**Subject Name: Introduction to Visual Programming and Web Technology**

**Rationale for Course**

Learning to program offers the student an invaluable opportunity to develop problem-solving skills. A solid understanding and application of computational thinking and the technologies used in computer science is essential to the development of new ideas as a citizen of the 21st century. This one-semester course, it’s an introductory computer programming course using the language Visual Basic.

**Course Objectives**

\* Identify and use the features of a Visual Basic (VB) development environment.  
\* Use the properties and methods of forms and controls to create VB programs.  
\* Write procedures to perform input, processing, and output.  
\* Locate, resolve, and handle various types of programming errors.  
\* Declare and use variables of different data types in a VB program.  
\* Write statements that use various mathematical operators.  
\* Design a Windows application user interface.  
\* Create graphic user interface programs using introductory concepts involved in object-oriented programming (OOP).

**Topics Covered**

This list of subjects is in no particular order and may be modified by the instructor as necessary.

1. Visual Studio IDE and Rapid Application Development
2. Forms, Controls, Menus, Programming Events
3. Variables, Constants, Operators and Formulas
4. Built-in Numeric and String Functions
5. IF...THEN...ELSE and SELECT CASE statements
6. Looping Constructs
7. Classes
8. Using Databases
9. Using HTML & DHTML in Web Development (Type of List Programming)
10. Create Tables & Frame in Web Development
11. Using CSS & JAVA Script for Development Statics & Dynamics Web Form Development

**Department of Computer Science & Engineering**

**INTEGRAL UNIVERSITY LUCKNOW**

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**Course Content**

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| **SN** | **Objective** | **Page No** |
| **1** | **Program for a running traffic light application using Visual Basic** |  |
| **2** | **Program for design a user friendly menu File Edit Utilities Quit** |  |
| **3** | **Program to add two numbers and then transfer the result into INITIAL NO. Text box and then add another number to the initial no. do this process 5 times.** |  |
| **4** | **Program to calculate the Compound Interest.** |  |
| **5** | **Design a simple webpage using HTML and DHML to Implement all type of List** |  |
| **6** | **Design a simple webpage using HTML5** |  |
| **7** | **Write inline, internal and external CSS for a Web Page** |  |
| **8** | **Design a Navigation Menu using HTML and CSS** |  |
| **9** | **Crete Frame for Separate Web Page** |  |
| **10** | **Write a Program to Create Table for Student Cross-List** |  |
| **11** | **Design a dynamic web page with validation using JavaScript.** |  |
| **12** | **Design a Responsive Web Page.** |  |
| **13** | **Design a simple Website using HTML, CSS and JavaScript** |  |
| **14** | **Design a complete student registration form using Server Side Scripting language** |  |