2011 Course List

Title: Windows Azure Solutions with Microsoft Visual Studio 2010

Type: Classroom Training – Onsite Customer Location

Length: 3 Days
Description: This class is an introduction to cloud computing and specifically Microsoft's public cloud offering in Windows Azure. Windows Azure has been described by Microsoft as an operating system for "the cloud". In this class, you explore this new cloud operating system and learn how to write, deploy and monitor .NET applications in Azure.

Prerequisites: Before attending this course, students must have:

- Experience with Visual Studio 2008 or better is required.
- Knowledge and experience in a .NET language (C# or VB) is required.
- Knowledge of ASP.NET is required.

Title: Introduction to Web Development with Microsoft Visual Studio 2010

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: In this course, students will be introduced to ASP.NET Web development using ASP.NET Web Forms and supporting Microsoft technologies. This course focuses more on server-side programming and data access/management rather than client-side programming. AJAX is covered at a beginner level. Additional Web development models such as Silverlight and ASP.NET MVC are demonstrated for students but will not be covered in any significant detail.

Prerequisites: Before attending this course, students must have at least one month of experience in .NET technologies. In addition to their professional experience, students who attend this training should have the following technical knowledge:

- Knowledge of HTML or DHTML, including:
  - Tables
  - Images
  - Forms
- Programming experience using Visual Basic .NET or Visual C# .NET, including:
  - Declaring variables
  - Using loops
  - Using conditional statements

2011 Course List

Title: Developing Web Applications with Microsoft Visual Studio 2010

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: In this course, students will learn to develop advanced ASP.NET MVC and Web Forms applications using .NET Framework 4 tools and technologies. The focus will be on coding activities that enhance the performance and scalability of the Web site application. ASP.NET MVC will be introduced and compared with Web Forms so that students know when each should/could be used.

Prerequisites: In addition to their professional Web development experience, students who attend this training should have the following technical knowledge:

- An understanding of the problem-solving techniques that apply to software development.
- A basic understanding scripting techniques and some hands-on experience writing scripts.
- A general understanding of the purpose, function, and features of the .NET Framework.
- Experience using Visual Studio 2008.
- Experience in object oriented design and development.
- Experience in N-Tier application design and development.

2011 Course List

Title: Developing Data Access Solutions with Microsoft Visual Studio 2010

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: In this five-day instructor-led course, students learn to create data-driven applications that access data from various sources, such as Microsoft SQL Server, third-party, Microsoft Office Access, object data sources, XML, or other flat-file sources.

Prerequisites: Before attending this course, students must have:

- A basic understanding of scripting techniques and some hands-on experience writing scripts:
- A general understanding of the purpose, function, and features of following .NET Framework topics:
- Experience using Visual Studio 2008 in the following task areas:
- Experience in object oriented design and development as follows:
- Experience in N-Tier application design and development as follows:
- Performing basic data access tasks with LINQ
- Implementing basic security best practices in .NET Applications
- Implementing basic service calls
- Using .NET Configuration Files
- Deploying .NET Framework Applications using ClickOnce and the MS Installer
- Data access experience in Windows client application development as follows:
- Data access experience in Web application development as follows:

Title: Administering Team Foundation Server 2010

Type: Classroom Training – Onsite Customer Location

Length: 3 Days
Description: This three-day instructor-led course provides students with the knowledge and skills to manage Microsoft Team Foundation Server 2010. The course focuses on the technologies used in Team Foundation Server 2010 and the techniques used to deploy, manage and support Team Foundation Server 2010.

Prerequisites: Before attending this course, students must have:

- A+ certification or equivalent knowledge.
- Network+ certification or equivalent knowledge.
- Possess working knowledge of Windows Server administrative tasks.

2011 Course List

Title: Developing Windows Communication Foundation Solutions with Microsoft Visual Studio 2010

Type: Classroom Training – Onsite Customer Location

Length: 3 Days
Description: In this course, students will learn to develop Windows Communication Foundation applications using .NET Framework 4 and Visual Studio 2010. Service Oriented Application design considerations will also be included as part of this training.

Prerequisites: Before attending this course, students must have:

- Understanding of the problem-solving techniques that apply to software development.
- General understanding of the purpose, function, and features of the .NET Framework.
- Experience developing software using Visual Studio 2008 or Visual Studio 2010.
- Experience in object-oriented design and development using the C# programming language.
- Experience in n-tier application design and development.

Title: Developing Windows Applications with Microsoft Visual Studio 2010

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: In this course, experienced developers who know the basics of Windows Forms development gain more advanced Windows Client design and development skills. WinForms and WPF programming models, as well as relative strengths and when to use each technology, are covered.

Prerequisites: Before attending this course, students must have:

- A general understanding of the purpose, function, and features of the .NET Framework.
- Experience using Visual Studio 2008.
- Experience in object oriented design and development.
- Experience in N-Tier application design and development.
- Controlling input at the user interface level in Windows Client applications.
- Debugging, tracing, and profiling .NET applications.
- Monitoring and logging .NET applications.
- Performing basic Data Access tasks with LINQ.
- Implementing basic security best practices in .NET Applications.
- Implementing basic service calls.
- Using .NET Configuration Files.
- Deploying .Net Framework Applications using ClickOnce and the MS Installer.

2011 Course List

Title: Programming in C# with Microsoft Visual Studio 2010

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: This five-day instructor-led course provides students with the knowledge and skills to develop C# applications for the Microsoft .NET Platform. The course focuses on C# program structure, language syntax, and implementation details.

Prerequisites: Before attending this course, students must have:

- At least 12 months experience working with an Object Oriented language
- Have C++ or Java knowledge:
    - Creating Classes
    - Inheritance and Abstraction
    - Polymorphism
    - Interfaces
    - Exceptions
- Knowledge of the Visual Studio IDE.

Title: Programming in Visual Basic with Microsoft Visual Studio 2010

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: This five-day instructor-led course provides students with the knowledge and skills to develop Visual Basic applications for the Microsoft .NET Platform. The course focuses on Visual Basic program structure, language syntax, and implementation details.

Prerequisites: This course requires that you meet the following prerequisites:

- This course is targeted at developers who already have Visual Basic knowledge.
- This course is not for new developers; at least 12 months experience working with an Object Oriented language is expected.
    - Creating classes
    - Inheritance and abstraction
    - Polymorphism
    - Interfaces
    - Delegates/ Events
    - Exceptions
- Experience with the Microsoft .NET Framework
- Knowledge of the Visual Studio integrated development environment (IDE)

2011 Course List

Title: Maintaining a Microsoft SQL Server 2008 R2 Database

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: This five-day instructor-led course provides students with the knowledge and skills to maintain a Microsoft SQL Server 2008 R2 database. The course focuses on teaching individuals how to use SQL Server 2008 product features and tools related to maintaining a database

Prerequisites: This course requires that you meet the following prerequisites:

- Basic knowledge of the Microsoft Windows operating system and its core functionality.
- Working knowledge of Transact-SQL.
- Working knowledge of relational databases.
- Some experience with database design.
- Completed Course 2778: Writing Queries Using Microsoft SQL Server 2008 Transact-SQL

Title: Implementing a Microsoft SQL Server 2008 R2 Database

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: This five-day instructor-led course provides students with the knowledge and skills to implement a Microsoft SQL Server 2008 R2 database. The course focuses on teaching individuals how to use SQL Server 2008 R2 product features and tools related to implementing a database.

Prerequisites: This course requires that you meet the following prerequisites:

- Working knowledge of Transact-SQL (ability to write Transact-SQL queries) or Course 2778A: Writing Queries Using Microsoft SQL Server 2008 Transact-SQL
- Working knowledge of relational databases (database design skills).
- Core Windows Server skills.
- Basic programming language.

2011 Course List

Title: Designing a Business Intelligence Solution by Using Microsoft SQL Server 2008

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: This five-day instructor-led course provides in-depth knowledge on designing a Business Intelligence solution by using Microsoft SQL Server 2008.

Prerequisites: This course requires that you meet the following prerequisites:

- Knowledge of data warehousing, data marts, and industry-accepted Business Intelligence (BI) methodologies.
- Conceptual understanding of SQL Server 2005 and SQL Server 2008 components, such as online analytical processing (OLAP), extract, transform, load (ETL), and reporting tools and technologies.
- Experience in developing and implementing cubes at the physical level.
- Experience in working with data transformations .
- Experience in creating star and snowflake schemas at both conceptual and logical levels.
- Experience in writing MDX for customization and querying.
- Fundamental understanding of Microsoft Windows security, such as how groups, delegation of credentials, and impersonation function in a security context.
- Fundamental understanding of Web-based architecture.
- Experience in using the following tools:
    - Microsoft SQL Server BI Development Studio
    - Microsoft SQL Server Management Studio
    - Report Builder and Report Manager
    - Source Code Control (SCC) product
- Possible experience in using the following tools:
    - Microsoft Office Visio
    - System Monitor

2011 Course List

Title: Developing Spatial Data Solutions with Microsoft SQL Server 2008

Type: Classroom Training – Onsite Customer Location

Length: 1 Day
Description: This course provides the knowledge and skills to create database solutions that use spatial data in Microsoft SQL Server 2008. It introduces spatial data concepts and the geography and geometry spatial data types in SQL Server 2008. It describes use of these data types to store geographic and location-based data and to perform spatial operations and queries. Finally, it describes how to integrate spatial data in SQL Server 2008 with the Microsoft Virtual Earth map control in a Web application.

Prerequisites: This course requires that you meet the following prerequisites:

- Experience of creating database solutions in SQL Server, including basic Transact-SQL programming.
- Familiarity with Web development in Microsoft Visual Studio (recommended but not essential).

Title: Writing Queries Using Microsoft SQL Server 2008 Transact-SQL

Type: Classroom Training – Onsite Customer Location

Length: 3 Days
Description: The student will be introduced to how client/server architecture works, and examine the various database and business tasks that can be performed by using the components of SQL Server 2008. The student will also be introduced to SQL Server database concepts such as relational databases, normalization, and database objects. In addition, the student will learn how to use T-SQL to query databases and generate reports.

Prerequisites: This course requires that you meet the following prerequisites:

- Knowledge of data integrity concepts.
- Core Windows Server skills.
- Relational database design skills.
- Programming skills.

2011 Course List

Title: Java Programming

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: Intensive and hands-on, the course emphasizes becoming productive quickly as a Java™ application developer. This course quickly covers the Java 5.0 language syntax and then moves into the object-oriented features of the language. Students will then use several of the provided API packages, such as I/O streams, collections, Swing GUI programming, threads, and accessing a database with JDBC. The course ends with a chapter on performance tuning with hints and best practices for writing efficient applications. Appendices on sockets, regular expressions and J2EE™ are also available for further study.

Prerequisites: Professional programming experience in C, C++, or C# is required. Knowledge of Object-Oriented concepts is required.

Title: Advanced Java Programming

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: This intensive, hands-on course explores advanced Java™ 5.0 Standard Edition language features and packages. Students will learn how to utilize more advanced I/O capabilities with object serialization and low-level file I/O with the java.nio package. Advanced JDBC topics include batch processing and working with LOBs and RowSets. Client/server applications can be written utilizing both the java.net and java.rmi packages. Security is also covered in detail throughout several chapters including security policies and data encryption. XML parsing is done using the JAXP API. Programmers can use C and C++ functions from their Java programs using JNI. The course ends with several chapters on design patterns and how they can be put to best use in different types of Java applications.

Prerequisites: Java Programming class or equivalent experience

2011 Course List

Title: Fast Track to Java EE with Servlets/JSP and JDBC on RAD

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: This is a 5-day course that covers Java EE 5 with a focus on the Web tier and JDBC.. The Java EE platform offers all the advantages of developing in Java plus a comprehensive suite of server-side technologies. This course tells you what you need to know to design and build your own web applications. You'll learn the details of the key Java EE technologies and how to leverage the strengths of each, with special focus on Servlets and JSP. At the same time, you'll be learning about the big picture of Java EE and how to design web applications that are robust, efficient, and maintainable. A major part of the course is spent on Servlets and JavaServer Pages (JSP) with special focus on using the JSTL. It then covers JDBC, Javas database access technology. The course concludes with an introduction to EJB and other important Java EE technologies.

Prerequisites: A working knowledge of Java.

Title: Fast Track to Spring 3 and Spring Web Flow 2.1

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: This course is a new course based on the Spring® 3 release. It includes complete coverage of the annotation based approach to configuration and the use of Java-5 capabilities that was first introduced in Spring 2.x, and which has been greatly enhanced in Spring 3. It also provides coverage of the traditional XML-based configuration that can still play an important role in existing and new projects. The course starts with the basics of Spring and in-depth coverage on using the powerful capabilities of the Core module to reduce coupling, and increase flexibility, ease the maintenance, and testing of your applications. It goes on to cover all the important capabilities of Spring 3, including using Spring to simplify the creation of a persistence layer with JDBC and/or persistence frameworks like Hibernate® and JPA. It includes coverage of advanced capabilities such as using Spring's Aspect Oriented Programming (AOP) to program cross-cutting concerns such as transactions and security. It provides an introduction to Spring Security v3, its architecture, and how to use it to secure both Web application requests and bean invocations. The course includes integration of Spring with Java EE Web applications, an introduction to Spring's Web MVC, and thorough coverage of Spring Web Flow 2 (which is still the latest version available). Spring MVC is a Web framework based on the powerful Model-View-Controller pattern, and the introduction covers the basics of Spring MVC, and how it supports organizing your Web applications in a highly structured, loosely coupled manner. Spring Web Flow 2 is a Spring framework for

defining user interface flow in a Web application. The course includes thorough coverage of Web Flow, including an overview of its capabilities and architecture, defining flows, flow variables and actions, the Unified EL, and flow programming.

Prerequisites: A good working knowledge of basic Java, JDBC, and Servlets/JSP.

Title: Struts 1.2

Type: Classroom Training – Onsite Customer Location

Length: 3 Days
Description: This 3-day course will teach students how to use Java™ Struts as a framework to develop web applications that follow the Model/View/Controller design pattern. The topics cover the components of Struts that are available from the Jakarta project of the Apache Foundation. The course illustrates what the components provide and use of them.

Prerequisites: Java Programming, Java Web Programming, or Java2 Enterprise Edition. Java Servlet and JSP programming experience, and a basic understanding of HTML and XML is required.

Title: Object Oriented Analysis and Design Using the Unified Modeling Language

Type: Classroom Training – Onsite Customer Location

Length: 5 Days
Description: In this 5-day course students learn how to use Object-Oriented techniques to analyze real-world requirements and to design solutions that are ready to code. Students learn how to identify and design objects, classes, and their relationships to each other, which includes links, associations, and inheritance. A strong emphasis is placed on diagram notation for use cases, class and object representation, links and associations, and object messages. This course utilizes UML 2.0 notation.

Prerequisites: Familiarity with structured techniques such as functional decomposition is helpful.

2011 Course List

Title: Design Patterns

Type: Classroom Training – Onsite Customer Location

Length: 4 Days

Description: This advanced Object-Oriented course provides software architects and designers with skills to create high quality object-oriented designs exhibiting improved flexibility, reduced maintenance costs, and with increased understanding of the resulting code. Participants learn more than 30 object-oriented patterns, including the 23 micro-architectures in "Design Patterns: Elements of Reusable Object-Oriented Software," by Gamma, Helm, Johnson, and Vlissides (the gang-of-four, or GoF book). Application examples and code snippets are provided to illustrate the patterns and the rationale for using that pattern in a given situation.

Prerequisites: Object-Oriented Analysis & Design-UML or equivalent experience. At least 6 months experience programming with an object-oriented programming language.