

CERTIFICATE OF ACHIEVEMENT

This program integrates classroom experience with hands-on lab exercises, which prepare students for employment in a variety of areas.

A computer programmer writes the instructions the computer follows. The programmer also tests, debugs and maintains computer programs. CSN's computer programming classes teach modern computer languages such as Java, C++ and Visual Basic.

STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- Demonstrate development of Pseudo code and flowchart to simple problems.
- Demonstrate proficiency in development of solution for complex computer problems.
- Demonstrate the understanding of control structures in developing computer programs.
- Demonstrate the understanding of Object Oriented Programming (OOP) in developing computer programs.

GENERAL EDUCATION REQUIREMENTS (3 Credits):

	CR	SEMESTER
COMMUNICATIONS: ENG 100, 101, 107, 113	3-5	_____

SPECIAL PROGRAM REQUIREMENTS (27 Credits):

	CR	SEMESTER
IS 115 Introduction to Programming	3	_____
Choose three tracks totaling 18 credits from the following list:		
Track 1 - JAVA		
CIT 130 Beginning Java	3	_____
CIT 230 Advanced Java	3	_____
Track 2 - C		
CIT 131 Beginning C Programming	3	_____
CIT 231 Advanced C Programming	3	_____
Track 3 - VB.NET		
CIT 132 Beginning Visual Basic	3	_____
CIT 232 Advanced Visual Basic	3	_____
Track 4 - C++		
CIT 133 Beginning C++	3	_____
CIT 233 Advanced C++	3	_____
Track 5 - Web Development		
CIT 151 Beginning Web Development	3	_____
CIT 251 Advanced Web Development	3	_____
Plus 6 credits from the following:		
CIT, CSCO, IS, GIS	6	_____
Computation included in IS 115		
Human Relations included in ENG 100, 101, 107, 113		

30
Total Credits

CIT C19

Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.