

Programming Concepts

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Course Overview:

This course introduces the student to a number of programming concepts not often used or needed in commercial programming. However, an understanding of these concepts is necessary if the student is to take full advantage of the language in which they are currently programming or if they wish to learn a language such as FORTRAN, Pascal, compiled Basic, C, C++, C#, or Java.

The course is not hardware or operating system-specific.

Course Length: 1/2 day

Goals:

Provided students meet the prerequisites, at the end of the course, they should understand the following concepts:

- Number system theory
- Bit operations
- Data representation

Who Should Attend:

Programmers who are seriously interested in, or are about to begin, programming in C/C++, C#, or Java and who are unfamiliar with, or need a refresher course in, the topics mentioned above. Programmers whose only, or primary, language is COBOL or interpreted BASIC are prime candidates.

Prerequisites:

A working knowledge in at least one programming language.

Materials:

- *Programming Concepts* – This manuscript was written specifically for teaching. It serves as a useful reference once the course has been completed.