Course Description:
The Preliminary course introduces students to the basic concepts of computer, web and mobile phone platform software design and development. Students complete practical coding exercises to illustrate their learning of the theory concepts and develop graphical user interfaces for each of their applications.

The HSC course asks students to develop and document software using a variety of data structures and language facilities. Students complete an internally marked major project to showcase and practice their skills from the entire course duration.

Programming languages studied in this course include: Visual basic.NET, JavaScript, xcode (iOS), Haskell and other emerging languages. Platforms developed for may include Windows computers, web applications and mobile phone/tablet apps. No previous programming experience is required.

A genuine interest in computers and programming is an expectation for this course.

Main Topics Covered:

- Concepts and issues in the design and development of software
- Social and ethical issues
- Hardware and software
- Software development approaches
- Introduction to software development
- Defining the problem and planning software solutions
- Building software solutions
- Checking software solutions
- Modifying software solutions
- Developing software Solutions

### HSC Course

- Impact of software solutions
- Social and ethical issues
- Software development approaches
- Software development cycle
- Defining and understanding the problem
- Planning and design of software solutions
- Implementation of software solutions
- Testing and evaluation of software solutions
- Maintenance of software solutions
- Developing a solution package
- The interrelationship between hardware and software (option topic)

**Particular Course Requirements:**
Practical experience should occupy a minimum of 20% of the Preliminary course, and a minimum of 25% of the HSC course. There are set specifications methods of algorithm

### Assessment: HSC course only

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<tr>
<th>External Assessment</th>
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<th>Internal Assessment</th>
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<tbody>
<tr>
<td>A three hour written examination</td>
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<td>Development approaches, hardware, applications and issues of software</td>
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<td>Design and development of software</td>
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<td>Project management</td>
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<td>Projects</td>
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