Spring Core Training Plus (SCTP)

ID SCTP **Price** CHF 3,250.—(excl. VAT) **Duration** 4 days

Who should attend

Application developers who want to deepen their understanding of Spring and Spring Boot with practical experience and a focus on the fundamentals.

Prerequisites

Some experience as a developer with Java, an IDE (Eclipse, STS or IntelliJ) and build tools such as Maven or Gradle.

Course Objectives

By the end of the course, you should have acquired the following knowledge and skills:

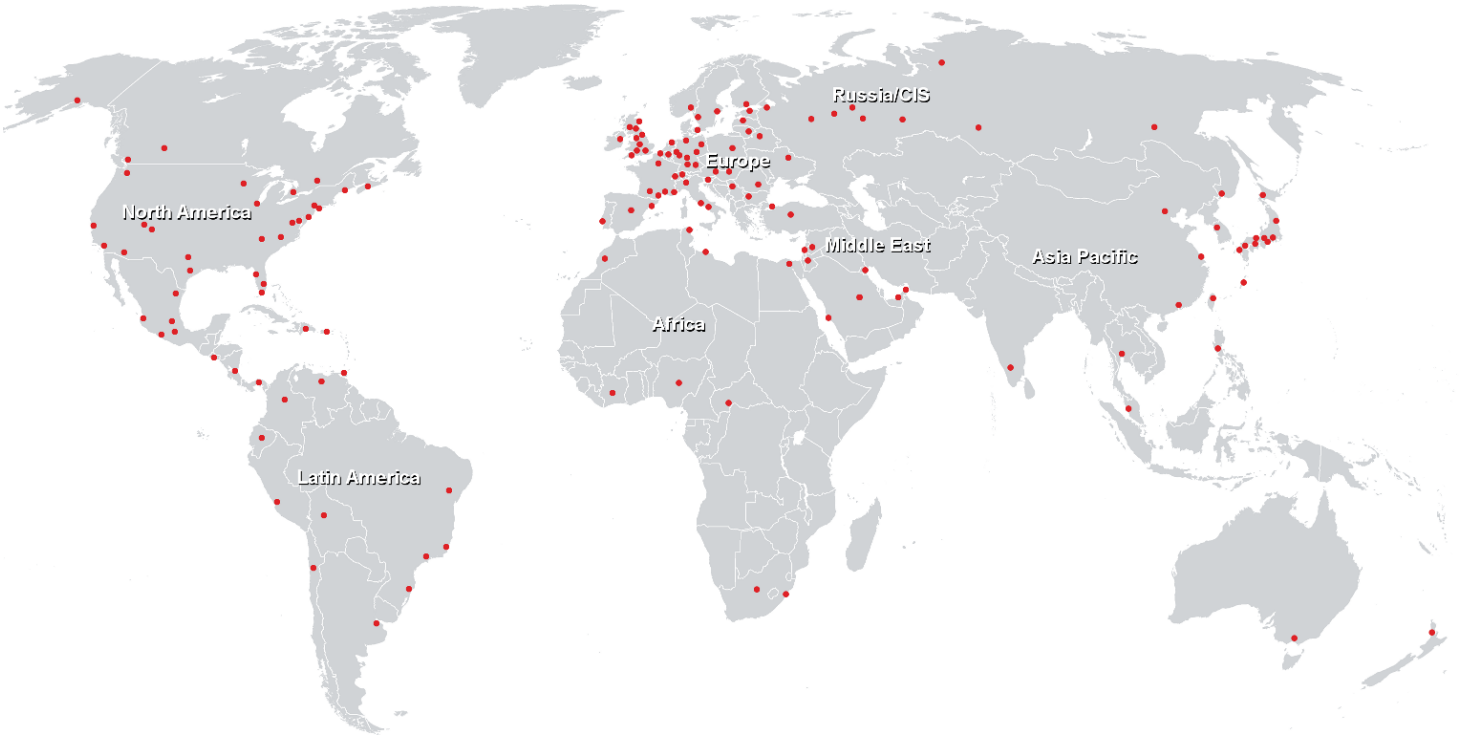
- Configure Spring using Java configuration and annotations, understand and use dependency injection and properties
- Understand aspect-oriented programming (AOP) with Spring and use it for application development
- Integration test Spring applications with JUnit 5
- Spring Data Access – select and apply Spring JDBC, JPA, and Spring Data according to appropriate criteria
- Understand Spring Transaction Management and configure it according to practical criteria
- Set up a Spring Boot application
- Know and use Spring Boot simplifications and conventions: autoconfiguration, Spring Boot Starter, dependencies, managing properties, and the build process
- Create a REST application with Spring Boot, an embedded web server, and fat JARs or classic WARs while adhering to REST principles
- Implement REST client applications using RestTemplate, RestClient, and WebClient, and select them according to appropriate criteria
- Understand and use Spring Boot extensions for testing
- Spring Security: authentication, authorization, password encryption, database storage of user credentials Configure, customize, implement, and test an OAuth2 resource server with JSON Web Token (JWT)
- Enable and extend metrics and monitoring functions with Spring Boot Actuator

Course Content

- Introduction to Spring: Principles and Definition
- Spring Java Configuration, Annotation-Based Configuration, Dependency Injection
- BeanFactory, Dynamic Proxies, Resource Abstraction: The Cornerstones of Spring
- Advanced Spring: How the Spring Application Context Works Internally
- Aspect-Oriented Programming for Application Developers
- Testing a Spring-Based Application
- Data Access and JDBC Abstraction with Spring
- Database Transactions with Spring
- Introduction to Spring Boot
- Spring Boot Dependencies, Autoconfiguration, Properties, and Build
- JPA with Spring, SpringBoot, and Spring Data
- Spring MVC for Dynamic Web Applications and REST
- REST with Spring MVC: A full backend application
- Spring Boot Test Improvements
- Spring Security: Authentication, Authorization, OAuth2 Resource Server with JWT
- Actuators, Metrics, and Health Indicators

Spring Core Training Plus (SCTP)

Training Centres worldwide





Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3
CH-8304 Wallisellen
Tel. +41 44 832 50 80

info@flane.ch, https://www.flane.ch