Faculty of Computer Science
Name of Program: Bachelor of Science (Information Technology) Semester : IV
w.e.f. June-2014
Teaching & Evaluation Scheme

Sr. No	Subject Code	Subject Name	Teaching Hours/Week				Credits	Evaluation Scheme/Semester						
								Theory				Practical		
			Th	Tu	Pr	Total		Sessional Exam		University Exam		Internal		Uni.	Total Marks
								Marks	Hrs	Marks	Hrs	Pr	TW	Pr	
3	4CS04IDO3	.Net Technology with ASP.Net	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 Lectures
1	Introduction to .NET	Overview of .NET Framework, Features of .NET	4
		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	
2	OOPS Concepts With C#	Scope & Visibility Of Variable, Introduction To Class & Object	4
		Constructor, Overloading Of Operators & Methods	
		Introduction To Inheritance & its Types	
		Dispose & Finalize methods, Debugging & Error Handling.	
3	Introduction to ASP.NET	Overview of ASP.NET, Difference Between ASP and ASP.NET	6
		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	
4	ASP.NET Controls	Introduction to The Control Class and WebControl Class	10
		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.	
		Validation Controls: RequiredFieldValidator, RangeValidator, ReqularExpression, 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, 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	7
		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	Security in ASP.NET	Using Login Control, Using the LoginStatus Control	3
		Using ChangePassword Control, Using PasswordRecovery Control, Using LoginView Control	
9	Working with XML and web services	Reading Dataset from XML, Writing Dataset with XML	5
		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	
10	Deploying ASP.NET web application	Packaging Web Applications, Using Web.config Transformations,	2
		Deploying Database, One Click Publishing Web Applications	
11	Custom control building	Overview of Custom Control Building , Building Fully Rendered Controls	6
		Building Composite Controls, Building Hybrid Controls	
		View State & Control State	
		Supporting View State, Supporting Control State	
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	58

Teaching Methodology:

Revision, Paper Solving, Seminar, Expert Talk, MCQ Quiz, Viva Test, Programming Test

Learning Outcome:

At the end of the syllabus, students should be able to make programming ASP.Net and its various concepts.

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 ISBN: 9780672336881

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