Core Java Syllabus

Introduction to Java Programming
- The Java Virtual Machine
- Variables and Data Types
- Conditional and Looping Constructs
- Arrays

Object-Oriented Programming with Java Classes and Objects
- Fields and Methods
- Constructors
- Overloading Methods
- Garbage Collection
- Nested Classes

Inheritance
- Overriding Methods
- Polymorphism
- Making Methods and Classes Final
- Abstract Classes and Methods
- Interfaces

Exception Handling With Try-Throw-Catch-Finally Constructs
- The Exception Class

The Object Class
- Cloning Objects
- The JDK LinkedList Class
- Strings
- String Conversions

Working With Types: Wrapper Classes
- Enumeration Interface
Packages

- Package Access
- Documentation Comments

Applets

- Configuring Applets
- Applet Capabilities and Restrictions

Basics of AWT and Swing

- Layout Managers
- Event Handling
- The Action Listener Interface
- Panels
- Classes for Various Controls, Such As Label, Choice, List, Checkbox, Etc
- Dialogs and Frames
- Using Menus
- Using the Adapter Classes
- Graphics

Threads

- Synchronization

The I/O Package

- Input Stream and Output Stream Classes
- Reader and Writer Classes

Basic Concepts of Networking

- Working with URLs
- Concepts of URLs
- Sockets

Database Connectivity with JDBC

- Java Security