

Course List 2018

JAVA

Java Programming

5 days : R10,900.00 excl. VAT

Java is one of the most popular programming languages in the world, and is used by thousands of companies. This course will teach you the fundamentals of the Java language, so that you can write Java programs or maintain existing Java code. It is also the foundation for learning other Java technologies, like EJB, JSP, Android and Spring.

Advanced Java Programming

5 days : R10,900.00 excl. VAT

This course will take you to the next level as a Java programmer. You will learn advanced Java programming concepts, and techniques to improve your code. The course also covers some of the new features in Java.

JEE Development

5 days : R10,900.00 excl. VAT

Java Enterprise Edition (JEE) is a collection of technologies for the Java platform that is designed to support large, complex software systems in a corporate environment. This course will give you an overview of how these technologies are organised and how they fit together. You will learn how to use Java Servlets and Java Server Pages (JSP) to build dynamic web applications. You will also learn how to use Enterprise JavaBeans (EJBs) to build Java systems with reusable components.

Enterprise JavaBeans Development

5 days : R10,900.00 excl. VAT

Enterprise JavaBeans (EJBs) make it easier to build Java systems with reusable components. EJBs also make your system more robust and better able to handle changes in volume. This course will teach you how to write different kinds of EJBs: session beans to handle the business data, entity beans to control the business logic, and message-driven beans to make different systems talk to each other.

Java Web Services

5 days : R10,900.00 excl. VAT

A web service is a software program that makes itself available over the internet for another system to use. Web services use a set of international standards for communication between different systems. This course will teach you how to develop web services using Java. You will learn about the various standards involved, the difference between SOAP and RESTful web services, and how to write client programs that use web services.

Spring MVC Development

5 days : R10,900.00 excl. VAT

The Spring Framework is a Java platform that aims to make application development easier. This course will teach you how to develop Java applications in a consistent, productive way, using the Spring framework. You will learn about the various Spring technologies and how they work together. You will also learn how to use Inversion of Control (IoC), Dependency Injection (DI), and Aspect Oriented Programming (AOP).

Android Development

5 days : R10,900.00 excl. VAT

Android is the mobile operating system from Google that runs on many smart phones and tablets. There are already thousands of applications (or apps) that run on Android. This course will teach you how to create your own Android apps. You will learn how the Android development process works, how to write simple GUI applications, how to work with data and how to use the built-in components.

Course List 2018

Java Servlets and JSP Programming

5 days : R10,900.00 excl. VAT

Java Servlets and Java Server Pages (JSP) are used to build web applications using Java. This course will teach you how to use JSP to develop web pages that contain dynamic content, and how to develop servlets, which are small programs that run on the web server. You will also learn how to use the Model-View-Controller (MVC) architecture to divide a complex system into more manageable parts.

Java Functional Programming

2 days : R3,900.00 excl. VAT

Functional programming is a way of developing software, using side-effect-free functions as basic building blocks. Functional code has some advantages: it can be more concise, more predictable, and easier to test than imperative or object-oriented code. Lambdas, which are anonymous functions, are an integral part of functional programming and were introduced in Java 8. This workshop will help Java programmers understand the new terminology and core concepts of functional programming, in particular lambdas. It will teach you how to write even better Java code.

SEMINARS

JEE: A Management Overview

1 day : R2,100.00 excl. VAT

Java Enterprise Edition (JEE) is a collection of technologies for the Java platform that is designed to support large, complex software systems in a corporate environment. This seminar is for companies and individuals who are starting to use JEE and need an overview of the JEE architecture. The seminar will show you how all the technologies fit together, so that you can better understand their use.

JEE Frameworks Overview

1 day : R2,100.00 excl. VAT

A framework is a software development environment that provides functionality which you can use and extend to make more complex applications within a specific domain. Frameworks enhance productivity and minimise time to market. This seminar is for companies and individuals who want to use a Java framework with JEE, and need to evaluate the many available options. The seminar will give you an overview of the most popular Java frameworks, and help you select the best choice for your development team. The frameworks evaluated include: JEE, Spring, Spring MVC, JSF, Google Web Toolkit, Grails, Struts, Wicket, Vaadin and the Play! framework.

Web Services: A Management Overview

1 day : R2,100.00 excl. VAT

A web service is a software program that makes itself available over the internet for another system to use. Web services use a set of international standards for communication between different systems. This seminar will provide you with an overview of the role that web services can play in your organisation. It will give you an understanding of the functionality available, the various international standards involved, and the requirements to implement web services successfully.

Mobile Application Technology Overview

1 day : R2,100.00 excl. VAT

Mobile applications development is already a major trend in the software industry, and is growing every day. From simple games to custom software for logistics, more and more developers need to make their software run on smart phones and tablets. There are many technologies and frameworks available, but which is best for you? This seminar will help you to understand the advantages and disadvantages of the various technology choices, so that you can make an informed decision that is best for your organisation.

Course List 2018

OBJECT ORIENTATION

Object-Oriented Analysis using UML

3 days : R8,700.00 excl. VAT

Object Orientation, or OO, is a methodology that can be used during the whole software development life cycle: from analysis of users' needs, to design and then coding and testing. The Unified Modelling Language (UML) is an international set of diagrams for modelling your system using an object-oriented approach.

This course will teach you how to analyse and document your system using established OO principles. It will help you to understand the problem and the solution better, and communicate it more effectively. The course will also make it easier to work with developers who use an object-oriented approach.

This course is run in parallel with the first 3 days of the Object-Oriented Analysis & Design using UML course. If you have programming experience, you will benefit more from attending the full 5 days.

Object-Oriented Analysis & Design using UML

5 days : R10,900.00 excl. VAT

Object Orientation, or OO, is a methodology that can be used during the whole software development life cycle: from analysis of users' needs, to design and then coding and testing. The Unified Modelling Language (UML) is an international set of diagrams for modelling your system using an object-oriented approach.

This course will teach you how to analyse, design and document your system using established OO principles. It will help you to understand the problem and the solution better, communicate it more effectively and guide you to write better code.

Design Patterns

5 days : R10,900.00 excl. VAT

A design pattern is an optimised, reusable design solution to a programming problem that occurs often. It is not specific to a particular programming language. Design patterns improve code, because they provide a tested solution to a problem, and make it easier to maintain the code. This course will give you a solid foundation in design patterns: how to classify them, how to identify the right pattern, and when to use or avoid using a design pattern.

.NET DEVELOPMENT

C# Programming

5 days : R8,700.00 excl. VAT

C# is Microsoft's preferred language for developing systems for the Windows .NET framework. C# is also used in Mono, which provides .NET functionality on other operating systems, such as Linux. This course will teach you the fundamentals of the C# language so that you can write C# programs, or maintain existing C# code. You will learn .NET concepts and the basics of object orientation, as used in C#. The course will also teach you some of the skills you need to develop web applications for .NET and Mono.

Advanced C# Programming

5 days : R8,700.00 excl. VAT

This course will take you to the next level as a C# programmer. You will learn more advanced features of the C# programming language and the .NET framework, including threads, collections, web services, XML and security.

ASP.NET MVC Development

5 days : R8,700.00 excl. VAT

ASP.NET is a development framework for building web applications. MVC (Model-View-Controller) is a way to handle a complex system by dividing it into parts. This course will teach you how to develop web-based applications using the .NET framework and the C# programming language. You will learn how to use MVC to create web systems that are easier to maintain and customise.

Course List 2018

C AND C++

Standard C Programming

5 days : R10,900.00 excl. VAT

Learning C is one of the best foundations for any programmer. Many of the principles in C are used in other languages, and C will give you a better understanding of what happens when your code runs. This course will teach you the fundamentals of the C language so that you can write C programs, or maintain existing C code. You will learn to write portable code that can be used on different platforms and devices. This course is also an essential foundation for anyone who wants to learn C++.

Advanced C Programming

5 days : R10,900.00 excl. VAT

This course will take you to the next level as a C programmer. You will learn advanced C programming concepts, and techniques to make your code more efficient and more portable.

Standard C++ Programming

5 days : R10,900.00 excl. VAT

C++ is one of the most powerful languages for serious systems that need real speed, high performance and high reliability. This course will teach you the fundamentals of the C++ language, in line with the newest ISO standards. You will learn how to write C++ code that can be used on different platforms. You learn to read, debug and maintain C++ code, and how object-oriented concepts apply to the C++ language.

Advanced C++ Programming

5 days : R10,900.00 excl. VAT

This course will take you to the next level as a C++ programmer. You will learn advanced C++ programming concepts, and techniques to make your code more efficient and more portable.

WEB DEVELOPMENT

HTML 5 and CSS

5 days : R8,700.00 excl. VAT

HTML makes the web work - every web page you view on the Internet is written in HTML. This course will teach you how to write web pages that work in different browsers and on different devices - from desktop computers to smart phones. You will learn how to make your pages attractive and interesting with CSS. By the end of the course you will be able to build a small web site, using only free tools that are already on your computer.

JavaScript Programming

5 days : R8,700.00 excl. VAT

JavaScript is one of the most important and popular languages in the world today. It is an essential skill for almost every developer, and a must for anyone who wants to develop for the web. This course will teach you the fundamentals of the JavaScript language. You will learn to write code that interacts with the web page, so that you can add functionality to your web site. It is also the foundation for learning how to use JavaScript frameworks such as jQuery.

Angular Workshop

2 days : R3,900.00 excl. VAT

Angular is an open-source framework for developing web applications. It is one of the most important frameworks today, and is maintained i.a. by Google. AngularJS (version 1) and Angular (version 2) use HTML as a template language. Angular reduces the amount of code developers have to write, and addresses many of the challenges encountered in developing single-page applications.

Course List 2018

XML Development

3 days : R6,300.00 excl. VAT

XML (eXtensible Markup Language) is used in many systems to handle data and configuration. It is also used on web sites, for documentation, for interfaces between systems, and even for images. This course gives you a solid foundation in XML, including XML schemas.

PHP Development

5 days : R8,700.00 excl. VAT

PHP is a popular scripting language that runs on any web server, and is one of the fastest, easiest and cheapest ways to write web applications. This course will teach you how to develop web-based systems using PHP. You will learn the PHP syntax, how to process form data from a web page, and how to read from and write to a database.

OTHER

SQL Fundamentals

3 days : R6,300.00 excl. VAT

SQL is the language you use to interact with a database management system. This course will teach you how to create tables, insert data and update data using SQL. The main focus is on learning how to find the data that you need by creating basic and advanced data queries.

Please note that the course is not specific to any particular database system.

Python Programming

5 days : R8,700.00 excl. VAT

Python is a popular programming language and is used by companies like Google and Facebook. It has many advantages: it is free, easy to learn, fast to learn and very versatile. This course will teach you how to read, write and understand Python scripts. You will learn good coding conventions, and be introduced to relevant resources and tools. The course will also provide an overview of object-oriented concepts in Python.

Perl Programming

5 days : R8,700.00 excl. VAT

The Perl programming language is a well-established language that is available free of charge for all operating systems. It is widely used for many different tasks: from text processing to system administration to testing. This course will teach you the fundamentals of the Perl language so that you can create your own Perl scripts, or maintain existing Perl code. You will learn safe programming practices, and how to run Perl on different operating systems.

Linux Fundamentals

5 days : R8,700.00 excl. VAT

Linux is the most popular operating system for web servers, and is a very powerful and flexible system. This course will introduce you to the fundamentals of the Linux operating system. It covers topics from installation and system architecture to scripting languages and the principles of Linux programming.

Linux Shell Scripting

3 days : R6,300.00 excl. VAT

Whether you are a Linux system administrator, a developer or a power user, you spend a lot of time on repetitive tasks. You can increase your productivity and save hours by learning to write efficient shell scripts that automate simple and complex processes.

Course List 2018

Introduction to Computer Programming

5 days : R8,700.00 excl. VAT

Learning to code is a valuable skill. Even if you don't want to be a career programmer, many of the programs you use every day can be programmed in some way to make your work faster and easier. This course is for people who have little or no programming experience. It introduces you to the fundamental building blocks of programming languages, and how to use them to write short programs. You will not be a programmer after 5 days, but you will have the essential foundation on which you can start building your skills.

Project Management for IT

3 days : R8,700.00 excl. VAT

The Project Management for IT course covers project management topics, such as project planning, risk management, change management, change control and quality management. It looks specifically at IT projects, which have different risks and different problems. You will also learn about the project development lifecycle, and be introduced to different project methodologies. This course does not follow any one specific project management methodology.

MORE INFORMATION

Customised Courses

Price on Request

We offer customised courses for clients who have special requirements. These may be courses we no longer schedule, or may combine topics from our other courses, or include specific topics not normally covered.

Customised courses may be presented either on an in-house basis anywhere in the country, or at our training venue in Pretoria. Please note that a minimum of 5 delegates is required for a customised course.

For more information, please telephone (27) 12 666 2020, or e-mail info@incusdata.com.

Prerequisites

Please check to make sure that you meet the prerequisites for a course before attending. This is very important: if you do not have the required background knowledge, you will not benefit from the course.

We reserve the right to ask a delegate who does not meet the prerequisites to leave a course. We will postpone the attendance until the delegate meets the prerequisites, or schedule the delegate for a more suitable course. There will also be an administration fee of 10% of the course price.