

GANPAT UNIVERSITY									
FACULTY OF ENGINEERING & TECHNOLOGY									
Programme	Bachelor of Technology				Branch/Spec	Computer Science & Engineering			
Semester	V				Version	1.0.0.0			
Effective from Academic Year		2024-25			Effective for the batch Admitted in			June 2022	
Subject code	2CSE50E28		Subject Name		Web Development using .Net				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	3	0	1	0	4	Theory	40	60	100
Hours	3	0	2	0	5	Practical	30	20	50
Pre-requisites:									
Knowledge of C/C++ Programming , Database, HTML, CSS, JavaScript.									
Learning Outcome:									
After completion of the course, student will be able to,									
<ul style="list-style-type: none"> <li>● Understand the basics of C# .Net</li> <li>● Design the web application using ASP.Net server controls and AP.Net MVC</li> <li>● Access the data using ADO.Net and ASP.Net</li> <li>● Develop web applications using JQuery and AJAX</li> </ul>									
Theory syllabus									
<b>Unit</b>	<b>Content</b>								<b>Hrs</b>
<b>1</b>	<b>Microsoft .Net Framework</b> What is .NET framework, .Net Framework Architecture, Components of .Net Framework, The Common Language Runtime (CLR), The common type system (CTS),Managed code and unmanaged code, The common language specification(CLS),The .NET framework class library, Namespaces, Assemblies								<b>02</b>
<b>2</b>	<b>C# .NET</b> Introduction to C#, Namespaces, Constructors and Destructors, Function Overloading and Inheritance, Modifiers, Properties and Indexers, Attributes, Reflection API ,Unsafe Code, Events and Delegates								<b>06</b>
<b>3</b>	<b>N-tier Architecture and ADO. NET</b> Introduction to ADO. NET, Understanding the Connection Object, Command Object, Data Adapter, DataSet, Data Reader, Working with Database using ASP.Net								<b>04</b>
<b>4</b>	<b>ASP.Net</b> Introduction to ASP.NET, Difference between ASP and ASP .Net, Working with Controls, Using Rich Server Controls, Configuration Overview, Using the Web Site Administration Tool, Programming Configuration Files, Encrypting Configuration Sections, Accessing Data using ADO .Net, Connecting to Data , Executing Commands , Working with Data								<b>10</b>
<b>5</b>	<b>Web Development in ASP.NET using MVC Architecture</b> Concept of ASP.Net, ASP. NET Server Controls, Validation controls, global. asax file, web.config								<b>15</b>

	file, Web application using ASP.Net, MVC Architecture, Understanding Model, View and Controller, Understanding Routing System, Routes and HTTP, Razor Views & SignalR, LINQ and Entity Framework	
<b>6</b>	<b>Integrating AJAX and JQuery in ASP.NET Application</b> Introduction to AJAX, Embedding AJAX Toolkit in ASP.NET application, Introduction to JQuery, Accessing DOM using JQuery, Integrating JQuery in ASP.NET Application	<b>08</b>

**Practical content**

Practicals are based on topics like C#, ASP .Net web controls, ASP.Net MVC Architecture, Database Connectivity using ADO.Net

**Text Books :**

1	PROFESSIONAL ASP.NET 4.5 in C# and VB, Jason N. Gaylord, Christian Wenz, Pranav Rastogi, Todd Miranda, Scott Hanselman, Wrox
2	Pro ASP.NET MVC 5 (Expert's Voice in ASP.Net), by Adam Freeman

**Reference Books :**

1	Beginning ASP.NET 4 in C# 2010, Matthew MacDonald, Apress
2	ASP.NET 4 Unleashed, Stephen Walther, Kevin Hoffman, Nate Dudek

**Course Outcomes:**

COs	Description
CO1	Understand the basics of C# .Net
CO2	Design the web application using ASP.Net server controls and AP.Net MVC
CO3	Access the data using ADO.Net and ASP.Net
CO4	Develop web applications using JQuery and AJAX

**Mapping of CO and PO:**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	2	3	2	2	0	0	3	1	2	1
CO2	3	1	1	2	2	1	0	0	2	1	2	1
CO3	2	2	0	1	2	1	0	0	2	2	2	1
CO4	3	3	1	3	2	2	0	0	3	2	2	1