



## **B.Ed(4 Years) Elementary Education**

Code	Subject Title	Cr. Hrs	Semester
EDE- 184	Computer Science II (Computer Programming)	3	
Year	Discipline		
	Elementary Education		

### **Aims**

This course acts as a foundation for the following semesters. The course aims to help the students increase their proficiency in Computer by enhancing their knowledge in the subject.

### **Objectives**

Upon the successful completion of this course the students will be able to:

- Explain the Introductory programming concept:
- Describe the Visual basic integrated development environment
- Understand and explain the foundations of Computer
- Clarify the Controls elements
- Apply their knowledge in different situations
- Develop a sense of understanding the trends and issues of Computer

### **Syllabus**

Theory;

Introductory programming concept: problem solving, algorithms, and pseudo code.

Programming techniques: visual programming, even, driven

Programming, object-oriented programming, structured programming. Visual basic integrated development environment. Controls elements. Data types. Variables and assignment statement.

Arithmetic operators and scope: data conservation, expression. Variable scope, declaring form and project variables and constants. Modules and producers: sub producers, event procedures, function producers, and optional argument. Branches and looping rational operators and logical expression, logical operators, if-then-else, case, for next looping with do and while lpp : menu and dialog boxes; arrays searching and :sorting: what is array, declaring arrays, using arrays, control arrays ad user defined types. Error handling. Sequential files: file details, file operator, add report to programs, programming with fixed report length. Introductory database programming: why use data bus, data control and creating data

### **Text Books**

- Harriger, A. R. (1999). *Introduction to Computer Programming with Visual Basic 6: A Problem Solving Approach*: Que.
- Deitel, H. M., Deitel, P. J., & Nieto, T. R. (2003). *Visual Basic 6 how to Program*: Prentice Hall.
- Siler, B., & Spotts, J. (2001). *Special Edition Using Visual Basic. Net*: Que Publishing

### **Reference Material**

Student must implement the concept study in theory part. For practice see examples given in Deitel, H. M., Deitel, P. J., & Nieto, T. R. (2003). *Visual Basic 6 how to Program*: Prentice Hall.

Some practical examples as guide line are given below:

1. Test if a given integer is odd or even
2. Given a sides of a triangles, determine the types of a triangle
3. Print integers in the specified range; make every alternate integers in the output negative
4. Print leap year in a given century