



SYLLABUS

Course Title	Programming with ASP .NET	
Course Code	MIT311	
Course Credit	Theory(Hrs)	: 5
	Practical(Hrs)	: 4
	Tutorial(Hrs)	: 0
	Credits	: 7
Course Objective		
<p>The objectives of the course are:</p> <ul style="list-style-type: none"> • To understand the Features & Framework of .NET • To understand ASP .NET concepts • To understand the ASP.NET objects & security • To understand the web services of ASP.NET • To understand ADO.NET concepts 		
Detailed Syllabus		
Sr. No.	Name of chapter & details	Hours Allotted
Section – I		
1	Web Programming Concepts: Understanding of Web Server and Web Browser, Brief about HTTP Protocol, HTTP Request & Response structure. Introduction to ASP.NET: ASP.NET and .NET Framework, The Common Language Runtime, The Framework Class Library	06
2	Designing ASP.NET Application: The Structure of ASP.NET Page, Creating and Running Application, AutoPostBack concept, Controls –Standard control, HTML controls,	12

	Navigation controls, Rich Controls, Login Controls	
3	Form Validation with validation controls: Brief of the Validation Controls, RequiredFieldValidator Control, RangeValidator Control, CompareValidator Control, RegularExpressionValidator Control, CustomValidator Control, ValidationSummary Control, Custom Validation Controls\	02
4	Creating User Control: Creating a UserControl. Adding a Usercontrol to the WebForm, Register – Directive, Loading UserControl Dynamically, Usage of Page.ClientScript. RegisterClientScriptBlock Method	03
5	Web Parts Control: Introduction, WebParts Control, WebPart Manager, WebPart Zone, PageCatalogPart, Creating Webparts page	03
Section – II		
6	Designing using Master Page & Themes: Why Master Pages, Significance of ContentPlaceHolder Tag in MasterPage and Content Tag in WebForm. How to Access master pages, Load and LoadComplete events of the Page and MasterPage classes. Creating Theme, Applying Theme, Applying Stylesheet.	04
7	State Management & Configuration: Preserving State in Web Applications, Using Cookies to Preserve State, ASP.NET Session State Application State Configuration Overview, Common Configuration Settings, Connecting Strings, Authentication, Authorization	04
8	Performing Data Access in ASP.NET: Overview of ADO.NET, Connection Object, Command Object, Rendering Table output using SqlDataAdapter and SqlCommandReader, SqlDataSource, GridView, DetailsView, DataList, Repeater, ListView	06
9	Working with XML, AJAX.NET & Crystal Report: Basics of XML, Create XML Documents, XmlReader and XmlWriter, Repeater, XmlDataSource Control, Architecture of AJAX.NET, Working with AJAX Pro, Using AJAX.NET Controls , Overview to Crystal Reports, Creating Crystal Reports with wizards, Integrating with Web Applications, Customizing the Report Viewer, Adding a Database or Table to a Report	06

10**Web Service, Configuration, Deployment of Web Application:**

Introduction to XML Web services, Creating Web Service, Test and Run Your Web Service, Consuming a Web Service in Client. Importance of WEB.CONFIG, Managing Application Settings, Handling Errors / Custom Errors. ConfigSource attribute, Methods of Deploying Web Application, Deploying & Publishing Website. Introduction to MVC, WPF, WCF.

06**Instructional Method and Pedagogy:**

- Lectures will be conducted on the basis of Classroom Response Systems with the use of multi-media projector, black board, OHP etc. to develop programs based on web based concepts
- Assignments on the basis of course contents given at the end of each unit/topic and will be evaluated at regular interval
- Tutorials and experiments basis on the practical curriculum are given to the students and evaluated at regular interval
- Guidance will be provided to develop real-world applications with the advanced concepts of web development with AJAX and other advanced tools

Course Learning Outcomes:

On the completion of the course, students will be able to:

- **Explain** the Microsoft .NET Framework and ASP.NET page structure
- **Design** web application with variety of controls
- **Use** the Trace and Debug utility of that are provided with Visual Studio .NET.
- **Access** the data using inbuilt data access tools.
- **Use** Microsoft ADO.NET to access data in web Application
- **Configure And Deploy** Web Application.
- **Create** a Microsoft ASP.NET Web Application Form, add code to a Microsoft ASP.NET Web form, validate user input, create user controls, and database connection.

Text books:

- Title : ASP.NET Unleashed , Sams publication
Authors : Stephen Walther, Kevin Hoffman, Nate Dudek
- Title : Professional ASP .NET 2.0, Wrox
Authors : Alex Homer, Dave Sussman, Rob Howard

Reference Books:

- Title : Beginning ASP.NET 2.0 in C# 2005 From Novice to Professional, Apress
Authors : Matthew
- Title : ASP.NET BLACK BOOK, Paraglyph Press, 2006
Authors : Charul Shukla
- Title : Mastering ASP.NET with C#, SYBEX Publication
Authors : A. Russell Jones
- Title : Teach yourself ASP.NET In 21 days – 2nd Edition, Sams pub.
Authors : Chris Payne

Additional Resources

- www.dotnetspider.com
- www.stackoverflow.com