

SYLLABUS  
PART I  
EDISON STATE COMMUNITY COLLEGE  
CIS 225S VISUAL BASIC PROGRAMMING  
3 CREDIT HOURS

**COURSE DESCRIPTION**

Software design and development emphasizing visual development techniques and the integrated environment provided by Visual Basic. Provides the student with an introduction to Windows programming using object-oriented event-driven programming methods. User interface design is emphasized; control flow, selection structures, and repetition structures are introduced. Use of sequential and random access files, exception handling, arrays, and an introduction to databases using ADO.NET is also presented. Prerequisite: CIS 221S or department approval. Lab Fee.

**COURSE GOALS**

The student will:

Bloom's Level		Program Objectives
2	1. Execute the software development process and use a planned approach when writing computer programs to solve object-oriented, event-driven problems.	3, 4, 5, 7
3	2. Use Visual Basic to write OOED programs emphasizing user control over the program.	3, 7
3	3. Use a team approach to develop a Visual Basic program.	3, 6, 7
3	4. Apply appropriate documentation techniques within programs.	7
4	5. Analyze program code and implement debugging and exception handling techniques.	3, 7
2	6. Discuss the importance of ethics in the computer industry and the role they play in the field of software development.	1

**CORE VALUES**

The Core Values are a set of principles that guide Edison State Community College in creating its educational programs and environment. They will be reflected in every aspect of the College. Students' educational experiences will incorporate the Core Values at all levels, so that a student who completes a degree program at Edison State Community College will not only have been introduced to each value, but will have had them reinforced and refined at every opportunity.

**TOPIC OUTLINE**

1. Introduction to Visual Programming using Visual Basic
2. Program and Graphical User Interface Design
3. Program Design and Coding
4. Variables and Arithmetic Operations
5. Decision Structures
6. Loop Structures
7. Procedures
8. Exception Handling
9. Arrays
10. File Handling
11. Web Applications using ASP.NET
12. Database Interaction using ADO.NET
13. Multiple Classes and Inheritance