Introduction

“Everyone should learn how to code, it teaches you to think.” Steve Jobs - 1955-2011

How will I be assessed?

Component Content Assessment % of grade

Paper 1

Computer Systems

This unit will teach you the theory about a wide

range of issues such as hardware and software,

the representation of data in computer systems.

A mix of short and longer answer and extended

response questions assessing a student’s

theoretical knowledge.

1hr 30min

Exam

50%

Paper 2

Computational

Thinking,

Algorithms and

programming

This unit covers the theory of algorithms,

programming techniques, computational logic

and data representation.

A mix of short and longer answer questions

assessing a student’s practical problem solving

and computational thinking skills.

1hr 30min

Exam

50%

Skills/equipment required

This course requires students to be on track in maths. This course requires an interest in computers and

programming outside of the classroom as well as an ability to solve problems.

What will I learn from this course?

The course covers the following topics: the theory of systems architecture, memory and storage,

computer networks, connections and protocols, network security, systems software, ethical, legal,

cultural and environmental impacts of digital technology; the theory of algorithms, programming

fundamentals, producing robust programs, Boolean logic, programming languages and Integrated

Development Environments.

What careers can this subject lead to?

Computer science is an exciting subject and can provide you with huge opportunities across lots of

industries, for example: Computer Programmer, Day Trader, Machine Learning Engineer, CAD Designer,

Games Developer, Legoland Designer, Clothes Designer, Tumblr product manager, Software Developer,

Software Architect, Geographical information systems officer, Secondary school teacher, Technical

Author, Music Data Analyst, MI5, MI6 and GCHQ.

For further details please see Mr Hersey