

## Course Description

Groovy on Grails Hands-On training course covers data types, control structures, closures, and dynamic object orientation, also for experienced web developers how to use the Grails framework to rapidly create sophisticated web applications, and much more...

This course teaches students how to create web applications using Grails and Groovy and all the basics including closures and collections, MVC (Model View Controller) design with Grails, database access, and the build-test-deploy lifecycle. In addition, the course includes coverage of Grails 3rd party plug-ins, and much more...

## Students Will Learn

- **Develop model-view-controller web applications using Grails**
- **Access relational databases from Grails**
- **To work with existing Java classes and libraries**
- **To build unit and functional tests for web applications**
- **And much more...**

## Prerequisites

Experience in the following areas is required

- Groovy
- Java EE including servlets, JSPs, and database access

## Course Outline

### Module I: Groovy Fundamentals

Differences between Groovy and Java  
Declaring classes  
Using assertions

- Groovy Strings
- Closures
- Lists and Maps
- Expando Objects
- Ranges
- Metaprogramming
- Builders

## **Module II: Grails Project Structure**

- Overview of a Grails project
- Directories for model classes, controllers, and views
- Data source configuration
- Logging
- Command line utilities
- IDE integration

## **Module III: Application Entities**

- Object-Relational Mapping with GORM
- Optional properties
- Constraints and validation
- Modeling relationships
- Performing CRUD operations
- Dynamic queries
- Connection to Hibernate

## **Module IV: Scaffolding**

- Dynamic scaffolding
- Working with the dynamic operations
- Static scaffolding
- Generating controllers
- Generating views

## **Module V: Grails Controllers**

- Setting the default action
- Accessing request attributes
- Flash scope
- Data binding and type conversion
- Rendering a response
- Using action interception

## **Module VI: Groovy Server Pages**

- Groovy scriptlets
- Built-in Grails tags
- Dynamic tags
- Layouts and templates
- Pagination
- Creating custom tags

## **Module VII: Adding Ajax Support**

- Basics of Ajax
- Handling events
- Ajax-supporting tags

## **Module VIII: Services and Jobs**

- Transactions
- Services and dependency injection

## **Module IX: Java Integration**

- ORM integration with Hibernate
- Dependency injection with Spring
- Working with legacy databases

## **Delivery Method**

Instructor-Led with numerous Hands-On labs and exercises.

## **Equipment Requirements**

**(This apply's to our hands-on courses only)**

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

## **Course Length**

4 Days