Computer Science A Level

This is a creative and interesting course combining problem solving and analytical thinking that I've never learnt in other subjects. It made me think differently.

Course Content

Computing Science is a creative subject which involves the invention and development of ideas through coding.

During the 2 years student will:
- Study contemporary systems architecture, databases and networks.
- Develop computational thinking skills, write code and learn about web technologies.
- Explore programming techniques.
- Understand key standard algorithms such as insertion sort and binary search.
- Characteristics of contemporary processors.
- Software development methodologies.
- How data is represented, stored and exchanged between different systems.
- Coding, using advanced programming techniques.
- Merge sort, quick sort, A* and Dijkstra's algorithm will be explored.
- Practical lessons will use Python Programming language.

The coursework project involves using skills developed to develop a solution to a problem of their own choice.

Entry Requirements
GCSE Computing Grade 6

How will I learn? (ie. Practical focus, fostering independence etc)
Learning through practical skills (coding) and computational thinking.

How will I be assessed?

The A Level qualification consists of two examined units and one coursework unit.

Unit 1: Computer Systems (40%).
Unit 2: Algorithms and Programming (40%).
Unit 3: Programming Project (20%).

Which awarding body is the course validated by?
The course is awarded and validated by OCR

What qualification will I receive?
The is an A level qualification
What can I do with this qualification? (ie. University courses and potential career paths)
Russell Group universities list Computer Science as a useful A Level for many degree courses.
Degree apprenticeship for computer science.