### Why Computing Science?

Computing science is vital to everyday life – on social, technological and economic levels. It shapes the world in which we live and its future. Computing is embedded in the world around us, from systems and devices in our homes to our places of work. It has also changed the way we learn, relax, travel and communicate. Learning computing science will give you many benefits apart from learning about technology. You will learn valuable transferable work and life skills, such as being able to solve problems in a logical way, think creatively and handle information. The skills you learn in this course are useful in lots of different job areas. These include science, communications, entertainment, education, business and industry.

As good mathematical skills are necessary for completing this course then pupils would be expected to have or to be studying National 5 Maths.

## COMPUTING SCIENCE HIGHER

### **Details of Course Components**

The course consists of four areas of study:-

### Software design and development

Development methodologies, Analysis, Design, Implementation (data types and structures), Implementation (data types and structures); Implementation (algorithm specification), Testing, and Evaluation.

### **Computer systems**

Data representation, Computer structure, Environmental impact, and Security risks and precautions.

Database design and development

Analysis, Design, Implementation, Testing, and Evaluation.

### Web design and development

Analysis, Design, Implementation (CSS), Implementation (HTML), Implementation (JavaScript), Testing, and Evaluation.

### ASSESSMENT

The course assessment has two components totalling 160 marks:

- Component 1: question paper worth 110 marks (consisting of 2 sections: section 1 worth 25 marks, and section 2 worth 85 marks)
- Component 2: assignment worth 50

For the assignment component you will be given three tasks to complete, by solving computing science problems in the areas of software design and development, database design and development and web design and development. You will gain marks for use of the following skills on each task: analysis, design, implementation testing and evaluation.



### FACULTY OF TECHNOLOGIES

**BEIT Staff**: Mrs Christine Cooper Mr Rob Haines Mr Hugh Conway Miss Charlene Aquillina

### CDT Staff:

Mrs Emma Idzikowska Mr Luis Medivelso

### Courses in Turriff Academy

### BEIT

Advanced Higher Accounting Higher Accounting National 5 Accounting Higher Administration National 5 Administration National 4 Administration Advanced Higher Business Management Higher Business Management National 5 Business Management National 4 Business Higher Computing Science National 5 Computing Science National 4 Computing Science NAtional 4 Computing Science NPA Games Development

### CDT

National 4 Design & Manufacture National 5 Design & Manufacture National 4 Woodskills National 5 Woodskills

# Useful websites to help you with your choices:

www.myworldofwork.co.uk www.skillsdevelopmentscotland.co.uk

Further advice and information on these options is available from your subject teacher, guidance teacher and careers adviser.