Hewlett Packard Enterprise

Course Datasheet

ASP.NET WITH C#

Education Services course product number – HPE-ASP-v1.0
Course length – 90 Hrs.
Delivery mode – Instructor Led Training (ILT)
                Virtual Instructor Led Training (vILT)

ASP.NET is a unified Web development model that includes the services necessary for you to build enterprise-class Web applications with a minimum of coding. ASP.NET is part of the .NET Framework, and when coding ASP.NET applications you have access to classes in the .NET Framework. You can code your applications in any language compatible with the common language runtime (CLR), including Microsoft Visual Basic and C# etc. These languages enable you to develop ASP.NET applications that benefit from the common language runtime.

Course Objective

This 90 hours training program will help the learner understand the entirely new programming model for creating network applications that take advantage of the Internet. On completion of the training, learner will have good knowledge of .Net framework, C# language fundamentals, classes, inheritance, and web applications, HTML, JS, CSS, Deployment and Hosting.

Prerequisite

No Experience is required; understanding of basics of C#/HTML would be helpful.

Course Modules

Chapter 01 – Fundamentals of .Net Framework and C#

- History of .NET Framework
- The CLI Concept
- Components of .NET Framework
- Advantages Of .NET Framework
- .NET Framework Versions
- Limitation Of .NET Framework
- C# Histroy
- C# Language Features
- Compilation & Execution of C# Programs
- Naming Conventions for Identifiers, Keywords, Variables & Constants
- Data Types
- Operators

Course Datasheet

- Programming Constructs(Control Statements & loops)
- Type Casting,Boxing & UnBoxing
- Taking Input from Console

Chapter 02 – OOPS Concepts, Classes and Methods, Properties, Arrays & Strings

- Programming Approaches
- What is OOP's?
- Class & Object
- State & Behavior of Objects
- Abstraction, Encapsulation, Inheritance, Polymorphism
- Object Base and Object Oriented Programming Languages
- Classes and Methods
- Class Members
- Access Specifires in C#
- Methods In C#
- Method Parameters - Value, Ref, Out, Named Parameters
- Method Overloading
- Constructors and Their overloading
- Properties in C#
- Types of Properties and their Implementation
- Array in C#
- Types of arrays and their use
- Arrays with params keyword as Method Parameter
- String In C#
- Types of string(String & StringBuilder Class)

Chapter 03 – Inheritance and Interface Implementation

- What is Inheritance?
- Types of Inheritance
- Visibility of Class members in Inheritance
- Abstract Classes and Abstract Methods
- Interface in C#
- Interface Implementation

Chapter 04 – Introduction to Collection Framework, Delegate and Event

- Collections
- System.Collections namespace
- Collection Implementation
- What is delegate?
- Types of delegate
- delegate implementation
- What are events?
- Event instantiation and invocation

Course Datasheet

Chapter 05 – Introduction to ASP.NET Web Application and HTML

- Distributed Application Fundamental
- Client-Server Architecture Application
- What are Client and Server
- Role Of Web Server
- IIS (Internet Information Services) overview
- Evolution of ASP .NET
- Drawback of Classic ASP
- Advantages of ASP.NET over ASP
- Features of ASP .NET
- Creating Web Sites Using Visual Studio
- HTML Basics
- Formatting Tags
- Using Images and Hyperlinks
- Tables and Forms
- Input Controls

Chapter 06 – WebForms, Web Interface, Master Pages and CSS in ASP.NET

- Web Forms Fundamentals
- Page Life Cycle
- isPostBack & AutoPostBack Properties
- Creating WebPages
- ASP.NET Controls
- Most Commonly used Server Controls
- Master Pages in ASP.NET
- Working with Master Pages
- CSS with Webpages

Chapter 07 – Working with SQL Server

- SQL Basics
- DDL,DML and DRL Queries

Chapter 08 – Working with ADO.NET

- Introduction to ADO .NET
- ADO.NET Components
- Connected & Disconnected Implementation
- DataBinding With Controls

Chapter 09 – Data Controls and State Management in ASP.NET

- DataControls overview
- Working with GridView, DataList and Repeater controls
- What is StateManagement?
- HTTP Protocol
- Client Side StateManagement (ViewState, QueryString, Cookies)
- Server Side StateManagement (Session & Application)
- Global Application Class File Overview
- What is Validation?

Course Datasheet

- Validation Controls
- Client Side Validation
- Server Side Validation

Chapter 10 – Security in ASP.NET, Validation Controls and Ajax

- Why Security?
- Types of Security
- Authentication and Authorization
- Login Controls
- Ajax Introduction
- Ajax Extension Controls
- Ajax Toolkit Overview

Chapter 11 – Introduction to WCF

- Introduction to WCF
- Creating WCF Services
- Hosting WCF Services
- Consuming WCF Services

Chapter 12 – Deployment and Hosting

- Deployment Basics
- Publishing and Hosting WebApplications on Web Server