Introduction to Python Programming and to Red Hat OpenShift AI (AI252)

Category: Software Development & Programming | **Vendor:** Red Hat

Duration: 40.00 hours (5 days) **32.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Related Exam: AI252

Course Overview

An introduction to Python programming, and creating and managing AI/ML workloads with Red Hat OpenShift AI. Python is a popular programming language used by system administrators, data scientists, and developers to create applications, perform statistical analysis, and train AI/ML models. This course introduces the Python language and teaches the basics of using Red Hat OpenShift AI for AI/ML workloads. This course helps students build core skills such as describing the Red Hat OpenShift AI architecture, and organizing, executing and testing AI/ML code through hands-on experience. These skills can be applied in all versions of Red Hat OpenShift AI. This course is based on Python 3, RHEL 9.0, Red Hat OpenShift ® 4.14, and Red Hat OpenShift AI 2.8.

About This Course

An introduction to Python programming, and creating and managing AI/ML workloads with Red Hat OpenShift AI. Python is a popular programming language used by system administrators, data scientists, and developers to create applications, perform statistical analysis, and train AI/ML models. This course introduces the Python language and teaches the basics of using Red Hat OpenShift AI for AI/ML workloads. This course helps students build core skills such as describing the Red Hat OpenShift AI architecture, and organizing, executing and testing AI/ML code through hands-on experience. These skills can be applied in all versions of Red Hat OpenShift AI. This course is based on Python 3, RHEL 9.0, Red Hat OpenShift ® 4.14, and Red Hat OpenShift AI 2.8.

Who Should Attend

- Data scientists and AI practitioners who want to use Red Hat OpenShift AI to build and train ML models
- Developers who want to build and integrate AI/ML enabled applications
- MLOps engineers responsible for installing, configuring, deploying, and monitoring AI/ML applications on Red Hat OpenShift AI

Prerequisites & Entry Requirements

General Prerequisites:

- Experience with Git is required
- Experience in Red Hat OpenShift is required, or completion of the Red Hat OpenShift Developer II: Building Kubernetes Applications (DO288) course
- Basic experience in the AI, data science, and machine learning fields is recommended

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Basics of Python syntax, functions and data types How to debug Python scripts using the Python debugger (pdb) Use Python data structures like dictionaries, sets, tuples and lists to handle compound data Learn Object-oriented programming in Python and Exception Handling How to read and write files in Python and parse JSON data How to effectively structure large Python programs using modules and namespaces Introduction to Red Hat OpenShift AI Data Science Projects Jupyter Notebooks

Detailed Course Outline

1 - An Overview of Python 3

- Introduction to Python and setting up the developer environment

2 - Basic Python Syntax

- Explore the basic syntax and semantics of Python

3 - Language Components

- Understand the basic control flow features and operators

4 - Collections

- Write programs that manipulate compound data using lists, sets, tuples and dictionaries

5 - Functions

- Decompose your programs into composable functions

6 - Modules

- Organize your code using Modules for flexibility and reuse

7 - Classes in Python

- Explore Object Oriented Programming (OOP) with classes and objects

8 - Exceptions

- Handle runtime errors using Exceptions

9 - Input and Output

- Implement programs that read and write files

10 - Data Structures

- Use advanced data structures like generators and comprehensions to reduce boilerplate code

11 - Parsing JSON

- Read and write JSON data

12 - Debugging

- Debug Python programs using the Python debugger (pdb)

13 - Introduction to Red Hat OpenShift AI

- Identify the main features of Red Hat OpenShift AI, and describe the architecture and components of Red Hat OpenShift AI.

14 - Data Science Projects

- Organize code and configuration by using data science projects, workbenches, and data connections

15 - Jupyter Notebooks

- Use Jupyter notebooks to execute and test code interactively

Frequently Asked Questions

Q: What delivery options are available for Introduction to Python Programming and to Red Hat OpenShift AI (AI252)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: Which exam does this course prepare me for?

This course prepares you for the AI252 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 5-day Introduction to Python Programming and to Red Hat OpenShift AI (AI252) course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Introduction to Python Programming and to Red Hat OpenShift AI (AI252) training?

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Introduction to Python Programming and to Red Hat OpenShift AI (AI252)?

Yes, we provide corporate training, dedicated training, and closed classes for Introduction to Python Programming and to Red Hat OpenShift AI (AI252). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: Why choose Nexus Human for Introduction to Python Programming and to Red Hat OpenShift AI (AI252)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Introduction to Python Programming and to Red Hat OpenShift AI (AI252) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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