



JAVA TRAINING

Develop Web Services And Microservices With Java

Master Java to develop robust web services and scalable microservices. Build modern, high-performance applications.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

Computer Pride | 1st Floor, ICEA Building, Kenyatta Avenue, Nairobi | www.computer-pride.co.ke

COURSE OVERVIEW

This intermediate-level course dives into the essential world of developing web services and microservices using Java, equipping you with the skills to build modern, scalable, and resilient applications. You'll explore the foundational principles of both traditional web services (like SOAP) and the more prevalent RESTful services, understanding their architecture, design patterns, and practical implementation with the powerful Java ecosystem, particularly leveraging frameworks like Spring Boot for rapid development.

By mastering these technologies, you will be able to design, develop, and deploy robust APIs that drive today's interconnected digital landscape. This course not only covers the 'how-to' of coding but also instills best practices for building decoupled microservices, enhancing application flexibility, maintainability, and scalability – crucial skills for any modern Java developer aiming to contribute to enterprise-grade solutions and advance their career in backend development.

Duration	2 hours
Level	Intermediate
Vendor	Java

COURSE CURRICULUM

01 Module 1: Foundations of Web Services

- What are Web Services? Purpose and Evolution
- Overview of SOAP and REST Architectures
- Understanding APIs and their role in modern applications
- Setting up a basic Java development environment for web projects

02 Module 2: Building RESTful Services with Java & Spring Boot

- Introduction to REST principles (Statelessness, Resources, URIs)
- Basic Spring Boot project setup for a REST API
- Creating simple GET and POST endpoints
- JSON as a data exchange format

03 Module 3: Exploring Microservices Concepts

- What are Microservices? Benefits and Challenges
- Comparing Monoliths vs. Microservices
- Key characteristics of a Microservice architecture
- Brief overview of communication patterns (e.g., synchronous vs. asynchronous)

04 Module 4: Basic Service Consumption & Future Steps

- Consuming a simple REST API in Java
- Introduction to API documentation (e.g., OpenAPI/Swagger concept)
- Brief mention of security and deployment considerations
- Roadmap for further learning in Java web services and microservices

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Java Backend Developer specializing in API Development**
- > **Entry-Level Microservices Engineer**
- > **API Integration Specialist**

FREQUENTLY ASKED QUESTIONS

Q: What foundational Java knowledge is recommended before taking this intermediate web services and microservices course?

Participants should have a solid grasp of core Java programming concepts, including object-oriented programming (OOP), collections, exception handling, and basic I/O. Familiarity with Maven or Gradle build tools and some experience with a Java IDE like IntelliJ IDEA or Eclipse would also be beneficial for maximizing practical learning.

Q: How does this course prepare me for building scalable and maintainable applications using Java?

This course introduces you to the core architectural patterns of RESTful web services and the principles of microservices, which are fundamental to developing scalable and easily maintainable applications. You'll learn how to structure your services for better modularity, understand the role of APIs in distributed systems, and gain insights into designing components that can be independently developed and deployed, directly contributing to more robust and flexible software solutions.

Q: Will this course cover advanced topics like service discovery, load balancing, or circuit breakers in a microservices context?

Given the 2-hour duration, this course focuses on providing a strong introductory and conceptual understanding of developing web services and microservices with Java, including building basic RESTful APIs and understanding microservices architecture. Advanced topics such as service discovery, load balancing, or implementing specific resiliency patterns like circuit breakers are typically covered in more extensive, specialized courses on advanced microservices patterns or Spring Cloud, which build upon the foundational knowledge gained here.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

Location

1st Flr, ICEA Building
Kenyatta Ave, Nairobi

Email

info@computer-pride.co.ke

Phone

+254 705 900 900

www.computer-pride.co.ke