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*High quality management  
and software engineering  
courses at reasonable prices.*

## Course Outlines

### **Managing Software Development Projects** *PMBOK compatible*

**Duration : 2 days**

**Level: Advanced**

This intensive course has been designed for information technology professionals involved in software development projects. It is suitable for project managers and other project team members currently, or soon to be, involved in a software development project.

By the end of this intensive course the participant will be able to:

- Properly initiate a Software Development Project
- Create a Project Charter
- Create a Scope Statement
- Create a Scope Management Plan
- Determine Project Feasibility
- Create the Statement of Work
- Understand how the various artifacts interact
- Use Project Time Management techniques
- Properly formulate Project Goals and Objectives
- Prepare Gantt Charts, Network Diagrams and Other Diagrams
- Determine Project Costs and Estimates
- Create a **comprehensive and professional** Project Plan
- Create a Staffing Plan
- Understand how Project Management differentiates from Work Management
- Know where PM fits into CMMI, ISO9000, RUP, SCRUM, Etc.
- Understand how the Project Plan fits in the Software Development Life Cycle
- Integrate the Software Development Plan into the Project Plan
- Implement Project Controls
- Manage Risks and Assumptions
- Manage Quality
- Measure Project Performance
- Report Project Progress
- Identify Corrective Actions
- Properly close a Software Development Project

By the end of this course, the participant will also have a good understanding of modern project management theory, best practices and terminology.

## Course Description:

### **UML Fundamentals Boot Camp**

**Duration: (2 days)**

**Level: Intermediate**

UML has become the modeling arsenal of choice for Object-Oriented Analysis and Design. Preparing standard UML diagrams and narratives is a must for analysts, professional programmers and software engineers. Proper use of the UML distinguishes the professional analyst/programmer from the amateur.

UML provides a common vocabulary of object-oriented terms and diagramming techniques that can model any systems development project from analysis through implementation. The UML can also be used in many other business situations.

If the projects you work on get complicated, this course is for you.

The UML Fundamentals Boot Camp consists of 4 hours of theory and 10 hours of relevant individual and group exercises. This is an hands-on course where you learn by doing.

By the end of this comprehensive hands-on course, you will:

- Have a good foundation in UML
- Have improved your skills at gathering and documenting user requirements!
- Have improved your application design skills.
- Have improved your communication skills.
- Understand the various views offered by the UML
- Understand where UML fits within Software Engineering and Business processes
- Choose the right UML diagram for the situation
- Distinguish between Logical and Physical views
- Properly select Dynamic, Static or Functional views
- Be able to create Use Case Diagrams, Narratives and Scenarios
- Be able to create Class and Object Diagrams
- Be able to model various types of Associations
- Understand How UML translates into object-oriented code
- Be able to create Sequence Diagrams,
- Be able to create Communication Diagrams,
- Be able to create State Chart Diagrams,
- Be able to create Activity Diagrams
- Be able to create Package Diagrams
- Know when to use UML and when not to
- Be able to function efficiently within an object-oriented development team.

## Course Description:

**ASP.NET (Hands-on C# version) (3 days)**

**Level: Intermediate**

This intensive course has been designed for programmers who have already developed web applications. It assumes that the student already knows SQL, HTML,XML and is at ease with Object Oriented Programming Languages such as C++,C# or Java. Very little time is spent on basics. Instead we focus on the less intuitive parts of ASP.NET and on the skills required to build complete applications and reusable components.

This intensive hands-on course covers:

- 15 minute intro to C#
- ASP.NET Web Applications
- Web Forms
- Code Behind
- Server Controls
- Creating Custom Controls
- Over-riding Existing Controls
- Storing and Retrieving Data using ADO.Net Objects (comprehensive)
- Comprehensive coverage of the feature-rich DataGrid and DataList controls
- Comprehensive coverage of Advanced Data Binding Features
- Use of the eval function and templates
- Creating Controls at Run-Time
- Maintaining ASP.NET Application Security
- Deploying Web Applications
- Web Services
- Post-Back, Cached and Validation Server Controls
- ASP.NET Life Cycle Events
- Programming a complete web application
- Debugging Techniques
- Optimizing ASP.NET applications
- Working with Transactions
- Working with XML files
- Catching and correcting Errors
- Web Matrix and Visual Studio
- Strategies for maintaining State
- And More

## Course Description:

### **C# Programming (Hands-on) (3 days)**

#### **Level: Intermediate**

This intensive course has been designed for programmers who are new to Object Oriented Programming Languages such as C++,C# or Java. It is ideal for Visual Basic, Delphi, C, Perl, VBScript, or Cold Fusion programmers starting to develop in C#.

The course covers

- C# and Visual C#
- The .NET Framework
- The Development Tools
- Identifiers and Keywords
- Variables
- Types
- Type Conversions
- User Defined Types
- Common Types
- Flow Control Statements
- Exception Handling
- Class Declaration
- Objects
- Methods, Properties
- Delegates
- Events and Event Handlers
- Access Modifiers
- Passing and Hiding Parameters
- Constructors and Destructors
- Inheritance and Polymorphism
- Abstract Classes and Interfaces
- Casting Objects and Conversions
- Threads
- Arrays,
- Indexers, Enumerators and Collections
- Reflection
- Assemblies and Namespaces
- C# Data access with ADO.NET
- Building Windows Applications
- Building Web Applications
- Web Services
- Accessing the Win32 API

## Course Description:

### **CFMX (Hands-on)**

**Duration: (2 days)**

**Level: Intermediate/Advanced**

**Pre-requisite (able to hand code HTML, must know how to program)**

This very intensive course has been designed for information technology professionals planning to use CFMX for their next web application. This course covers a wide spectrum of ColdFusion functionalities.

This intensive course covers:

- CFML Templates
- Setting up the Application
- Passing Parameters from page to page
- Processing Forms with <FORM> and <CFFORM>
- Client Sided and Server Sided Validations
- Session Variables
- Working with Cookies
- Data Access: Queries
- Data Access: Inserting, Deleting, Updating Records
- Data Access: Drill Down Applications
- Data Access: Stored Procedures
- CFMAIL
- Dynamic Pages
- Avoiding Cache Problems
- Looping
- CFTOKEN and CFID
- File Upload and File Management
- Lists, Arrays and Structures
- Error and Exception Handling
- Custom Tags and Custom Tag Attributes
- Nested Custom Tags
- User-Defined Functions
- Creating Custom Tags with Java
- HTTP Agents and Page Scraping
- Transferring files with CFFTP
- XML and WDDX
- Creating and Consuming Web Services
- Creating Graphs with Cold Fusion MX
- Streaming Multimedia
- Interacting with JavaScript
- Integrating with Java and J2EE Application Servers
- Integrating CFMX and FlashMX
- Improving Performance
- Designing Cold Fusion Applications

## Course Description:

### **ADO.NET C# Version (Hands-on)**

**Duration: (2 days)**

**Level: Advanced**

This very intensive course has been designed to increase .NET programmers knowledge of ADO.NET Data Access techniques. ADO.NET provides an extensive set of classes that facilitate access to data from a variety of sources. Whether you are developing applications using ASP.NET, Windows Forms Applications, or XML Web Services, this course will show you how to use ADO.NET data access to the maximum.

This course covers:

- The ADO.NET Object Model
- System.Data NameSpace
- Visual Studio and Web Matrix Data Features
- Working with Disconnected Data
- NET Providers
- Connection Objects
- Command Objects
- DataReader Objects
- DataAdapter Objects
- DataSet Object
- DataView Object
- DataTable Object
- DataGrid Control
- Data Binding
- Inserting, Updating and Deleting Rows
- Typed DataSets
- DataSet Schemas
- Merging DataSets
- XML access via the DOM
- XML access via the XpathNavigator
- XSL Transform Object
- Tables and Relations Collections
- Constraints, Relations, and Views
- Working with Stored Procedures
- Passing Parameters
- Managing Concurrent Data Updates
- Transactions
- Handling Exceptions and Errors
- ADO.NET in Web Services
- Security
- Cached Data
- Performance Issues and More

## Course Description:

**Project Management** *PMBOK compatible*

**Duration : 2 days**

**Level: Advanced**

This intensive course has been designed for professionals involved projects. It is suitable for project managers and other project team members currently, or soon to be, involved in a project.

By the end of this intensive course the participant will be able to:

- Understand what is Project Management
- Properly initiate a Project
- Create a Project Charter
- Create a Scope Statement
- Create a Scope Management Plan
- Create a Project Communication Plan
- Determine Project Feasibility
- Create the Statement of Work
- Understand how the various artifacts interact
- Use Project Time Management techniques
- Properly formulate Project Goals and Objectives
- Prepare Gantt Charts, Network Diagrams and Other Diagrams
- Determine Project Costs and Estimates
- Understand Critical Path Management
- Create a **comprehensive and professional** Project Plan
- Create a Staffing Plan
- Learn about Project Team Dynamics
- Understand how Project Management differentiates from Work Management
- Selecting the Proper Phase Structure for the project
- Understand the specifics of Software Development and IT Projects
- Understand Procurement Planning
- Implement Project Controls
- Implement Change Management
- Manage Risks and Assumptions
- Manage Quality
- Measure Project Performance
- Report Project Progress
- Identify Corrective Actions
- Know how to deal with Outstanding Issues
- Properly close a Project

By the end of this course, the participant will also have a good understanding of modern project management theory, best practices and terminology.

**Course Description:**  
**Systems Analysis and Design (UML based)**  
**Duration : 2 days**  
**Level: Intermediate**

This intensive Systems Analysis and Design course teaches the core set of skills and techniques that all competent analyst need to know. It offers a comprehensive overview of the analysis and design processes and associated artifacts. The course also shows how to use UML for both analysis and design.

The course covers

- Differences between Structured Analysis and Object-oriented Analysis
- Structured Modeling Techniques
- Object-Oriented Techniques
- *Physical vs Logical* Solutions
- Systems Development Life Cycles
- Selecting the proper life cycle
- Object-Oriented Analysis with UML
- Business Value Analysis
- Feasibility Analysis
- The Analysis Process
- Developing the Analysis Plan
- Analysis Techniques
- Requirements Gathering
- Requirements Management
- UML
- Use Case Modeling
- Structural Modeling
- CRC Diagrams
- Class Diagrams
- Behavioral Modeling
- Sequence Diagrams
- Collaboration Diagrams
- Statechart Diagrams
- Evolving Analysis Models into Designs
- Package Diagrams
- System Architecture Design
- User Interface Design
- Object Persistence and Data Base Design
- Class and Method Design
- Test Planning
- Documentation
- Change Management Principles

## Course Description:

### **Quality Management Systems - Design and Implementation**

**Duration : 2 days**

**Level: Intermediate**

This hands-on course teaches how to design an ISO9000 Quality Management System for Software Development. It also covers how to create a project plan for an ISO implementation. By the end of the course the student knows how to write a Quality Manual based on ISO 9001/9000-3/90003 standards.

The course covers:

- What is Quality?
- What is Quality Control?
- What is Quality Assurance?
- What is Quality Management?
- What is Quality Management System?
- How to Design a Quality Management System.
- Process Modeling Techniques.
- Minimal Requirements in Contractual Situations.
- ISO 9001:2000 - Underlying Principles
- ISO 9000-3
- ISO 9001
- ISO 90003
- ISO 9004-2
- Planning an ISO9001 Implementation.
- Quality Management System Requirements.
- The Quality Manual.
- Quality Records.
- Control of Records.
- ISO 9001 Management Responsibility Requirements.
- The Quality Policy
- ISO 9001 Resource Management Requirements.
- ISO 9001 Product Realization Requirements.
- ISO 9001 Measurement, Analysis, and Improvement Requirements.
- Quality Management and Contracts
- ISO 9001 Registration.
- Hands-on: Writing the Manual.
- Hands-on: Modeling the Quality Management System.
- Things we can do to improve quality during software development.