

## Advanced ASP.NET

### Session 1: Introduction to ASP.NET

✓ Introduction to ASP.NET Basics, Web Programming Introduction	✓ HTML, DHTML, JavaScript Introduction, Introduction to IIS, ASP vs ASP.NET
✓ Architecture, Inline Technique and Code-Behind Technique, Code Render Blocks	✓ Server Controls, Page Basics, Page lifecycle, Post back Request, View State, Directives

### Session 2: Programming with Server Controls

✓ HTML Server Controls in ASP.NET	✓ Web Server Controls in ASP.NET
✓ Basic Web Controls in ASP.NET	✓ List Controls, Data Controls in ASP.NET
✓ Advanced Controls and User Controls	✓ Custom Controls, Themes and Skins, Master Pages and Site Navigation

### Session 3: ADO.NET Programming

✓ Architecture, Data Readers and DataSets, Command Object, Transaction Programming	✓ Procedure Execution, Data Adapter and Data Set, Data Tables, Data Relation, Data Views
✓ Updating Dataset, Working with Data Controls	✓ GridView – Inserting, Updating, Deleting
✓ Sorting in Data Grid, Paging in Data Grid	✓ Data Source Controls, Dataset, Details View
✓ Form View, Data List, Repeater Controls	✓ Crystal Reports using ADO.NET

### Session 4: State Management with ASP.NET

✓ Context, View State, Cookie State	✓ Session State, Session Tracking, Application Object, Session and Application Events
✓ Machine.Config, Web.Config, App Setting	✓ Compilation Setting, Custom Error Setting

### Session 5: Introduction to Security and Web Services

✓ Authentication and Authorization, Windows Authentication, Forms Authentications	✓ Passport Authentications, Memberships, Introduction to Web Services
✓ WSDL, SOAP, UDDI, Publishing and Consuming Web Services	✓ Web Client, Windows Client
✓ Caching Web Services	✓ Security in Web Services, ASP.NET with AJAX

### Session 6: Introduction to LINQ

✓ Introduction to LINQ, LINQ Expression, Using via extension methods, Filtering, Sorting	✓ Aggregation, Skit and Take Operators, Joins, Extension Methods, Object Initialization syntax
✓ Anonymous types, Lambda expressions, Deferred Execution, Benefits and drawbacks	✓ IEnumerable vs IQueryable, Using across tiers, Data Projection, Single result value, Existing types
✓ Grouping, LINQ to XML, New XML Classes, Generating XML, Querying XML	✓ Using data projection, combining with XPath, LINQ to SQL, Attributes and Mapping
✓ Creating a Data Context, Deferred Loading, Saving Changes	✓ Inserts and Deletes, Transactions

### Session 7: ASP.NET AJAX and MVC

✓ ASP.NET AJAX Introduction, AJAX Server Controls, AJAX Server Data	✓ AJAX Client Side Library, AJAX Control Toolkit, Web Application using MVC Pattern
✓ Razor View, Model-View and Controller	✓ Introduction to Entity Framework with Examples

### Session 8: Microsoft SQL Server 2014 and ASP.NET MVC

✓ Overview of SQL Server 2014, Installation of SQL Server 2014, Features of SQL Server Express, SQL Server Management Studio	✓ Introduction to different Web Technology, What is ASP.NET MVC, Role of Model, View and Controller, How ASP.NET MVC Works
✓ Benefits of using ASP.NET MVC, Installing Internet Information Server	✓ Installation of ASP.NET MVC, Application setting in IIS
<b>Session 9: Getting Started with MVC</b>	
✓ ASP.NET MVC Project Templates	✓ Understanding the structure of an ASP.NET MVC
✓ Naming Conventions, Creating views, Defining Controllers, Defining data models	✓ Overview of coding standards following during programming
<b>Session 10: Creating an application in MVC</b>	
✓ Creating strongly-typed views, Understanding URLs and action methods	✓ Using HTML helpers, Handling form post backs
✓ Data Validation, Razor Basic, Razor Design goals, Implementation of Razor view	✓ Razor syntax, Accessing Model Data in Razor Views, Defining and using custom HTML Helpers
✓ Defining a layout/MVC Master Page, Styles	✓ Defining and using partial views, Razor Helper
<b>Session 11: Implementing Navigation in MVC web pages</b>	
✓ Defining view-model classes, Implementing Data Filtering in a Controller, Routing Mechanism	✓ Adding Custom entities to a route table, Defining defaults, parameters, and validation
✓ Generating URLs and Hyperlinks, Custom Route Constraints	✓
<b>Session 12: MVC State Management, Using AJAX and jQuery with ASP.NET MVC</b>	
✓ Using hidden fields, Session and Application State, Custom model bindings	✓ Overview of AJAX and ASP.NET MVC, Unobtrusive AJAX, Using AJAX Action Links, Overview of jQuery
✓ jQuery Techniques, Using jQuery UI, Understanding FTP, Setting up FTP Server	✓ Uploading and Downloading FTP Contents
<b>Session 13: Sending Emails &amp; Live Project Development</b>	
✓ Designing email panel, How to send an email to various users, Sending auto emails	✓ Deploying application on Web Server
✓ Getting Customer Requirements, Preparing database and business logics	✓ Developing and Testing Application