

**Price:** R8,600.00 excl. VAT  
**Duration:** 5 days  
**Code:** JSFCS

# JavaServer Faces Programming

## Description

The JavaServer Faces Programming course focuses on the development of web applications using JavaServer Faces (JSF). Topics include an overview of the MVC architecture, UI components, configuration and navigation, user input validation, backing bean development, Expression Language.

## Objectives

Delegates who complete the JavaServer Faces Programming course will be able to:

- Write web applications using JavaServer Faces.
- Integrate servlets, JSPs, JSF and JavaBeans in a MVC architecture.
- Use JSP version 2.0 Expression Language.

## Intended Audience

The JavaServer Faces Programming courses is for experienced Java programmers who need to create, deploy and maintain robust web applications using JavaServer Faces in conjunction with Java servlets, JSPs, custom tags, JSTL, Expression Language and JavaBeans.

## Prerequisites

Our Java Programming course or equivalent Java programming experience is essential, as well as the Web Development with HTML and CSS course or a good knowledge of basic HTML. The Java Servlets and JSP Programming course is required or a good knowledge of basic JSP.

## Course Contents

*The lecturer reserves the right to modify the contents of the course to suit the needs of the delegates.*

**Java-based Web Application Development** • Client/server architecture. • Servlet and JavaServer Pages overview. • JSP expressions, scriptlets, declarations and directives. • Custom tags and the JSP Standard Tag Library (JSTL). • Overview and benefits of Model-View-Controller (MVC) architecture.

**JavaServer Faces overview** • UI components. • Renderers. • Validators. • Backing beans. • Convertors. • Events and listeners. • Messages. • Navigation. • JSF Expression Language. • The use of IDEs to develop JSF applications.

**JSF Navigation and configuration** • Page navigation control. • Navigation rules and navigation cases. • The faces-config.xml configuration file.

**JSF UI components** • Standard UI components. • Component families: column, command, data, form, graphic, input, output, select, message, panel, parameter, viewroot, etc • Common component properties. • HTML attributes and pass-through properties. • Value-binding expressions. • Facets. • Writing custom components.

**Validating and converting user input** • Default and custom error messages. • Standard JSF validators. • Creating custom validators. • Standard and custom converters.

**Backing beans/JSF managed beans** • Using backing beans to add functionality. • Managed beans, backing beans and regular JavaBeans. • Structural requirements of JavaBeans. • Initializing and referencing beans. • Associating UI components with backing beans.

**Miscellaneous topics** • Container-based vs custom security. • Internationalization and resource bundles. • Using JSF without JSP. • Building views with Java and XUL.