

Role	Spring Developer
Suggested certification	Infosys Certified Spring REST Professional

TOC(NCS batch)		
Course Name	Day	Topics Covered
Java 11 Essentials	Day 1	Enterprise application, Java Basics - Java Introduction to JShell, [Java Basics-complete module]-Recap covered in Generic training, Packages and Access specifiers, String, Wrapper classes, Arrays, Enumeration, SonarLint
	Day 2	RegularExpression, Data & Time API, [Static, Method & Constructor Overloading, Inheritance, Method Overriding]Recap Covered in Generic training, Object class, Final, Abstract
	Day 3	Interfaces & Functional Interface, Exception Handling
	Day 4	Collection Framework - List, Set, Map, Capstone Project
Java 11 Beyond Basics	Day 1	Lambdas and Streams, Properties and Logging
	Day 2	JUnit 5, Modular Programming
	Day 3	Maven, JDBC and Optional classes
	Day 4	Integrated Assignment
	Day 5	Practice Day
Service Layer using Spring	Day 1	Introduction to Service Layer, Need of Spring Framework, Introduction to Spring Framework, Introduction to Spring IoC Container, Configuring and using Spring IoC Container, Reading properties file in Spring, Best Practices in Java-Annotation based Configuration, Introduction to Autowiring, Using @Autowired annotation, Best Practices in Spring Framework
	Day 2	Introduction to Spring Boot, Understanding the structure of a Spring Boot project, SpringBootApplication annotation, Spring Boot Runners, Configuring Spring Boot application, Logging in Spring Boot using default logger, Logging in Spring Boot using Log4j, Introduction to Aspect Oriented Programming, Configuring AOP in Spring Boot, Implementing AOP advices, Best Practices in Spring Boot, Writing test cases using JUnit, Writing test cases using Mockito and JUnit
Persistence Layer using Spring Data	Day 1	Need for Spring Data, Introduction to Spring Data, Spring Data Repositories, CRUD operations using Spring Data
	Day 2	Introduction to JPQL [w.r.t Spring Data], Selection – The SELECT clause, Restriction - The WHERE clause, JPQL Aggregate Functions, JPQL String Functions, Grouping and Ordering – The GROUP BY, HAVING and ORDER BY clause, Update and Delete Queries [w.r.t Spring Data], Spring Data - Query Approaches, Pagination & Sorting using Spring Data
	Day 3	Primary Key Generation Strategies, One to One relationship
	Day 4	Many to One Relationship. One to Many Relationship

REST API using Spring	Day 1	Introduction to Web Services, RESTful Web Services Developing REST API Using Spring Boot, CRUD Operation in Spring REST Using Spring Boot
	Day 2	Consuming REST API with RestTemplate, CORS - Cross-Origin Resource Sharing, Why to do exception handling?, Exception Handling using @RestControllerAdvice, Exception handling using ResponseStatusException
	Day 3	Need for validation, Data Validation using Bean Validation API, Path Variable Validation, Securing REST APIs
Spring Microservices	Day 1	Need for Microservices, Introduction to Microservices, Integrated Assignment
	Day 2	Integrated Assignment

