# C. U. Shah University, Wadhwan City

**Faculty of Computer Science**

**Name of Program: Master of Science Information Technology**

**(Web Technology)**

**Semester : I**

**June-2014**

**Teaching & Evaluation Scheme**

| Sr. No | Subject Code | Subject Name | Teaching Hours/Week | | | | | Evaluation Scheme/Semester | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Theory | | | | Practical | | |
| | | | | | | | | Sessional Exam | | University Exam | | Internal | | Uni. | Total Marks |
| | | | Th | Tu | Pr | Total | Credits | Mks | Hrs | Mks | Hrs | Pr | Case Study | Pr | |
| 4 | 5CS01WVS1 | Advanced.Net Technology-I | 4 | - | - | 4 | 4 | 30 | 1.5 | 70 | 3 | - | - | - | 100 |

**Objectives:** At the end of the syllabus, Student can develop a security enabled dynamic web site. He/she can also publish his/her web site.

**Pre-requisites:** Student should have knowledge about HTML and CSS. He/she should have fundamental programming and scripting language knowledge.

| Ch. No. | Chapter Name | Chapter Topics | Total Hours |
|---|---|---|---|
| 1 | Introduction to .NET | Overview of .NET Framework, Features of .NET, Components of .NET framework Like Common Language Runtime, Intermediate Language, Common Language Specification, Metadata, Assembly, GAC, Private and Shared Assembly, Manifest, Base Class Library, Namespace, Garbage Collection, COM interop | 4 |
| 2 | OOPS Concepts With C# | Scope & Visibility Of Variable,Introduction To Class & Object, Constructor, Overloading Of Operators & Methods, Introduction To Inheritance & its Types, Dispose & Finalize methods, Debugging & Error Handling. | 4 |
| 3 | Introduction to ASP.NET | Overview of ASP.NET, Difference Between ASP and ASP.NET, Understanding The IDE, Directory Structure of ASP.NET Web Application, Life Cycle of an ASP.NET Web Page, Different stages of an ASP.NET Page, ASP.NET Pages Life Cycle Events, Working With ASP.NET Web Page, Code Behind Page Model, Various File Types of ASP.NET, Overview of ASP.NET Controls, Simple Program of ASP.NET | 6 |
| 4 | ASP.NET Controls | Introduction to The Control Class and WebControl Class <br> Standard Controls: Label, TextBox, Literal, Button, LinkButton, ImageButton, Hyperlink, Image, ImageMap, RadioButton, RadioButtonList, CheckBox, CheckBoxList, ListBox, DropDownList, Calendar, AdRotator, FileUpload, Grouping Controls: Panel, MultiView, Wizard Control. <br> Validation Controls:RequiredFieldValidator, RangeValidator, ReqularExpression, | 11 |

| | | CompareValidator, CustomValidator, ValidationSummary, Navigation Controls:SiteMapPath, Menu and TreeView | |
|---|---|---|---|
| 5 | State Management | About state, Why State Is Required In ASP.NET, Client Side State Management, Server Side State Management<br>Various State Management Techniques Like View State, Query String, Cookie, Session State, Application State | 4 |
| 6 | Designing web sites with master page and themes | Master Pages: Simple Master Page and Nested Master Page, Working With Content Place Holder and Nested Master Pages, ASP.NET Themes: Working with CSS and Skin File | 3 |
| 7 | ADO.NET | ADO.NET Architecture, Difference Between ADO and ADO.NET, Connected Architecture, Disconnected Architecture, ADO.NET Classes, Connection, Command, DataReader, DataSet, DataAdapter, DataRow, DataColumn, DataTable, DataConstraint, DataView, GridView Control, Repeater Control, ListView Control, Binding Data To Controls | 8 |
| 8 | Security in ASP.NET | Using Login Control, Using the LoginStatus Control, Using ChangePassword Control, Using PasswordRecovery Control, Using LoginView Control | 3 |
| 9 | Working with XML and web services | Reading Dataset from XML, Writing Dataset with XML, About Web Service, Designing Web Services, Creating an XML Web Service With Visual Studio, Creating Web Service Project, Declaring Web Service, Setting Web Service Attributes, Declaring Methods For Web Service | 5 |
| 10 | Deploying ASP.NET web application | Packaging Web Applications, Using Web.config Transformations,Deploying Database, One Click Publishing Web Applications | 2 |
| 11 | Custom control building | Overview of Custom Control Building , Building Fully Rendered Controls, Building Composite Controls, Building Hybrid Controls, View State & Control State, Supporting View State, Supporting Control State | 6 |
| 12 | Data access with WCF data services | Overview of WCF Data Services, Using Data Services with a Service Reference, Using Data Services with a Data Context | 4 |
| | Total:: | | 55 |

**Teaching Methodology:** Revision, Paper Solving, Seminar, Expert Talk, MCQ Quiz, Viva Test, Programming test

**Books Recommended:**
1. Advance .NET Technology,  Chirag Patel, Dream Tech Press ISBN: 9789350042083
2. ASP.NET 4.5 Unleashed,  Stephen Walther, Kevin Hoffman, Nate Dudek , Pearson Publication

**Reference Books:**
1. Beginning ASP.NET 3.5 in C# 2008 From Novice To Professional, Matthew MacDonald, Apress ISBN: 9781430204305
2. ASP.NET 4.5 Covers C# and VB Codes Black Book Kogent Learning Solutions Inc. DreamTech Publication
3. Microsoft ADO.NET 2.0 Step By Step Rebecca Riordan, Microsoft Press, ISBN: 9780735648456