

## **SEED Certified Technology Specialist (SCTS) – JAVA**

### **SCTS – Java**

Product Code: ST-SD-50015

Duration: 520 hrs.

#### **Prerequisite**

- Operating Computers
- Knowledge of programming techniques would be an advantage

#### **Take Aways**

- Develop dynamic and interactive web-pages using HTML5 & CSS3.
- Develop interactivity with jQuery.
- Develop responsive, mobile first projects on the web using Bootstrap.
- Perform effective testing of Software applications.
- Create GUI application using Java.
- Create data centric applications using Java.
- Develop a Web-based application using JSPs & Servlets.
- Develop a web applications using Struts 2.x framework.
- Develop dynamic and interactive web-pages using HTML and Angular JS
- Stand out in the interview by effectively demonstrating your abilities and technical knowledge.

#### **Course Contents**

##### **Responsive Web Designing (RWD) – 40 Hrs.**

- Design web pages dynamically and more innovatively.
- Develop websites.
- Create GUI for the applications like Library Management System, Hotel Management System.

##### **Core Java – 80 Hrs.**

- Object-oriented Concepts
- Introduction to Java
- Writing Java classes
- Language fundamentals
- Inheritance & Polymorphism

- Java API Support
- Exception Handling
- Collection Framework & Generics
- Annotations
- GUI with Java Swing controls
- Event Delegation Model
- Swing MVC
- Multithreading
- Synchronization
- Socket programming
- Applets
- Input-Output (File I/O)
- JDBC

#### **Java Web Component Developer (WCD) – 40 Hrs.**

- JDBC
- Advanced JDBC
- Introduction to J2EE Framework
- HTML
- Java Script
- XML basics
- JAXP- XML Parsing
- Servlet API
- Servlet Collaboration
- Session Management
- Servlet 3.0 features
- JSP elements & directive
- Custom tag libraries
- JSTL & EL

#### **Struts Framework – 40 Hrs.**

- Introduction to Struts
- MVC design pattern
- AOP : DI & IC
- Struts Configuration
- Action and subclasses
- Action classes & UI

### Angular JS – 35 Hrs.

- Design web pages dynamically and more innovatively using AngularJS with HTML.
- Write client code using built-in Directives, Filters and expressions.
- Implement Controller, custom Services & factory
- Apply animation effects , handle events, perform unit testing
- Write client code using built-in AngularJS services like \$http and \$location
- Integrate AngularJS with ASP.NET MVC and Java applications.
- Implement a case study using Angular as client front end framework.

### Incubation Project – 235 Hrs.

#### Objectives : You will learn to

- List SDLC phases.
- Create a project using SDLC with Java as technology.

#### Configuration and Tools Requirements

- Eclipse 3.4 or above
- Tomcat 6.x or above

#### Course Contents

Software Development Life Cycle (SDLC)

Need for Software Engineering, SDLC Phases, Salient Features of SDLC

Project Implementation

Implementation of given Project

Evaluations / Mentoring – 60Hrs.