SHIVAJI UNIVERSITY, KOLHAPUR
CENTRE FOR COMMUNITY DEVELOMENT

CERTIFICATE COURSE IN COMPUTER APPLICATION WITH VISUAL BASIC

Objectives:
- To understand basics of computer.
- To develop skill for Visual basic.

Job Opportunities:
- Computer Operator.
- DTP Workshop.

Course Duration: 4 Months

Expected Number of Students: Minimum-10 Maximum- 20

Eligibility for Participants: 10th Pass or Equivalent

COURSE FEES: Rs.2000/-+ Rs.150 Evaluation Fee

Infrastructure Requirement:
1. Well- equipped classroom with all facilities required for teaching and learning.
2. Computer laboratory with at least 10 PCs (Pentium –III)
3. Required Software: Windows 98, Visual Studio (Version 6)

Staff Qualification:
1. Instructor, B.C.S. or DCP with minimum 2 years experience in teaching field/trade.
2. Demonstrator: DTP operator with minimum two years experience.

Syllabus:
1. A glimpse inside the machine-Basic computer hardware components and their functionality, introducing the motherboard, Slots and other peripheral cards – Rapidex for computer (BPB- Publications) Introduction to computer basic (Balguru Swami) – 8 hours.

3. I/O devices Viz. Printer-inkjet, Laser and dot matrix type, Keyboard, mouse, touch screen, storage, Processing and retrieval of data on disk and CDROM, storage and retrieval of multimedia type data- Rapidex for computer(BPB Publications), Introduction to computer basic (Balguru Swami) – 10 hours.

4. Concept of office automation and PC productivity tools viz. Using MS office, Word And Excel in specific, Utilities like mail merge, creating, formatting and text with tables and graph, using spreadsheet, sort, find, Histogram, Pie chart, sum, avg. count etc. (Sam's MS office teach yourself)- 30 hours.

5. Introduction to database management system, using ACCESS to create, modify, delete, and report data, Validation of data and design user- friendly interface should be stressed – (Sam's MS-office teach Yourself)- 30 hours.

6. Introduction to networked environment, modems and configuration of modem, serial and parallel communication, introduction to network operating system- (Computer organization & Networking- Nirali prakashan)- 10 hours.

7. Introduction to internet and internet tools viz chart, mail and search – 6 hours.

Programming with Visual Basic

1. Over view of MS – Windows   <6 hours>
Features of MS-Windows: GUI, Multitasking etc. Main Modules of windows operating System: program Manager, File Manager, Print Manager, Control Panel. Elements of Windows: Desktop, Windows Applications, Icons, Group Window.

2. Fundamentals of Program   <6 hours>

Algorithm: Definitions and Properties, Developing Well known Algorithms.

Flow Chart: Principles of Flow charting, Flow charting symbols, Converting Algorithm to Flow chart.

Introduction to Data structures and Data types:

3. Introduction to Visual Basic   <35 hours>
IDE, Menu Bar, Tool Bar, Tool Box, Properties Window, Project Explorer, Form layout Window, Process of program/Project Execution. Visual Basic Building Blocks: Form, Part of Form, Control, control function, property basics, Common Properties, difference between design and runtime properties. Comparative study of default controls: Text Box, Label. Choice control: Command Button, Check Box, option Button, List Box, Combo Box. Dialog Boxes: Msg Box, Input Box etc.

4. Introduction to Event   <35 hours>
Types of Events, Event sequences, Multiple events for each action, order of Events, Event procedure. Concept of modular & structural Programming, sub-procedure-function. Customizing aspects menu design, popup design, adding forms to project, Working with multiple forms, MDI application.

5. Introduction to Database Concept   <35 hours>
Field, Record, Database file, Primary field. Creating database file using visual data manager. Adding, Deleting fields from a database file, Data control, setting required properties. Navigating the database, Adding deleting records to database. Automatically creating forms with data control using data form wizard.

6. Introduction to DAO, ADO, RDO   <35 hours>
Types of record sets. Setting up a DAO project and opening an existing database file. Adding, editing, updating and deleting records. Creating various Data reports as per requirement. Introduction to multi- user environment.

Project (real life problems)   30 hrs.
Home assignments-10   12 hrs.

Reference Books:
1. Parmar, mathur, U. Prasanna & V. prasanna – Working with windows-95
2. McBride- Programming in Visual Basic.
3. Perry- Teach yourself Visual Basic.
4. Brain Siler and Jeff Spotts- Using Visual Basic-6