

GANPAT UNIVERSITY									
FACULTY OF ENGINEERING & TECHNOLOGY									
Programme		Bachelor of Technology			Branch/Spec.		Computer Engineering / Information Technology		
Semester		IV			Version		2.0.0.0		
Effective from Academic Year			2019-20		Effective for the batch Admitted in			July 2018	
Subject code		2CEIT403		Subject Name		Application Development Tools			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	2	0	2	-	4	Theory	40	60	100
Hours	2	0	4	-	6	Practical	30	20	50
Pre-requisites:									
Basic knowledge of any programming language and object oriented concepts									
Learning Outcome:									
The main objectives for offering the course are:									
<ul style="list-style-type: none"> • Explain the architecture of .NET Framework. • Explain features of C# using Console Application. • Develop Windows based application using Microsoft Visual Studio. • Develop ADO.net based database driven .NET application • Develop simple web application. 									
Theory syllabus									
Unit	Content								Hrs
1.	Introduction To .Net Framework: The Common Language Runtime, Compilation in .NET (MSIL and JIT), CTS, CLS, Cross language Integration, Garbage Collection, Assemblies, Name spaces, Versioning and deployment, Framework class Library								3
2.	C# Basics using Console Application: Variables and Constants, Data Types, Scope of variables, Formatting Data, Handling Exceptions, Conditions, Loops, Arrays, StringBuilder, Functions								5
3.	Windows Forms and Controls: Creating Windows Forms, Windows Forms Properties and Events, Controls (Properties and Events of Controls): Button, Label, TextBox, NumericUpDown, CheckBox, RadioButton, DateTimePicker, GroupBox,ListBox, ListView, ComboBox, TabControl, PictureBox, ProgressBar, ToolTips, RichTextbox, Timer,DataGridView								7
4.	Working With ADO.NET: Introduction to ADO.NET, ADO.NET Architecture, Understanding SqlConnection, SqlCommands, SqlDataReader, DataSet and DataAdapter								3
5.	Working with ASP.NET: Introduction to three-tier Client Server systems, Web Application basic, Introduction to ASP.NET, ASP.Net page life cycle, Working with various ASP.NET Server Controls, Creating consistent looking website, ASP.Net with ADO.NET, ASP.NET - Managing State, Introduction to user control, Validating user input, Introduction to ASP.NET AJAX, ASP.NET Security, Introduction to LINQ								10
6.	ASP.NET MVC Introduction								2
Practical Content									
Experiments/Practical's/Simulations would be carried out based on syllabus									
Text Books									
1	Professional C# and .NET by Wrox Publication								
Reference Books									
1	Beginning Visual C# Programming. by Wrox publication								

2	Beginning ASP.NET 4.5.1 in c# and VB by Imar Spaanjaars, Wrox publication
3	Dino Esposito, Programming Microsoft ASP.NET
4	Matthew Macdonald and Robert Standefer, ASP.NET Complete Reference, TMH
ICT / MOOCs	
1	Students can enroll various NPTEL or other MOOCs for the related course contents.