

Course Design Document

Course Code	
Course Name	Hibernate

Duration (in days)	2	Proficiency Level	Fundamental
Pre-requisites	<ul style="list-style-type: none"> Java JDBC 	Target Audience	Campus Hires

Learning Outcome

At the end of the program, participants will learn

- Overview of Data Access Object (DAO) design pattern
- Getting and using Hibernate session
- Understanding entity states: transient, persistent, and detached
- Tuning Hibernate

Day wise Session Plan

Day	Unit	Objectives	Hours
1	Developing with Java EE	<ul style="list-style-type: none"> • Review of Java EE (a.k.a. J2EE) • Review of Java Web Application development with JDBC and Servlets/JSPs/EL • Overview of Data Access Object (DAO) design pattern • The pain of developing with JDBC and Servlets 	4
	Hibernate	<ul style="list-style-type: none"> • Getting and using Hibernate session • Understanding transactions • Storing entities 	4
2	Retrieving data	<ul style="list-style-type: none"> • Hibernate Query Language (HQL) • Named queries • Criteria API • Query by example • Filtering data • Understanding entity states: transient, persistent, and detached 	4
	Tuning Hibernate	<ul style="list-style-type: none"> • Monitoring • Logging • Lazy loading • Fetching strategies • Caching • Best-practices: examples and labs 	4