

**GUJARAT UNIVERSITY**  
**K. S. SCHOOL OF BUSINESS MANAGEMENT**  
**M.Sc. IN COMPUTER APPLICATIONS AND INFORMATION TECHNOLOGY**  
[Five Years' (Full-time) Integrated Degree Course]

**Sixth Semester M.Sc. (CA & IT)**  
**KS\_C\_SE-361 ASP.NET**

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**3 credit course**

**Objective:**

The subject and the course content will help the student to understand advanced web technology with C# language, ASP.NET server controls enable an HTML-like style of declarative programming that let you build great pages with less code.

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**UNIT I:** **(20%)**

- **basic of the .net framework:-** .net architecture, managed code, assemblies, CLR, execution of assemblies code, il, jit, net framework class library, common type system, common language Specification, interoperability with unmanaged code

**UNIT II:** **(20%)**

- **VB.Net:-** Net features, Data Types
- **C#:-** Data Types, Operators, Garbage Collection, Jagged Array, Collection (Array list, Hash table), Indexer(One Dimension) and property, Delegates and events(Multicasting , Multicasting Event), Exception Handling.

**UNIT III:** **(20%)**

- **ADO.Net & Object Oriented Concepts (Using VB.Net Or C#):** Basic window control, Architecture of ADO.Net, Comparison with ADO, .Net Data provider, Data Adapter, Data Set, Data Row, Data Column, Data Relation, command, Data Reader, Data Grid Constructor, Destructor, Abstraction, interface, polymorphism (Over loading and over ridding)

**UNIT IV:** **(20%)**

- **ASP.Net:** - Anatomy of ASP.NET Page, Server Controls : label, dropdown list box, validation controls, list box, text box, radio button, check box, State Management : session, caching, Authentication (window,.Net Passport, Forms Based), Authorization, web services, Advance Grid Manipulation

**UNIT V:** **(20%)**

- **ASP.NET AJAX:** Understanding AJAX Technology, Need of AJAX in Web Application, Building a ASP.NET Page with Ajax Using Update Panel, Update Progress and Timer AJAX Server Controls, Downloading and Installation AJAX Control Toolkit Extenders

**Recommended Lecture Scheme:** Approximately 45 hours of classroom teaching,

**Recommended Practical Scheme:** Not Applicable

**Assignment:** One assignment every month.

**Text Books:**

1. Applied .Net Framework Prog. In Ms VB.Net  
By Jeffrey Richter, Francesco Balena (TMH Publication)
2. Microsoft Visual Basic .Net step by step  
By Michael Halvorsan (PHI Publication)
3. Professional ASP.NET 3.5 AJAX  
By Bill Evjen, matt Gibs, Dan Wahlin, Dave Reed, Wrox publications

**Reference Books:**

1. Complete Reference C#  
By Herbert schildt (TMH Publication)
2. Microsoft ASP.Net with C# .Net step by step  
By G.Andew Duthie (PHI Publication)