



# Computer Science Preparing for Post 16

## A Level Specification

Read through the 'specification overview' pages to gain an understanding of the course. Pages 4-15.

[Link](#)



## Investigation

One of the recent talking points in computer science has been the commercial applications of artificial intelligence, and its rapid growth.

During the summer break, watch the keynote speech titled "The A.I. Dilemma" and write down your opinions on how A.I. could impact society within the next few week, months, or even years.

Though this is based on your opinion, your evidence should reference the video, where possible.

[Link](#)



## Exam Question:

Discuss the impact of modern encryption on society. You should refer to:

- The importance of asymmetric encryption and how it differs from symmetric encryption.
- Different circumstances in which symmetric and asymmetric encryption may be used.

9 Marks

If you are considering studying Computer Science next year, then these are activities that you should seriously consider completing over the next few months to prepare yourself for the very large step up to Post 16 from GCSE.

The activities are divided into:

**Essential** - suggested as good preparation for the course.

**Recommended** - suggested to support the essential activities for the course

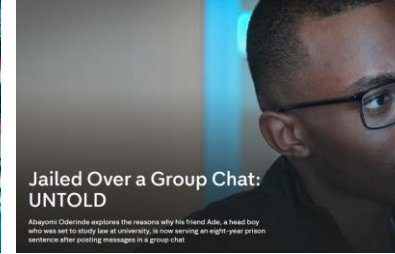
**Optional** - suggested to support wider learning around the subject; you are expected to do this independently at Post 16.

## TV Shows to watch (The images are links)

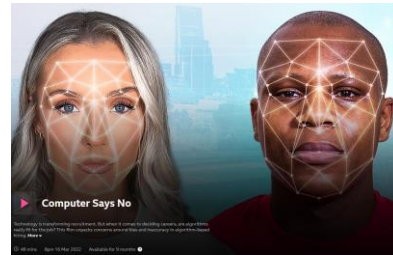
[AI – What next?](#)



[Jailed Over a Group Chat](#)



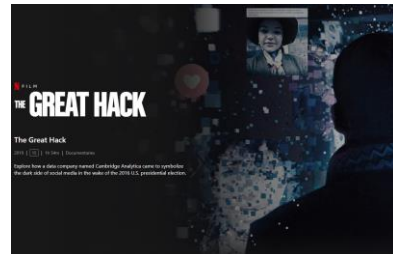
[Computer Says No](#)



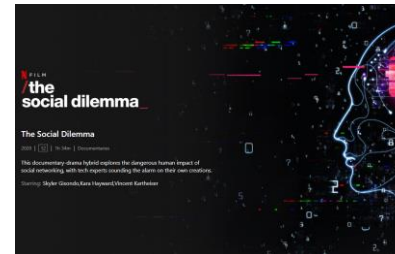
[Storyville](#)



[The Great Hack](#)



[The Social Dilemma](#)



## Online Reading

[BBC News Technology](#) - A comprehensive list of the current news stories related to technology in the UK, and around the world. Presented by the BBC.

[The Conversation](#) – Explore talk articles around Computer Science, the subject's impact on the future and how it could evolve over the next few years.

[MIT News](#) – Keep up to date with current developments and news from MIT.

## TIPS for the Exam Question

- The candidate demonstrates a thorough knowledge and understanding of modern encryption and the difference between symmetric and asymmetric encryption. The material is generally accurate and detailed.
- The candidate is able to apply their knowledge and understanding directly and consistently to the context provided. Evidence/examples will be explicitly relevant to the explanation.
- The candidate provides a thorough discussion which is well balanced. Evaluative comments are consistently relevant and well-considered.
- There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.

## Submitting the essential tasks

- Tasks should be submitted by email, using PowerPoint or word to collate the information.

## Have a go at something practical

There's an expectation that you've had some experience with computer programming during GCSE Computer Science. As an introduction to advanced programming features, you'll encounter in advanced level computer science, have a go at creating a very basic game in python, using the pygame module. This pygame tutorial be completed in a web browser using the following website below:

[Link](#)