



Faculty of: **Computer Science**

Course: **Bachelor of Science Information Technology**

Semester: **IV**

Subject Code: **4CS04TCN1**

Subject Name: **.Net programming using C#**

Sr. No	Branch Code	Subject Code	Subject Name	Teaching hours/ Week			Credit hours	Credit Points	Evaluation Scheme/ Semester								
				Th	Tu	Pr			Theory				Practical				Total
									Internal Assessment		End Semester Exams		Internal Assessment		End Semester Exams		
									Marks	Duration	Marks	Duration	Marks	Duration	Marks	Duration	
1	2	4CS04TCN1	.Net programming using C#	4	--	4	8	6	15(SE)	1Hr.	70	2½ Hrs.	50(IP)	1 ½ Hrs.	--	--	200
								15(CE)		50(CE)							

AIM :

The students would be able to:

- Learn the fundamentals of the Microsoft Visual C# .Net programming language
- Become familiar with Visual Studio IDE.
- Be aware of the real functions of desktop application development

COURSE CONTENTS

Unit I Understanding .NET Platform

10 Hrs.

- Introduction to .NET Framework
- Components of .NET Framework (CTS, IL, CLS, Managed Code, Garbage Collection, JIT)
- Benefits

Unit II Introduction of C# .NET

12 Hrs.

- About C#
- Why C#?
- Evaluation of C#
- Characteristics & Applications
- Difference between C# & C++, C# & Java
- Different Types of C# Application (Console, Windows, Web and Web Services)
- Creating Simple Console Program
- Executing the program
- Program Structure
- Understanding Main Method
- Namespace
- Comments

Unit III C# .NET Programming

10 Hrs

- Data types (Value type and Reference Type)
- Variable
- Declaration and Initialization of variable

- Scope of variable
- Operators
- Decision Making Statement
- Looping Statement
- Working with Arrays

Unit IV Windows Application

16 Hrs.

- Overview of Windows Application
- Creating and use of Windows Application
- .NET Events – Mouse, Keyboard
- Common Properties, Methods and Events of Controls
- MessageBox

Unit V Windows Controls

16 Hrs.

- Creating Windows Form
- Button
- Label
- TextBox
- RadioButton
- ComboBox
- CheckBox
- ListBox
- ScrollBar
- PictureBox
- Timer
- Panel and Group
- TreeView
- ToolTip
- ProgressBar.
- Menus: MenuStrip
- Dialog Boxes: OpenFileDialog, SaveFileDialog,
- FontDialog, ColorDialog
- MDI: Introducing MDI Concept, Use of MDI

Unit VI ADO .NET

16 Hrs.

- Introduction of ADO .NET
- Benefits of ADO .NET
- ADO V/S ADO .NET
- Connected and Disconnected architecture
- ADO .NET Classes: Connection, Command, DataReader,
- DataSet, DataAdapter, DataTable, DataRow,
- DataColumn
- DataGridView control
- Binding standard and GridView control.
- Introduction of Crystal Reports

REFERENCE BOOKS:

1. Programming C# - E Balaguru Swami - Tata McGraw-Hill - ISBN: 9780070702073
2. C# .NET Programming Black Book – Stevan Holzner – DreamTech Press - ISBN: 9788177228328
3. Professional .NET Framework 2.0 – Joe Duffy - John Wiley Publication – ISBN: 9788126507931
4. Microsoft ADO .NET 2.0 Step By Step – Rebecca Riordan – Microsoft Press – ISBN: 9780735648456