

Java Programming III**DESCRIPTION:**

Java Programming III examines Java enterprise applications; Java Servlets and Java Server Pages; Session Management; Spring Framework; Web Services; Data Persistence; and Hibernate ORM. Students will develop and deploy server-side Java applications using Java EE Platform. On course completion, students will be able to develop applications to solve various business problems; use Java Servlet and Java Server Page technology; and develop Java web services with data persistence using Spring and Hibernate.

GOALS & OBJECTIVES:

- Understand Java Enterprise Edition platform including Java Servlets and Java Server Pages
- Develop server-side applications using servlets and JSPs
- Use Spring Framework effectively for developing web services
- Effectively manage data persistence

COURSE OUTLINE:

WEEK	TOPICS
1	INTRODUCTION <ul style="list-style-type: none">- JAVA ENTERPRISE EDITION PLATFORM
2	JAVA SERVLETS <ul style="list-style-type: none">- SERVLET LIFE CYCLE- HTTP METHODS & PARAMETERS
3	WEB DEVELOPMENT <ul style="list-style-type: none">- JAVA SERVER PAGES- JAVA STANDARD TAG LIBRARY
4	STATE MANAGEMENT & FILTERING <ul style="list-style-type: none">- SESSION MANAGEMENT- JAVA FILTERS
5	SPRING FRAMEWORK <ul style="list-style-type: none">- INVERSION OF CONTROL & DEPENDENCY INJECTION- BOOTSTRAPPING
6	SPRING MVC <ul style="list-style-type: none">- MODEL – VIEW – CONTROLLER PATTERN- SERVICES MODEL
7	WEB SERVICES <ul style="list-style-type: none">- RESTFUL WEB SERVICES
8	DATA MANAGEMENT <ul style="list-style-type: none">- JDBC
9	DATA PERSISTENCE PART I <ul style="list-style-type: none">- JAVA PERSISTENCE API- HIBERNATE ORM

- JAVA PERSISTENCE ANNOTATIONS
- SPRING DATA