

Java Advanced

Prerequisites / Further Training

- [Java Beginner](#)
- [Beginning SQL](#)

Also have a look at our [Java Bootcamp](#)

Alignment

Oracle OCP Certification aligned to Oracle OCP Java Exam

After this course you should be able to

- Have a good understanding of programming and the building blocks of an OO programming language, with an emphasis on JAVA.
- Build small apps in Java, making use of I/O, Networking, GUI
- Prepare for Oracle OCA and OCP exams

Course Material

Course Material Provided

Course Contents

Day 1:

Static Classes

- Static Methods,
- Static Variables
- Math Class
- Math Methods
- Static Imports

Wrapper classes

- Autoboxing

- Number formatting

Day 2

Exception Handling

- What if you need to call risky code?
- Checked Exceptions
- Flow control in try/catch blocks
- Exceptions are polymorphic
- When you don't want to handle an exception...
- Ducking (by declaring) only delays the inevitable

Nested Classes

- Getting GUI: A Very Graphic Story
- Getting a user event
- Listeners, Sources, and Events
- An inner class instance must be tied to an outer class instance
- How to make an instance of an inner class

Day 3:

I/O Fundamentals

- Saving Object state
- Implement Serializable
- Transient variables

Highlights of the Calendar API

- Getting an object that extends Calendar
- Working with Calendar objects

Date / Time API

- Moving backward and forward in time

Day 4:

Networking

- Connecting, Sending, and Receiving
- Network Sockets
- Writing a simple server
- Writing a Chat Client

Threads & Concurrency

- Thread class
- Runnable interface
- The Thread Scheduler
- Putting a thread to sleep
- Atomic methods
- Using an object's lock
- Synchronization

Day 5:

Collections and Generics

- Collections
- Sorting an ArrayList with Collections.sort()
- Generics and type-safety
- Comparable interface
- A Custom Comparator
- Collection API : lists, sets, maps
- HashSet
- HashMap
- Polymorphism wildcards

Packaging

- Command-line Java
- Classpath
- Jars

Duration and pricing

[Price Group A](#)

Certificate

[Read About Our Certificates](#)

Bookings

You can download the course registration form on our home page or by clicking [here](#)

Brochure

You may download a pdf copy of this page by clicking on the pdf icon at the top of the page.

Questions

Please [email us](#)

Schedule

On the calendar below. If your browser doesn't display the calendar below, please click on [this link](#) or try using [Google Chrome](#), alternatively please enquire via our [Contact Us](#) page.