

Course: Computer Science 11

Course Format: Online

Credits: 4

**Description:** CS 11 is a mathematically orientated first level computer science and programming course designed for students to develop computational thinking and abstract problem-solving skills. It is applicable for students entering most post-secondary fields and well as the workforce.

## Content Learning Standards:

- Ways to represent basic data types
- Basic programming concepts
- Variable scope
- Ways to construct and evaluate logical statements
- Use of control flow to manipulate program execution
- Development of algorithms to solve problems in multiple ways
- Techniques for operations on and searching of arrays and lists
- Problem decomposition through modularity
- Uses of computing for financial analysis
- Ways to model mathematical problems

## Curricular Competency Development Leaning Standards:

- Reasoning and modelling
- Understanding and solving
- · Communicating and representing
- Connecting and reflecting

For detailed information on the curriculum, please see:

https://curriculum.gov.bc.ca/curriculum/mathematics/11/computer-science

**Recommended Prerequisite:** Mathematics 10

**Resources:** Online course materials.

