

A Level Computer Science 2018/19



Overview of the course

This course covers the theoretical and practical aspects of Computer science and computational methods. If you are interested in using computers to analyse and solve problems this is the course for you. It will teach you the skills required to work in an IT focused business or industry. You will use problem solving skills and develop software development skills of analysis, design and evaluation.

What are the entry requirements?

The entry requirement for this course is at least a 6 in computer science and Mathematics and a 5 in English, at GCSE level. Students who have got an 7 and above in Mathematics, but no computing qualifications, are encouraged to apply.

How is the course assessed?

To complete the A Level year of the course you will study three units. **(01) Computer systems 140 marks, 2 hours and 30 Minutes written paper** , **(02) Algorithms and programming 140 marks, 2 hours and 30 Minutes written paper** , **(03) Programming project 70 marks Non-exam assessment**

These will be assessed by written examinations and large coursework submission.

What are the career opportunities?

You may progress onto Computing/IT related higher education courses or employment where knowledge of IT and programming skills are required. Some examples:

Application analyst , Applications developer, CAD technician, Cyber security analyst, Data analyst, Database administrator, Forensic computer analyst, Game designer, Games developer, Information systems manager, IT consultant, Machine learning engineer, Multimedia programmer, SEO (search engine optimisation) specialist, Software engineer,

Systems analyst, UX (User eXperience) designer, Web designer, Web developer

Current and Future in-demand jobs

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/391911/15.01.05._UKCES_Career_Brochure_V13_reduced.pdf

<https://www.zdnet.com/article/the-10-it-jobs-that-will-be-most-in-demand-in-2020/>

<https://www.weforum.org/agenda/2016/01/8-jobs-every-company-will-be-hiring-for-by-2020/>

<https://www.topuniversities.com/student-info/careers-advice/what-will-hottest-jobs-be-2020>