

# Computing Science Higher

## **Award Received**

Higher

## **Entry Level: What do I need to do it?**

Entry to this course is at the discretion of the school. You must have achieved a good pass at National 5 Computing Science.

## **Course Content: What will I learn?**

- Further programming in Python. This will include new concepts like file handling, records and additional standard algorithms (finding the minimum/maximum value, linear search, counting occurrences).
- How to create a multi-page web site. This will include horizontal layout, navigation bars and javascript events.
- How to work with multiple tables in a database. This will include compound keys, aggregate functions, and combining multiple queries.
- How to plan and design a programming/web/database project. This will include end-users, boundaries and functional requirements.
- Further exploration of how computers work. This will include negative binary numbers, decimal binary numbers and intelligent systems.

## **Teaching Methods: What will I do?**

Most weeks up to January prelim exams include 2 periods of theory work and 3 periods of practical work. The practical work is all completed on the computers. After prelim exams and til end of February the focus is on practical skills and completing the coursework. After that point the focus switches to getting ready for final exams.

## **Assessment: How will I be assessed?**

The course is assessed by externally assessed exam and coursework. The exam is worth 110 marks whilst the coursework is 50 marks. The exam takes 2 hours and covers programming (40%), web pages (25%), databases (25%) and computer systems (10%). The coursework takes 8 hours (upper limit) and covers programming (50%), web pages (25%) and databases (25%).

## **Homework.**

Weekly

## **Progression in the Senior Phase.**

Leads to Advanced Higher Computing Science