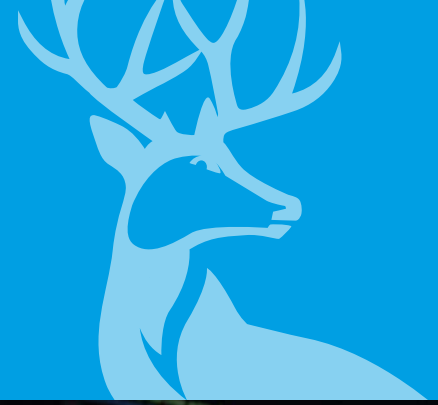# Computer Science

Course Outline

- The characteristics of contemporary processors, input, output and storage devices
- Software and software development
- Programming
- Exchanging data
- Data types, data structures and algorithms
- Legal, moral, ethical and cultural issues
- Elements of computational thinking
- Problem solving and programming
- Algorithms to solve problems and standard algorithms
- The learner will choose a computing problem to work through according to the guidance in the specification.
- Analysis of the problem, Design of the solution, Developing the solution, Evaluation

Exam Board

OCR.

Skills Required

Successful student will have a passion for the subject and interest in all areas of computer science. They will enjoy solving problems, will be able to think analytically. The course requires a keen mathematical aptitude and ability to organize and to think both creatively and logically.

Entry Requirement

Learners who are beginning an A level course are likely to have followed a Key Stage 4 programme of study in Computer Science. GCSE Maths at Grade 5 or above.

Future opportunities

This course will enable learners to progress to higher study or to progress directly to employment. This qualification is suitable for learners intending to pursue any career in which an understanding of technology is needed. The qualification is also suitable for any further study as part of a course of general education. It will provide learners with a range of transferable skills which will facilitate personal growth and foster cross curriculum links in areas such as maths, science and design and technology.

Computer Science is a very creative subject and skills such as problem solving and analytical thinking will all be refined and explored as learners progress through the learning and assessment programme.