ICS3U – Introduction to Computer Science Course Summary

This course introduces students to computer science. Students will design software independently and as part of a team, using industry-standard programming tools and applying the software development life-cycle model. They will also write and use subprograms within computer programs. This course focuses almost exclusively on developing (coding) using the Java programming language.

Major Units of Study

- Computer Hardware, Computing Environments and File Organization
- Software Development (The Software Development Cycle)
    - Problem Solving
    - Working in teams
    - Planning, implementing, testing, and evaluating problem solutions
- Programming
    - Data storage, variables
    - Control Structures
    - Modular programming (using methods, classes, and Java libraries)
    - Arrays

Key Knowledge and Learning Skills Recommended

- Strong ability in Math, Science
- Problem solving skill
- The ability to work independently and make good use of class time
- The ability to work in a team and contribute to that team

Who should take this course?

- Students intending to go on to University in any program, especially Technology, Computer Science, and Engineering based programs
- Students intending to go on to college in a Programming, Technology, Science, or Engineering based program
- Students who have an interest and/or experience with computer programming and are willing to work hard and learn