The UK is a world leader in the creative digital industries, such as in the creation of visual effects for films and computer games. However, there is growing recognition that we need to build on and improve the UK’s capability and capacity for technical innovation and creativity in this area.

The UK has a well-deserved reputation for producing innovation and design. In an era in which creativity is intertwining with technology like never before, there is a danger that the UK will fail to nurture the next generation of world class designers.

Course title: AQA GCSE Computer Science

This qualification aims to:

Understand and apply the fundamental principles and concepts of Computer Science including abstraction, decomposition, logic, algorithms, and data representation.

Analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs.

Think creatively, innovatively, analytically, logically and critically.

Understand the components that make up digital systems, and how they communicate with one another and with other systems.

Understand the impacts of digital technology to the individual and to wider society.

Apply mathematical skills relevant to Computer Science.

Unit 1: Computational thinking and problem solving

80 marks

1 hour and 30 minutes

Written paper

What's assessed?

Computational thinking, problem solving, code tracing and applied computing as well as theoretical knowledge of computer science from subject content 1 to 4.

50%

of total

GCSE

Unit 2: Written assessment

80 marks

1 hour and 30 minutes

Written paper

What's assessed

Theoretical knowledge from subject content 3 – 7 above.

50%

of total

GCSE

Programming project

40 marks

Totalling 20 hours

Non-Exam Assessment (NEA)

What's assessed?

The non-exam assessment (NEA) assesses a pupil’s ability to solve a practical programming problem.

0%

of total

GCSE

Helps understanding of Units 1 & 2

Further information: https://www.aqa.org.uk/subjects/computer-science-and-it/gcse/computer-science-8520

Useful Websites/Information:

https://www.bbc.com/education/subjects/z34k7ty

https://www.bbc.com/education/subjects/zqmtsbk

http://www.teach-ict.com/glossary/A.htm

https://www.w3schools.com/

https://members.gcsepod.com/login

Parents can encourage pupils to attend Computing club regularly to obtain additional guidance with coursework. The software used for the projects are Visual Studio, Game Maker 8, Microsoft Office package, Adobe Creative Cloud 2017 and Python.