



Launceston College Sixth Form

Part of the Athena Learning Trust

Computer Science

```
mirror_mod.use_x = False
mirror_mod.use_y = True
mirror_mod.use_z = False

#selection at the end -add back the deselected
bpy.context.scene.objects.active = modifier_ob
print("Selected" + str(modifier_ob)) # modifier ob
#mirror_ob.select = 0
done = bpy.context.select_objects[0]
my_data.objects[0].name = "done"

AJK5545001J-JK
```

Subject Information
For admissions in September

Computer Science

Course Title: A level Computer Science

Exam Board : AQA

Specification Link:

<https://www.aqa.org.uk/subjects/computer-science-and-it/as-and-a-level/computer-science-7516-7517/specification-at-a-glance>

Course Structure

- 10 Fundamentals of programming
- 11 Fundamentals of data structures
- 12 Fundamentals of algorithms
- 13 Theory of computation
- 14 Fundamentals of data representation
- 15 Fundamentals of computer systems
- 16 Fundamentals of computer organisation and architecture
- 17 Consequences of uses of computing
- 18 Fundamentals of communication and networking
- 19 Fundamentals of databases
- 20 Big Data
- 21 Fundamentals of functional programming
- 22 Systematic approach to problem solving
- 23 Non-exam assessment - the computing practical project

Entry Requirements:

5 GCSE(s) at 9-5 including English and Grade 6 in Maths and Sciences

Possible Progression Routes:

The course could lead to numerous university courses in the computer science or science faculties. Also to careers and apprenticeships in the IT and communications industry

Equipment required:

Access to a computer with the appropriate software. Most software required is free to download. If there is any cost for software or a computer students may be eligible for support from the 16-19 bursary.

Supporting Subjects:

Maths and Physics

Assessments:

Paper 1

What's assessed: this paper tests a student's ability to program, as well as their theoretical knowledge of Computer Science from subject content 10-13 above and the skills required from section 22 above.

Assessed

On-screen exam: 2 hours 30 minutes

40% of A-level

Questions

Students answer a series of short questions and write/adapt/ extend programs in an Electronic Answer Document provided by us. We will issue Preliminary Material, a Skeleton Program (available in each of the Programming Languages) and, where appropriate, test data, for use in the exam.

Paper 2

What's assessed: this paper tests a student's ability to answer questions from subject content 14-21 above.

Assessed

On-screen exam: 2 hours 30 minutes

40% of A-level

Questions

Compulsory short-answer and extended-answer questions.

Non-Exam Assessment

What's assessed: the non-exam assessment assesses student's ability to use the knowledge and skills gained through the course to solve or investigate a practical problem. Students will be expected to follow a systematic approach to problem solving, as shown in section 22 above.

Assessed

75 marks

20% of A-level

Component Content:

Paper 1

This component will incorporate and build on the knowledge and understanding in the field of programming, data structures, problem solving & algorithms and the theory of computation.

Paper 2

This component will introduce learners to the internal architecture and systems of a computing device, how data is represented and processed, the exchange and management of data including data management systems and legal and ethical issues.

Non-exam Assessment

Learners will be expected to analyse, design, develop, test, evaluate and document a program written in a suitable programming language. The underlying approach to the project is to apply the principles of computational thinking to a practical coding problem. Learners are expected to apply appropriate principles from an agile development approach to the project development. While the project assessment criteria are organised into specific categories, it is anticipated the final report will document the agile development process and elements for each of the assessment categories will appear throughout the report..

Subject contact:

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How to apply?

To apply to Launceston College Sixth Form
please complete our online application form:

www.launceston-college.cornwall.sch.uk/sixth-form

sixthform@launcestoncollege.uk

01566 771855

Our admissions team will then be in contact to arrange a Sixth Form interview to discuss your options, your aspirations, and to provide advice and guidance on your next steps.