

Software Development

Software Development is a one-credit course designed to provide students with an introduction to the C++ programming language, structured elements of C++, classes, data, abstractions, inheritance, polymorphism, storage management, and a C++ programming environment. This course contains many simple programming exercises to reinforce the theory and to stimulate understanding. It is recommended that Information Technology Fundamentals be taken prior to this course.

Career and technical student organizations are integral, cocurricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Customer Service

Students will:

1. Analyze customer software needs and system requirements to design an information technology-based project plan.
2. Utilize research results to assist in designing an information technology-based project plan with strategies for solving specific problems.
3. Analyze quality assurance tasks to produce quality products.
4. Evaluate maintenance and customer support functions.

Software Design

5. Demonstrate the effective use of tools for software development.
6. Relate program structure, blocks, and storage types to C++.
7. Construct console and file input and output, functions, arrays, and strings.
8. Develop a software program.
9. Differentiate between C++ and C programming languages.
10. Design a simple program that incorporates mathematics by writing the code, performing unit testing, and debugging the program.

Career Opportunities

11. Demonstrate career and entrepreneurial opportunities, responsibilities, and educational and credentialing requirements in the software development industry.