

Branch Name:	Information and Communication Technology
Program Code	ET107
Semester/Year:	Semester V/ Third Year
Course Name:	.Net Technology (Professional Elective –I)
Course Code:	2ET1070504T
Pre-requisite:	Object Oriented Programming

Course Objective:

1. To analyze and evaluate various components of .net frame work
2. To understand features of C#/VB using Console Application.
3. To understand Windows/Web based application using Microsoft Visual Studio.
4. To understand ADO.net based data base driven .NET application.

Teaching and Examination Scheme:

Credit	Teaching Scheme Hours per week				Evaluation Scheme (Marks)								
					Theory (Marks)				Practical (Marks)				Total (Marks)
	L	T	P	Total	SEE		CCA		SEE		CCA		
					Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
3	3	-	-	3	24	60	16	40	-	-	-	-	100

Subject Contents:

Sr. No	Topic	Total Hours	Weightage (%)
1	Introduction to .NET Framework: .NET framework Architecture, MSIL, CLR, CLS, CTS, Namespaces, Assemblies, Garbage Collection, End to DLLHell-Managed Execution, Reflection API.	5	10
2	Basics and Console Applications in C#: Variables and Constants, Data Types, Arrays, Classes and Inheritance, Name Spaces-Constructor, Method Overloading, Property and Indexers, Delegates, Debugging and Error Handling, String Manipulation, Files and I/O, Collections.	5	10
3	Windows Forms and Controls: The Windows Forms Model, Creating Windows Forms, Windows Forms Properties and Events, Windows Form Controls, Container Controls, Menus-Dialogs–Tool Tips, Data Grid View control	5	10
4	ADO.NET: Introduction to ADO.NET, ADO.NET Architecture, Data Providers in .Net, Data Readers, Data table, Data set and Data Adapters, Data Source Controls.	7	20
5	ASP.NET: Introduction to ASP.NET, HTML and ASP.NET Controls, Using Rich Server Controls, Login controls, ASP.NET Validation Controls, ASP.NET page events, ASP.NET Configuration, Tabular Data Bound Controls, Hierarchical Data Bound Controls	8	20

6	Themes and Master Pages: Fundamentals of ASP.NET Master Pages, Master Pages in Web Configuration, ASP.NET Themes-Creating Themes, Skin File, CSS	5	10
7	Managing Application State: Using Cookies to Preserve State, ASP.NET Session State Management, Storing Objects in Session State, Configuring SQL Server Session State.	5	10
8	Web Services: Introduction, The Motivation for XML Web Services, WSDL, SOAP, DDI, Creating an XML Web Service with Visual Studio, Creating Web Service Consumers, Discovering Web Services Using UDDI.	5	10

List of Reference Books:

1. ASP.NET: The Complete Reference-Matthew Macdonald TMH, 1 July 2017
2. Beginning C# Object-Oriented Programming By Dan Clark, A press, 29 March 2013
3. Head first C# by Andrew Stellman O'Reilly, 1 November 2013
4. ASP.NET unleashed-Stephen Walther, Kevin Hoffman, NateDudek. Pearson, 14 October 2010
5. C#:The Complete Reference-Herbert Schildt TMH, 1 July 2017

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Understand C# and the .NET framework namespace contents.	1 Remembering 2 Understanding
CLO2	Understand the console and GUI applications using C# .Net.	2 Understanding
CLO3	Application of various navigation techniques for integrating web pages within the site	3 Applying
CLO4	Evaluate advanced concepts related to Web Services in project development.	5 Evaluate

Mapping of CLOs with POs & PSOs

Course Learning Outcomes	Program Outcomes (POs)												Program Specific Outcomes(PSOs)			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CLO1	H	M	L	L	M	L			M	M	H	M	M	M	M	H
CLO2	M	M	M	L	M				M	M	M	L	M	M	L	M
CLO3	M	M	M	M	H	M			M	M	M	M	M	M	M	H
CLO4	M	M	M	L	M	M			M	M	M	M	M	M	M	M

H: High, M: Medium, L: Low