DEPARTMENT:	**COMPUTING**
TITLE OF COURSE:	**COMPUTING SCIENCE**
LEVEL:	**HIGHER**

RECOMMENDED ENTRY LEVELS:

- A pass in National 5 Computing Science at grade A or B

COURSE CONTENT:

The study of Computing is wide-ranging - from programming and engineering large software systems, to the design and evaluation of modern human-computer interfaces, data management systems, web development, games design and information systems. Computing Science will equip students with the essential skills and understanding to help them advance in their choice of career, regardless of what that may be. The valuable transferable skills developed in the course will be valued in the computing profession and beyond.

This course consists of two units:

UNIT 1   Information System Design and Development
UNIT 2   Software Design and Development

METHODOLOGY:

In Information Systems design and development students will develop knowledge, understanding and practical problem-solving skills related to the design and development of information systems through a range of practical and investigative tasks. Learners will apply computational thinking skills to implement practical solutions using a range of development tools and to develop an understanding of the technical, legal and environmental issues related to information systems.
In Software design and development students will develop knowledge, understanding and practical problem-solving skills in software design and development. Students will develop their programming and computational thinking skills by developing, implementing and testing practical solutions and explaining how these programs work. They will also develop an understanding of how data and instructions are stored in binary form, the basic architecture of a computer, and an awareness of different contemporary software development languages/environments.

The **aims** of the course are to:

- To learn and understand the role of modern computer systems and their application in today's society

- To develop advanced software development skills and logical thought processes

- To develop problem solving skills and analytical thinking

- To develop practical skills in the use of Database Management Systems and Web Design

ASSESSMENT:

- Units **internally** assessed – practical activity
- Added Value Assignment – research and development practical task (60 marks)
- **Externally** assessed exam (90 marks)