

## Advance Diploma in Information Technology Application (ADITA)

Course Module	Module Details
C++	<ol style="list-style-type: none"> <li>1) Concept of OOP, Procedural programming. Difference between this two.</li> <li>2) Concept of compilation, assembling and Running C++ Source code.</li> <li>3) Basic structure of C++ Programming.</li> <li>4) Data type and variable declaration.</li> <li>5) Uses of Operators.</li> <li>6) Conditional statement ( if , if else , if else if else , case )</li> <li>7) Array               <ol style="list-style-type: none"> <li>a) <i>Declaring Array</i></li> <li>b) <i>Initializing Arrays</i></li> <li>c) <i>Accessing Array Elements</i></li> <li>d) <i>Array Shorting(BubbleShort)</i></li> <li>e) <i>Character Array</i></li> </ol> </li> <li>8) Function               <ol style="list-style-type: none"> <li>a) <i>Function Declarations</i></li> <li>b) <i>Argument Passing</i></li> <li>c) <i>Value Return</i></li> <li>d) <i>Overloaded Function Names</i></li> <li>e) <i>Default Arguments</i></li> </ol> </li> <li>9) Class and Objects               <ol style="list-style-type: none"> <li>a) Making sense of core object concepts (Encapsulation, Abstraction, Polymorphism, Classes, Messages Association, Interfaces)</li> <li>b) Implementation of class in C++</li> </ol> </li> <li>10) Inheritance               <ol style="list-style-type: none"> <li>a) Single Inheritance</li> <li>b) Multiple Inheritance</li> <li>c) Hierarchical Inheritance</li> <li>d) Multilevel Inheritance</li> <li>Hybrid Inheritance (also known as Virtual Inheritance)</li> </ol> </li> </ol>
Visual Basic.Net	<ul style="list-style-type: none"> <li>• <b>Visual Basic.NET and the .NET Framework:</b> Introduction to .net framework -Features, Common Language Runtime (CLR) ,Framework Class Library (FCL).Visual Studio.Net – IDE, Languages Supported, Components. Visual Programming, VB.net- Features, IDE-Menu System, Toolbars, Code Designer, Solution Explorer, Object Browser, Toolbox, Class View Window, Properties Window, Server Explorer, Task List, Output Window, Command Window.</li> <li>• <b>Elements of Visual Basic.NET:</b> Properties, Events and Methods of Form, Label, Text Box, List Box, Combo Box, Radio Button, Button, Check Box, Progress Bar, Date Time Picker, Calendar, Picture Box, HScrollbar, VScrollbar, Group Box, Tool Tip, Timer.</li> <li>• <b>Programming in Visual Basic .NET:</b> Data Types, Keywords, Declaring Variables and Constants, Operators ,Understanding Scope and accessibility of variables, Conditional Statements- If- Then, If-Then-Else, Nested If, Select Case, Looping Statement- Do loop, For Loop, For Each-Next Loop, While Loop, Arrays- Static and Dynamic.</li> <li>• <b>Functions, Built-In Dialog Boxes, Menus and Toolbar:</b> Menus and toolbars- Menu Strip, Tool Strip, Status Strip, Built-In Dialog Boxes –Open File Dialogs, Save File Dialogs, Font Dialogs, Color Dialogs, Print Dialogs, Input Box, MsgBox, Interfacing With End user- Creating MDI Parent and Child, Functions and Procedures- Built-In Functions- Mathematical and String Functions, User Defined Functions and Procedures.</li> </ul>

JAVAScript	<ul style="list-style-type: none"><li>• Creating scripts for Web for Dynamic websites using Java Script.</li><li>• Creating scripts for Web for Dynamic websites using VB Script.</li><li>• Using ASP to create dynamic web pages enabled with forms and database usage.</li><li>• Knowledge of Internet, Web design techniques and study of designs as per content Create interactive animations and applications for web using Flash.</li><li>• <b>Java scripting:</b> Creating scripts for Web for Dynamic websites Validation on Forms.</li></ul>
VBScript	<ul style="list-style-type: none"><li>• Introduction to VBScript</li><li>• Declaring and Using Variables in VBScript</li><li>• Operators, Operator precedence and Constants in VBScript</li><li>• Using Conditional Statements in VBScript</li><li>• Using Loops in VBScript</li><li>• Using Procedures and Functions in VBScript</li></ul>