

Course Code	Course Title	H	C	I	E	T
17U3DMC6	VISUAL PROGRAMMING	5	4	25	75	100

**Objectives:**

- To impart the knowledge of computer programming with GUI approach.
- Learning the concept and controls of a front-end tool.

**UNIT I : Introduction**

**(15 hours)**

Overview of the IDE - Managing forms in Visual Basic - The Visual Basic Language: Declaring Constants, Variables – Selecting variable types-Converting between data types - setting variable scope- verifying data types – declaring arrays & Dynamic arrays – Declaring Subroutines – Declaring functions – Handling strings – Converting strings to numbers and back again – Handling operators & operator precedence – Using if-else statements- Using select case – Looping – Handling higher math- Handling Dates and Times.

**UNIT II : Controls**

**(15 hours)**

Text Boxes and Rich text Boxes- command buttons – checkboxes & option buttons – list boxes and combo boxes – picture boxes and image controls – The timer control – The frame control – the label control – the shape control.

**UNIT III: Menus & Toolbars**

**(15 hours)**

Visual Basic Menus: adding a menu to a form – modifying & deleting menu items – creating sub menus – using Visual Basic predefined menus-Handling MDI forms & MDI child menus-creating & displaying popup menus – Adding & deleting menu items at runtime-- Toolbars, status bars, progress bars and coolbars.

**UNIT IV : Files & Data Base Concepts**

**(15 hours)**

File handling and File Controls – Using DAO,RDO and ADO : Creating and managing databases with the visual data manager – creating a table - Adding a Data control – opening a database with the data control, Remote data control, ADO data control – connecting a databases using controls- working with database objects in code.

**UNIT V : Activex controls & Documents**

**(15 hours)**

Creating an Activex control – Designing Activex control- Adding controls to an Activex control- Registering an Activex control – Creating an Activex Document – Activex Document Dll vs EXEs – Testing an Activex Document.

**Text Book:**

Steven Holzner – “Visual Basic 6 Programming Black Book” - 16<sup>th</sup> Reprint Edition -Dreamtech Press Publications.

**Reference Books:**

4. Petroustos.E – “ Mastering Visual Basic 6” – Fifth edition, BPB Publications
5. Jerke .N - “ Visual Basic 6.0 – The Complete reference” – Nineteenth Reprint 2004, Tata-McGraw Hill Publishing.
6. Gary Cornell- “VB 6 from the Ground up” – Second Reprint 1999-Tata-McGraw Hill Private Ltd.