**Curriculum For WCF**

**Introduction to Windows Communication Foundation (WCF)**

Introduction to Course Outline

Evolution of WCF

What is WCF?

Overview of Different Types of Contracts in WCF

Introduction to SOA

Steps Involved in Developing,Hosting and Consuming a WCF Service

**Developing a Simple WCF Service**

[Creating a WCF Service Application](javascript:void(0))

[Creating a WinForms Client for our WCF Service](javascript:void(0))

[Overview of App.Config File](javascript:void(0))

**Developing and Hosting a WCF Service onto IIS**

Creating a Simple WCF Service Library

Performing Web Hosting of our WCF Service

Developing a Winforms Client for our WCF Service

**Learn How to Self Host a WCF Service**

Developing a WCF Service Library and Self Host Application

Developing a Winforms Client for our WCF Service

Testing the Winforms Client

**Learn How to Self Host Multiple WCF Services**

Developing Multiple WCF Libraries and a Single Self Host Application

Developing and Testing a Winforms Client for our multiple WCF Services

**Learn How to Self Host a WCF Service Using Config Files**

Developing a WCF Service Library

Working with App.Config

Working with Configuration Editor

Developing a Winforms Client for our WCF Service using a Configuration File

**Learn How to Host a WCF Service Using Windows Services**

Developing a WCF Service Library

Developing a Windows Service To Host Our WCF Service

Developing a Winforms Client for our WCF Service

**Learn How to Self Host a WCF Service Using a Service Reference**

Developing a WCF Service Library

Developing a Self Host Application using a Service Reference

Developing a Winforms Client for our WCF Service

**Learn How to Host a WCF Service Using WAS**

Developing a WCF Service Library

Install Required Roles and Features using Server Manager

Develop a Web Host Service on IIS

Working with AppCmd to Enable NetTcp Binding

Developing a Winforms Client for our WCF Service

**Learning Message Exchange Patterns in WCF**

Developing a WCF Service Library

Implement One Way Methods in a WCF Service and Test

Implement Duplex Methods in a WCF Service and Test - Part I

Implement Duplex Methods in a WCF Service and Test - Part II

**Learn How to Implement Exception Handling for WCF Services**

Throwing .NET CLR Errors from a WCF Service Method

Throwing .NET CLR Errors from a WCF Service IsOneWay Method

Throwing Fault Exceptions from a WCF Service

Throwing Strongly Typed Fault Exceptions

**Learn How to Implement Session Management in WCF Services**

Developing a WCF Service Library

Working with PerSession InstanceContextMode

Working with PerCall InstanceContextMode

Working with Single InstanceContextMode

**Learn How to Implement Transactions in WCF Services**

Developing a WCF Service Library with Transaction Support

Developing a Web Host Application

Developing a Winforms Client To Test out Transaction Support

**Learn to Implement Session Management and Transactions together in WCF Services**

Developing a WCF Service Library with Sessions and Transactions Support

Developing a Winforms Client for WCF Service to test Sessions and Transactions

**Learn to Implement Session Concurrency in WCF Service**

Developing a WCF Service Library with Session Concurrency Support

Developing a Host Application

Developing a Winforms Client to test Session Concurrency Effect

# Learning Objective

Section 1 : Developing a Simple WCF Service Application

Section 2 : Developing and Hosting a WCF Service Onto IIS

Section 3 : Learn How to Self Host a Service

Section 4 : Learn How to Self Host Multiple WCF Services

Section 5 : Learn How to Self Host a WCF Service Using Config Files

Section 6: Learn How to Host a WCF Service Using Windows Services

Section 7 : Learn How to Self Host a WCF Service Using a Service Reference

Section 8 : Learn How to Host a WCF Service Using WAS

Section 9 : Learning Message Exchange Patterns of WCF

Section 10 : Learn How to Implement Exception Handling for WCF Services

Section 11 : Learn How to Implement Session Management in WCF Services

Section 12 : Learn How to Implement Transactions in WCF Services

Section 13 :Learn to Implement Session Management and Transactions together in WCF Services