

## ATC-JAVA-EE-TECH: Java EE for Technical

Course Code: ATC-JAVA-EE-TECH

Duration: 3 days

Instructor-led Training (ILT) | Virtual Instructor-led Training (VILT)

### OVERVIEW

This course offers hands-on experience with Spring and its major features, including configuration, data access, web and REST applications, Spring Boot, Spring Security and using Spring Cloud to build a small microservices application. On completion, participants will have a foundation for creating enterprise-ready applications.

### SKILLS COVERED

- Understand the lifecycle JEE applications
- Best Practices while deploying JEE apps
- How to make and maintain JEE application
- Servers best suited for JEE applications
- What's new with Java EE 8
- Deep understanding of Java EE apps and architecture

### WHO SHOULD ATTEND?

Web and Java Application developer.

### PREREQUISITES

- A Basic knowledge of core java
- Experience with any other web framework will be helpful.

## MODULES

### Module 1: Introduction

- Architecture
- MVC Architecture
- Modified MVC Architecture - Front Controller
- Need For Multiple Layers
- Layers, Frameworks and Specifications
- What is a Distributed System?
- What is Coupling?
- What is Cohesion?
- What are Cross Cutting Concerns?
- Web Layer of JEE

### Module 2: Introduction to Scriptlets, JSTL and EL

- Front Controller and Application Controller Patterns
- View Helper
- Composite View
- Context Object
- Intercepting Filter

### Module 3: Business Layer

- Domain Model
- EJB
- JTA
- Facade
- DTO VO
- Service Locator

### Module 4: Data & Integration Layers

- JMS, JAX-WS, JAX-RS and JAXB
- JNDI, JDBC, ORM and JPA
- Data Access Object
- Service Activator

### Module 5: Miscellaneous Topic

- Caching

- Aspect Oriented Programming (AOP)
- Dependency Injection

### **Module 6: What's New in Java EE 8**

- Java Servlet 4.0 API with HTTP/2 support explanation and example
- Enhanced JSON support including a new JSON binding API explanation and example
- A new REST Reactive Client API explanation and example
- Asynchronous CDI Events explanation and example
- A new portable Security API explanation and example
- Server-Sent Events support (Client & Server-side) explanation and example
- Support for Java SE 8 new capabilities (e.g. Date & Time API, Streams API, annotations enhancements) explanation and example
- Summary and Closing Remarks

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