

## **Basic Programming Skills**

Your basic programming skills should, at least, include:

- Writing and compiling a program
- Debugging programs
- Input/Output using files
- Use of variables, control structures and loops
- Use Functions, methods, procedures
- Use of Data Structures such as arrays, lists, trees
- Algorithms for searching and sorting

If you are already comfortable with C++ programming, these should be familiar. However, if you are new to C++ programming, you should spend the time getting familiar with these basic ideas.

## **Books You Can Use to Prepare**

C++ Weekend Crash Course – by Stephen Randy Davis offers an accelerated introduction to the language.

If you are already proficient in C++ and have a book that you have grown to like you may be happy to stay with the book you are accustomed to. There are many books that cover the same topics well so having one that you like is more important than picking a specific name.

## **Material on the Internet**

There is a lot of material on the internet that you can “google”.

Some such links are

[www.cprogramming.com/tutorial.html](http://www.cprogramming.com/tutorial.html)

[www.cplusplus.com/doc/tutorial/](http://www.cplusplus.com/doc/tutorial/)

If you're already familiar with programming in C/C++ and can navigate your way around, these sources serve as a great and ready reference. However, if you're a novice, it might be better for you to learn within a structured approach provided by a book

## **Class Notes**

We will be posting class notes for C++ and object oriented design on the course web site. More details to follow once classes begin.

## **C++ Mini Course**

We are happy to announce that Lee will, by popular demand, offer a mini course on C++ to jump start your introduction to the language. I would encourage you to take advantage of this opportunity even though you may know C++.

## **Programming Environments**

Key aspects of your programming environment include your editor, compiler, debugger. Popular environments are Cygwin (<http://www.cygwin.com/>) and MS Visual studio (you will need to buy) and code blocks IDE (<http://www.codeblocks.org/>)

## **Email us with any questions:**

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