# FAST TRACK to JAVA ENTERPRISE EDITION (EE)

Java Enterprise Edition (Java EE 5) is a powerful platform for building web applications. The Java EE platform offers all the advantages of developing in Java plus a comprehensive suite of server-side technologies. This course tells you what you need to know to design and build your own web applications. You'll learn the details of the key Java EE technologies and how to leverage the strengths of each, with special focus on Servlets and JSP.  At the same time, you'll be learning about the big picture of Java EE and how to design web applications that are robust, efficient, and maintainable. If you want to deliver an application on the web, you'll find this course essential.

The course begins with a discussion of web application architecture. A major part of the course is spent on Servlets and JavaServer Pages (JSP) with special focus on using the JSTL. It then covers JDBC, Java's database access technology.  The course concludes with an introduction to EJB and other important Java EE technologies. Throughout the course, students will create code for a online store. Students will learn not only specific topics and APIs but also how to fit the pieces together into a complete application.

All labs are done with the Eclipse IDE, and the lab instructions include detailed directions for setting up and using it. The standard applicaiton server used is Tomcat, but it is available for all major app servers, including GlassFish, JBoss AS, IBM WebSphere AS, and Weblogic AS

### AUDIENCE
(1) New Programmers
(2) Java Programmers who want to move beyond the basics of Java

### PREREQUISITES
(1) A good understanding of software development practices and life cycle management.

### COURSE OBJECTIVES
(1) Design and build robust and maintainable web applications
(2) Create dynamic HTML content with Servlets and Java ServerPages, using the JSP Standard Tag Library (JSTL).
(3) Make Servlets and JSP work together cleanly.
(4) Use JSTL and other Custom Tag Libraries to separate Java and HTML code.
(5) Access databases with JDBC.
(6) Use Enterprise JavaBeans effectively from Servlets and JSP.

## CHAPTER 1
### JAVA EE INTRODUCTION
Overview, Technologies, Architecture, and MVC

## CHAPTER 2
### WEB APPLICTATION BASICS
How the Web works, HTTP Overview,
J2EE, Web Applications, Servlet Basics, Writing a Servlet,
and Labs

## CHAPTER 3
### SERVLET API
HTML Forms, HTTP Review, Servlet Overview, and Labs

## CHAPTER 4
### ADDITIONAL SERVLET CAPABILITIES
HttpServletResponse, Initialization, Error Handling, and
Labs

## CHAPTER 5
### JAVASERVER PAGES
Basics, MVC, Controllers, Data Sharing, JSP EL, and Labs

## CHAPTER 6
### USING CUSTOM TAGS
Overview, Reducing JSP complexity, Tag Libraries, JSTL,
and Labs

## CHAPTER 7
### HTTP SESSION TRACKING
Overview, Cookies, Sessions, and Labs

## CHAPTER 8
### MORE JSP CAPABILITIES
Error Pages, JSPs as XML, Scriptlets, and Labs

## CHAPTER 9
### MORE JSTL & EL
JSTL, JSP EL, Common Tags, and Labs

## CHAPTER 10
### SECURITY
Overview, Security (Role-based, Declaritive),
Authentication (Web, Basic, Form-based), Programmatic
Security, and Labs

## CHAPTER 11
### ADDITIONAL TOPICS
Design Issues, Custom Tags Using Tag Files, Servlet
Filters, and Java ServerFaces

## CHAPTER 12
### JDBC INTRODUCTION
Overview, Relational Database, Architecture,
Connections, DataBaseMetaData, and Handling
Exceptions

## CHAPTER 13
### DATA ACCESS w/ JDBC
DAO, Processing Database Data, JDBC Driver Types, and
Labs

## CHAPTER 14
### ADVANCED TOPICS
Java Persistence API and Advanced JDBC Features

## CHAPTER 15
### JAVA EE DATABASE INTEGRATION
ENC and Resource Injection, JNDI and the ENC,
Connecting Servlets, and Connection Pooling

## CHAPTER 16
### ADDITIONAL TOPICS
EJB, XML and Web Services, Design Considerations, and
Labs