

## **Dot Net Course**

TED Pro Offers best .Net Training in Trichy. We offer Internships in Real-Life Business Applications of our clients. Students are given Practical Training in the below mentioned syllabus. The syllabus can be customized according to individual needs.

### **Visual Studio Latest version and .Net Compact Framework**

Introduction to .Net Framework 4.0 – Common Language Runtime - .Net Framework Class Library – ADO.NET – Assemblies – Dynamic Source Code Generation & Compilation – Common Type Systems – Configuring Applications – Extending Design Time Support – Events – Exceptions – Garbage Collection – Graphics & Drawing – Globalization & Localization of Applications – Cross Language Interoperability – Language Integrated Query (LINQ) – Managed Execution – Assemblies – Mobile Development – Networking – Reflection – Security – Side By Side Execution – Threading – Windows Communication Foundation – Windows Presentation Foundation – Windows Service Applications.

### **Visual Basic .Net**

Introduction to Visual Basic.Net – Language Syntax and Enhancements – Classes, Methods, Properties, Access Modifiers-OOPs Implementation:- Inheritance, Interfaces, Polymorphism – Delegates – Multi threading – Arrays – Boxing & UnBoxing – Assemblies – Class Libraries – File Concepts – I/O Handling – Building Windows and Console Applications – Creating Win Forms – Use of Controls in Win Forms – Building Menu Bar – Building Tool Bars – Building Context Menu – File Handling – MDI Application Building. Exception Handling – Exception Handling & Debugging Win Apps – Understanding VB.Net's Integrated Debugging Environment – Errors: Compile – Time, Run – Time & Logical – Error Handling: writing, Creating & Logging Exception Handling in Code.

### **Data Presentation**

Introduction to Reports – Introduction to Crystal Engine – Advantages of Crystal Reports over conventional Data Reports - Creation of Crystal Report R format – Crystal report Integration with Windows & Web Applications – Discussion on Data Handling and Reports.

### **ADO .NET 4.0**

Getting Started with ADO.NET 4.0 - The Structure of ADO.NET 4.0 - Connecting to a Database and Retrieving Data -Best Practices for Managing Connections and Performing

Queries. Modifying Data by Using ADO.NET Commands - Inserting, Updating, and Deleting Data - Managing Data Integrity and Concurrency Querying and Maintaining Data by Using Datasets - Creating and Using a DataSet to Retrieve Data - Updating a Database by Using a DataSet - Querying and Maintaining Data by Using LINQ - Querying In-Memory Data by Using LINQ Query Expressions Retrieving Data by Using LINQ to SQL - Modifying Data by Using LINQ to SQL. Implementing an Entity Model by Using the ADO.NET Entity Framework - Creating an Entity Data Model by Using the ADO.NET Entity Framework - Querying and Modifying Data by Using the ADO.NET Entity Framework. Building Occasionally Connected Solutions by Using Synchronization Services - Understanding Microsoft Synchronization Services - Downloading Data by Using Synchronization Services - Uploading Data by Using Synchronization Services.

## **Visual C#.Net:**

Getting Started - Introduction to .NET and the .NET Framework - Exploring Visual Studio .NET - Creating a Windows Application Project. Understanding C# Language Fundamentals – Understanding the Fundamentals of a C# Program - Using C# Predefined Types - Writing Expressions - Creating Conditional Statements - Creating Iteration Statements .Creating Objects in C# - Defining a Class - Declaring Methods - Using Constructors - Using Static Class Members. Implementing Object- Oriented Programming Techniques in C# -Designing Objects - Using Inheritance - Using Polymorphism Programming with C# - Using Arrays - Using Collections - Using Interfaces - Using Exception Handling - Using Delegates and Events. Building .NET-based Applications with C# - Examining the .NET Framework Class Library - Overriding Methods from System. Object - Formatting Strings and Numbers - Using Streams and Files Using ADO.NET to Access Data - ADO.NET Architecture - Creating an Application that uses ADO.NET to Access Data - Changing Database Records. Creating Windows-based Applications - Creating the Main Menu - Creating and Using Common Dialog Boxes - Creating and Using Custom Dialog Boxes -Creating and Using Toolbars - Creating the Status Bar - Creating and Using Combo Boxes. Using XML Web Services in a C# Program -Consuming an XML Web Service - Building an XML Web Service. Creating a Web Application with Web Forms -Creating a Web Forms Application - Accessing Data by Using a Web Forms Application - Configuring ASP .NET Application Settings. Application Settings and Deployment - Working with Application Settings - Deploying Applications.

## **ASP.Net 4.0**

Introducing ASP.Net – ASP Vs ASP.Net – Client Server Communication – Three-tier Architecture – Namespaces & Objects – Controls: HTML Controls, Server Controls, Validation Controls, Web Forms, Master Pages – Building Controls – Use of Controls– Binding Data to ASP.Net Server Controls – Accessing data from a database using ADO.Net – State Management and Web Configuration: Client Side, Server Side, Web Config File,

Global File – Debugging and Tracing Errors – Template Controls: Grid View, Data List, Form View, Repeater – Security in ASP.Net using Website Administration Tool – Introduction to Web Security and Authentications – Security Considerations – Relationship between IIS and ASP.Net – Authentication Methods – Authorization & Impersonation – Code Access Security – State Management – Themes & Skins – Creating a Web Application by using ASP.Net.

## **XML:**

Web Services - Alternative Solutions - Evolution of the Web - Benefits - Application Model - Introducing Extensible Markup Language - DTD to define XML Documents - Validating XML documents against a DTD - XML Schemas to define the structure of XML documents - XSL to transform the XML documents and Presenting the data in a Web Browser - XML Document Object Model - Active Server Pages with XML - SOAP, WDSL, DISCO, UDDI, XSD - ADO.Net & XML - Publishing Web Services - Discovery of Web Services - Consuming Web Services - Invoking: HTTP- GET and POST - Invoking: HTTP-SOAP - Creating a Proxy - State & Security - State Management - Security Model - HTTP and Firewalls - Secure Sockets Layer (SSL) - Developing High Performance Applications - Consuming Web Service in Real Time Applications - Integrating Applications - Deploying and Managing Applications.

## **ADVANCED DOT NET:**

### **LINQ (Language Integrated Query)**

Introduction to LINQ – Advantage of LINQ in Dot Net 4.0 – Creating LINQ Query Expressions – LINQ to Objects – LINQ to ADO.Net – LINQ to XML.

### **XAML (Extensible Application Mark-up Language)**

Use of XAML in Dot Net 4.0 – Advantages of XAML – XAML Vs Code - Syntax of XAML - Creating a XAML Project – First Program with Expression Blend – XAML Namespaces - Accessing XAML Objects and their Properties – Implicit Type Conversions – XAML Mark-up Extensions.

## **Windows Presentation Foundation:**

Creating an Application by Using WPF - Overview of WPF - Creating a Simple WPF Application - Handling Events and Commands - Navigating Between Pages. Building User Interfaces Defining Layout - Using Content Controls - Using Item Controls - Hosting Windows Forms Controls. Customizing Appearance - Sharing Logical Resources in an

Application - Creating Consistent User Interfaces Using Styles - Changing the Appearance of Controls Using Templates - Using Triggers and Animations. Data Binding - Overview of Data Binding - Create a Data Binding - Implementing Property Change Notification - Converting Data - Validating Data. Data Binding to Collections - Binding to Collections of Objects - Using Collection Views - Create Master-Detail User Interfaces - Using Data Templates. Creating New Controls - Overview of Control Authoring - Creating Controls. Managing Documents - Working with Flow Documents - Working with Fixed Documents - Packaging Documents - Printing Documents. Graphics and Multimedia - Displaying 2D graphics - Displaying Images - Displaying 3D Graphics - Going Further with 3D Graphics - Adding Multimedia Support. Configure and Deploy WPF Applications - Deployment Options - Deploying a Standalone WPF Application - Deploying an XBAP Application - Configuring Security Settings.

### **XPS (XML Paper Specification)**

Types of Documents in Windows Presentation Foundation – Introduction to XPS Documents – Advantages of XPS – Syntax of an XPS Document Class – Reading, Writing, Storing XPS Documents – Displaying Documents with XPS Viewer Application.

### **Windows workflow foundation**

Creating and Hosting Workflows - Overview of Windows Workflow Foundation - Creating Sequential Workflows - Creating State Machine Workflows - Modifying Workflows at Runtime Applying Conditions and Rules - Implementing Flow Control - Defining and Executing Rule Sets - Forward Chaining of Rules - Changing Rules at Run Time. Communicating with Workflows - Calling Methods on the Host Process - Handling Events from the Host Process - Consuming Services from a Workflow - Publishing a Workflow as a Service. Creating and Configuring Custom Activities - Creating Custom Activities - Creating Custom Composite Activities - Customizing Activity Serialization - Defining Custom Activity Layout . Creating and Managing Runtime Services - Creating a Custom Runtime Service - Hydrating and Dehydrating Workflows - Monitoring Workflows - Tracking Workflows. Managing Faults, Cancellations, Transactions, and Compensations - Handling Faults - Handling Cancellations - Creating and Managing Transactions - Creating and Handling Compensations.

### **Windows Communication Foundation:**

Windows Communication Foundation - Designing an Application to be Part of a Service Oriented Architecture (SOA) - Overview of WCF Architecture Using a Language-Level Interface As a Service Contract - Implementing a Simple WCF Service in Visual Studio 2010 - Consuming a simple WCF service in Visual Studio 2010 Configuring and Hosting WCF Services - Programmatically Configuring a Managed Application to Host a WCF Service - Programmatically Configuring a Managed Application to Call a WCF Service - Defining

Client and Service Settings by Using File- Based Configuration Selecting a Hosting Option for a WCF Service - Deploying a WCF Service. Endpoints and Behaviors - Exposing WCF Services Over Different Endpoints - Adding Behaviors to Services and Endpoints. Inter-operating with Non-WCF Web services.

Debugging and Diagnostics - Logging Messages - Activity Tracing. Designing and Defining Contracts - Designing a Coherent and Cohesive WCF Service Interface - Defining a Service Contract Defining Operations on a Service - Defining a Data Contract. Handling Errors - Relating .NET Exceptions to Service-level Faults -Using Faults in a Service - Handling Faults and Exceptions on Clients Improving WCF Service Quality - Managing WCF Service Instances - Managing Concurrency Issues - Improving WCF Service Performance. Implementing WCF Security-Overview of Security in WCF.

Applying Overall Security requirements to a Binding - Specifying Required Client and Service Credentials - Working With Security Information Modifying Workflows at Runtime. Applying Conditions and Rules - Implementing Flow Control -Defining and Executing Rule Sets - Forward Chaining of Rules - Changing Rules at Run Time Communicating with Workflows - Calling Methods on the Host Process - Handling Events from the Host Process - Consuming Services from a Workflow - Publishing a Workflow as a Service. Creating and Configuring Custom Activities - Creating Custom Activities - Creating Custom Composite Activities - Customizing Activity Serialization.

Defining Custom Activity Layout. Creating and Managing Runtime Services - Creating a Custom Runtime Service - Hydrating and Dehydrating Workflows - Monitoring Workflows - Tracking Workflows. Managing Faults, Cancellations, Transactions, and Compensations - Handling Faults - Handling Cancellations - Creating and Managing Transactions - Creating and Handling Compensations.

## **AJAX:**

AJAX Architecture – Using the XML Http Request object – Creating an AJAX Application – Browsers supported by AJAX – Methods & their Properties – Requesting Text/XML/ASP/PHP/HTML files from the server and Submitting Forms – Client & Server side – Microsoft Client Library for AJAX – Using AJAX Control Tool Kit - Adding AJAX to a Site.

## **Silver Light:**

Introduction to Silver Light Framework - Silver Light Architecture & Versions – Silver Light Hosting – Supported Platforms & Browsers – Future Platforms – Silver Light Vs WPF – Installing Silver Light – Silver Light Tools – Silver Light Languages – Windows Live Services – Microsoft Pop Fly, Example Implementation of Silver Light – Silver Light Controls: Lay out, User Interface, Custom Controls, User Controls – Expression Blend – Accessing HTML DOM from Silver Light – Accessing Silver Light from Java Script – Embedding Fonts & Going Full Screen – Designing User Interfaces – Creating a Silver Light

Application with Animation – Accessing Data Using Silver Light – Networking in Silver Light.