A LEVEL: COMPUTER SCIENCE
(AWARDING BODY OCR)

CONTENT

Computer Science is a practical subject where students can apply the academic principles learned in the classroom to real-world systems. It's an intensely creative subject that combines invention and excitement, and can look at the natural world through a digital prism.

The A level programme is assessed by two written exams and a programming project:

Paper 1: Computer Systems 2 hours 30 minutes, (40% of A level)

Paper 2: Algorithms and Programming 2 hours 30 minutes, (40% of A level)

Programming Project: Analysis of the problem; design of the solution; developing the solution; evaluation (20% of A level)
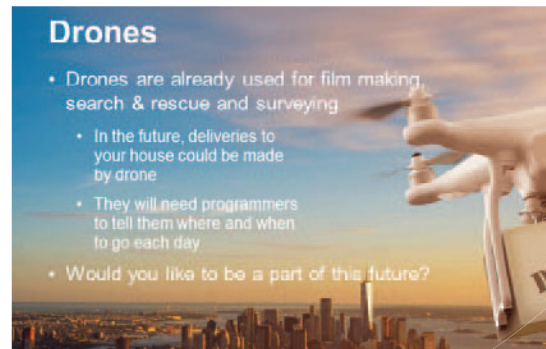
PROGRESSION

Many of our students go to university to study computing or games design before specialising in the following career areas:

- **Computer Programmer** – converting project requirements into code to create or modify computer programmes

- **Software Developer** – designing, installing, testing and maintaining software systems

- **Network Engineer** – installing, maintaining and supporting computer networks within an organisation

- **Web Developer** – responsible for the design, layout and coding of a website

- **Database Administrator** – assisting with the planning and development of databases

- **Systems Analyst** – deigning new IT solutions to improve business efficiency

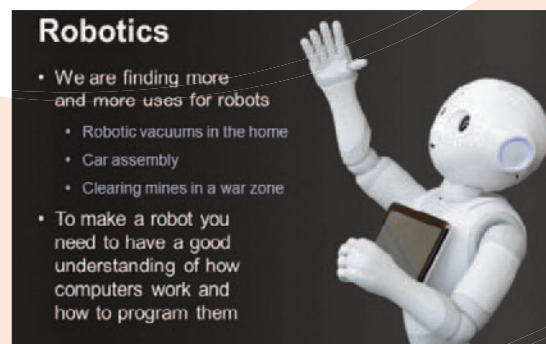For further information about the course contact:
Mr McPake: mmcpake@tkasa.org.uk

Drones
- Drones are already used for film making, search & rescue and surveying
  - In the future, deliveries to your house could be made by drone
  - They will need programmers to tell them where and when to go each day
  - Would you like to be a part of this future?

Robotics
- We are finding more and more uses for robots
  - Robotic vacuums in the home
  - Car assembly
  - Clearing mines in a war zone
- To make a robot you need to have a good understanding of how computers work and how to program them

Game-changing E-commerce
- Shopping has been transformed since the web was invented
  - Online shopping was worth £1 trillion in 2014
  - It is predicted to be worth £3.7 trillion by 2021
- Want to know how it works?

A strong games industry
- The UK is well known for its games development.
- The following were all made in the UK:
  - Grand Theft Auto (Edinburgh)
  - Elite Dangerous (Cambridge)
  - Candy Crush (London)
  - Batman: Arkham (London)
  - Sonic Forces (Leamington Spa)
  - Burnout Paradise (Guildford)

Further careers information can be found at:

https://www.computerscience.org/careers/

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