets to bridge the gap between coding basics and applied data science.

LEVEL	DURATION	DELIVERY
Intermediate	5 Days	Instructor-led

Course Overview

- 40 hours of instruction across five days, taught by IntelliGenesis instructors.
- Interactive environment using Jupyter Notebook.
- Hands-on practice with real datasets throughout.
- Designed to meet mission-ready federal workforce needs.

Prerequisites

- Basic familiarity with Python syntax and programming concepts.
- Experience executing and editing Jupyter Notebooks.
- Familiarity with variables, data types, functions, loops and basic Python programming.
- A PC or laptop able to reach the supplied virtual environment, and reliable internet access.

No prior experience with NumPy, pandas, SciPy, matplotlib, seaborn or formal data science workflows is required. All software, libraries, notebooks, starter files and datasets are provided.

Who Should Attend

- Aspiring data scientists.
- Analysts looking to automate tasks.
- Cybersecurity and intelligence professionals upskilling into technical roles.
- Technical managers who want to understand the tools their teams use.

What You'll Learn

- Introduction to NumPy for numerical computation.
- Introduction to pandas for working with datasets — loading, cleaning and exploring data.
- Introduction to statistics and hypothesis testing using SciPy.
- Basic data visualisation using matplotlib and seaborn.
- Understanding and applying descriptive statistics in Python.

- Working with CSV and Excel files and exploring structured data.
- Writing simple Python scripts that answer data-driven questions.

Next Steps

Prepares learners for more advanced AI, ML and data engineering courses, including the IntelliCademy AI/ML Specialist bootcamp.

Ready to enroll? Call 800.674.3550 or email Info@AppliedTechAc.com — private team cohorts, GSA MAS purchasing, military credentialing funding, VA GI Bill and VR&E and student financing available.