



# Red Hat Application Development I: Programming in Java EE

**Duration: 4 Days** Course Code: AD183

#### Overview:

Red Hat Application Development I: Programming in Java EE exposes experienced Java Standard Edition (Java SE) developers to the world of Java Enterprise Edition (Java EE).

This course is based on Red Hat® Enterprise Application Platform 7.0.

In this course, you will learn about the various specifications that make up Java EE. Through hands-on labs, you will transform a simple Java SE command line application into a multi-tiered enterprise application using various Java EE specifications, including Enterprise Java Beans, Java Persistence API, Java Messaging Service, JAX-RS for REST services, Contexts and Dependency Injection (CDI), and JAAS for securing the application.

#### **Target Audience:**

This course is designed for Java developers who want to learn more about the specifications that comprise the world of Java Enterprise Edition (Java EE).

## Objectives:

- As a result of attending this course, you should be able to describe most of the specifications in Java EE 7 and create a component with each specification. You will be able to convert a Java SE program into a multi-tiered Java EE application. You should be able to demonstrate these skills:
- Describe the architecture of multi-tiered Java EE applications.
- Package Java EE applications and deploy to Red Hat JBoss Enterprise Application Platform with various tools.
- Create an Enterprise Java Bean instance.
- Manage the persistence of data using Java Persistence API.

- Create a web service using JAX-RS.
- Properly apply context scopes to beans and inject resources into Java Beans.
- Store and retrieve messages using the Java Messaging Service.
- Secure a Java EE application.

# Prerequisites:

- Proficiency in developing Java SE applications, with 2+ years of experience required
- Proficiency in using an IDE such as Red Hat Developer Studio or Eclipse
- Experience with Maven is recommended but not required

## **Testing and Certification**

#### Content:

Transition to multi-tiered applications	Create persistence entities with validations.	Create messaging applications with JMS
Describe Java EE features and distinguish between Java EE and Java SE applications.	Manage entity relationships	Create messaging clients that send and receive messages using the JMS API.
Package and deploy applications to an application server	Define and manage JPA entity relationships.	Secure Java EE applications
	Create REST services	Use JAAS to secure a Java EE application.
Describe the architecture of a Java EE application server, package an application, and deploy the application to an EAP server.	Create REST APIs using the JAX-RS specification.	Comprehensive review of Red Hat JBoss Development I: Java EE
Create Enterprise Java Beans	Implement Contexts and Dependency Injection	Demonstrate proficiency of the knowledge and skills obtained during the course.
Develop Enterprise Java Beans, including		Ğ
message-driven beans.	Describe typical use cases for using CDI and successfully implement it in an application.	Note: Course outline is subject to change with technology advances and as the nature of the
Manage persistence		underlying job evolves. For questions or confirmation on a specific objective or topic, contact one of our Red Hatters.

## Additional Information:

# **Red Hat Learning Subscriptions:**

The Red Hat Learning Subscription is an exclusive program that provides users with 12-months access to all Red Hat Online Learning and video classroom courses. All subscribers will receive unlimited access to online learning content, up to 400 hours of hands-on lab time and more than 300 recorded instructor videos.

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For more information please see LS120 and LS220 below

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https://www.globalknowledge.com/en-GB/Courses/Red Hat/Operating Systems/LS220

## Further Information:

For More information, or to book your course, please call us on Head Office Tel.: +974 40316639

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