

# DEVELOPING AND DEPLOYING AI/ML APPLICATIONS ON RED HAT OPENSHIFT AI (AI267)

Course Code: 832010

Learn An introduction to developing and deploying AI/ML applications on Red Hat OpenShift AI.

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Developing and Deploying AI/ML Applications on Red Hat OpenShift AI (AI267) provides students with the fundamental knowledge about using Red Hat OpenShift for developing and deploying AI/ML applications. This course helps students build core skills for using Red Hat OpenShift AI to train, develop and deploy machine learning models through hands-on experience.

This course is based on Red Hat OpenShift ® 4.14, and Red Hat OpenShift AI 2.8. Note: This course is offered as a 3 day in person class, a 4 day virtual class or is self-paced. Durations may vary based on the delivery. For full course details, scheduling, and pricing, select your location then "get started" on the right hand menu.

# **Course Content Summary**

- Introduction to Red Hat OpenShift AI
- Data Science Projects
- Jupyter Notebooks
- Installing Red Hat OpenShift Al
- Managing Users and Resources
- Custom Notebook Images
- Introduction to Machine Learning
- Training Models
- Enhancing Model Training with RHOAI
- Introduction to Model Serving
- Model Serving in Red Hat OpenShift Al
- Introduction to Workflow Automation
- Elyra Pipelines

KubeFlow Pipelines

#### What You'll Learn

#### Impact on the Organization

 Organizations collect and store vast amounts of information from multiple sources. With Red Hat OpenShift AI, organizations have a platform ready to analyze data, visualize trends and patterns, and predict future business outcomes by using machine learning and artificial intelligence algorithms.

#### Impact on the Individual

 As a result of attending this course, you will understand the foundations of the Red Hat OpenShift AI architecture. You will be able to install Red Hat OpenShift AI, manage resource allocations, update components and manage users and their permissions. You will also be able to train, deploy and serve models, including how to use Red Hat OpenShift AI to apply best practices in machine learning and data science. Finally you will be able to create, run, manage and troubleshoot data science pipelines.

#### Who Needs to 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**

- Experience with Git is required
- Experience in Python development is required, or completion of the Python Programming with Red Hat (AD141) course
- Experience in Red Hat OpenShift is required, or completion of the Red Hat OpenShift Developer II: Building and Deploying Cloud-native Applications (DO288) course
- Basic experience in the AI, data science, and machine learning fields is recommended

# **Technology considerations**

No ILT classroom will be available



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VIRTUAL CLASSROOM LIVE

\$4,759 CAD

4 Day

#### Virtual Classroom Live Outline

## Module 1: Introduction to Red Hat OpenShift Al

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

## **Module 2:Data Science Projects**

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

#### **Module 3: Jupyter Notebooks**

Use Jupyter notebooks to execute and test code interactively

### Module 4:Installing Red Hat OpenShift Al

 Installing Red Hat OpenShift AI by using the web console and the CLI, and managing Red Hat OpenShift AI components

#### Module 5:Managing Users and Resources

 Managing Red Hat OpenShift Al users, and resource allocation for Workbenches

#### **Module 6:Custom Notebook Images**

 Creating custom notebook images, and importing a custom notebook through the Red Hat OpenShift AI dashboard

#### Module 7:Introduction to Machine Learning

 Describe basic machine learning concepts, different types of machine learning, and machine learning workflows

#### **Module 8:Training Models**

Train models by using default and custom workbenches

## Module 9:Enhancing Model Training with RHOAI

• Use RHOAI to apply best practices in machine learning and data science

# Module 10:Introduction to Model Serving

 Describe the concepts and components required to export, share and serve trained machine learning models!

## Module 11:Model Serving in Red Hat OpenShift Al

Serve trained machine learning models with OpenShift AI

#### **Module 12:Custom Model Servers**

 Deploy and serve machine learning models by using custom model serving runtimes

## **Module 13:Introduction to Data Science Pipelines**

• Create, run, manage, and troubleshoot data science pipelines

## **Module 14:Elyra Pipelines**

Creating a Data Science Pipeline with Elyra

#### **Module 15: KubeFlow Pipelines**

Creating a Data Science Pipeline with KubeFlow SDK

Jul 7 - 10, 2025 | 11:00 AM - 5:00 PM EDT

Aug 11 - 14, 2025 | 11:00 AM - 5:00 PM EDT

Sep 22 - 25, 2025 | 11:00 AM - 5:00 PM EDT

Oct 13 - 16, 2025 | 11:00 AM - 5:00 PM EDT



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ON-DEMAND

\$4,045 CAD

#### On-Demand Outline

## Module 1: Introduction to Red Hat OpenShift Al

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

## **Module 2:Data Science Projects**

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

### **Module 3: Jupyter Notebooks**

Use Jupyter notebooks to execute and test code interactively

## Module 4:Installing Red Hat OpenShift Al

 Installing Red Hat OpenShift AI by using the web console and the CLI, and managing Red Hat OpenShift AI components

## Module 5: Managing Users and Resources

 Managing Red Hat OpenShift Al users, and resource allocation for Workbenches

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 Deploy and serve machine learning models by using custom model serving runtimes

## **Module 13:Introduction to Data Science Pipelines**

Create, run, manage, and troubleshoot data science pipelines

## **Module 14:Elyra Pipelines**

Creating a Data Science Pipeline with Elyra

#### **Module 15:KubeFlow Pipelines**

Creating a Data Science Pipeline with KubeFlow SDK

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

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