

## Design Patterns in Java

**Duration: 3 Days**    **Course Code: DESPAT**    **Delivery Method: Virtual Learning**

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### Overview:

**English - Please note this course is only available in English.**

**Nederlands - Let op: deze training is alleen in het Engels beschikbaar.**

**Français - Veuillez noter que ce cours est uniquement disponible en anglais. Design Patterns in Java Course Overview**

This course aims to teach what design patterns are and how they can help to design well-structured, reusable object-oriented software.

### Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

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### Target Audience:

#### Who will the Course Benefit?

This Design Patterns in Java course is aimed at developers, designers, architects, and anyone else involved in the design and production of well-structured, reusable software written in Java or any other object-oriented language.

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### Objectives:

#### Course Objectives

- This course aims to provide the delegate with an understanding of what a design pattern is, how they're classified, and why they're important. It also seeks to provide the delegate with the skills necessary to apply commonly used patterns as and when it is appropriate to do so.
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### Prerequisites:

- Delegates attending this course should be familiar with object-oriented principles and will be able to write simple applications in Java or an equivalent object-oriented language. This knowledge can be obtained by attendance on the pre-requisite Java Programming 1 / Java Developer or equivalent level course.
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### Follow-on-Courses:

#### Further Learning

- Developing Applications with Java EE
  - Core Spring
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## Content:

### Design Patterns in Java Training Course Course Contents - DAY 1

#### Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

#### Session 1: INTRODUCTION

- What is a Design Pattern?
- Why use Design Patterns?
- Categories of Design Pattern
- The Gang of Four Design Pattern Catalogue

#### Session 2: CREATIONAL PATTERNS

- Singleton
- Factory Method
- Abstract Factory
- Builder
- Prototype
- Object Pool Design Patterns in Java  
Training Course Course Contents - DAY  
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#### Session 3: STRUCTURAL PATTERNS

- Adapter
- Composite
- Proxy
- Flyweight
- Facade
- Bridge
- Decorator

#### Session 4: BEHAVIOURAL PATTERNS

- Template Method
- Strategy
- Observer
- Mediator Design Patterns in Java  
Training Course Course Contents - DAY  
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#### Session 4: BEHAVIOURAL PATTERNS (CONT.)

- State
- Command
- Chain of Responsibility
- Iterator
- Interpreter
- Memento
- Visitor
- Null Object

#### Session 5: ANTI-PATTERNS

- God Class
- Dead Code
- Functional Decomposition
- Poltergeists
- Boat Anchor
- Old Yeller
- Dead End
- Spaghetti Code
- Clipboard Coding
- And more!

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## Further Information:

For More information, or to book your course, please call us on 0800/84.009

[info@globalknowledge.be](mailto:info@globalknowledge.be)

[www.globalknowledge.com/en-be/](http://www.globalknowledge.com/en-be/)