

SUBJECT GUIDE:

Exam Board - OCR
2 years - A Level

WHY CHOOSE COMPUTER SCIENCE

This specification encourages candidate to develop the capacity to think innovatively, analytically, logically and critically;

An understanding of the organisation of computer systems, including software, hardware, data, communications and people.

HOW WE STUDY COMPUTER SCIENCE

Students can be truly engaged in their studies by becoming active investigators rather than passive learners. Their progress is monitored closely by Homework, Progress Tests. Students will develop a project for a real user of their own interest.

LEARNING SKILLS REQUIRED

Skills i.e. Numeracy, Writing, Analytical, Logical Reasoning, Note taking, Scan reading, Computing, Interest in current affairs, Memory skills, Recall Skills, Ability to absorb data, Creativity, Wide vocabulary. This specifications assume that all candidates will have a basic understanding and knowledge of both the hardware and software of a standard, stand-alone computer system.

WHAT WE STUDY IN COMPUTER SCIENCE

COM1 – COMPUTER SYSTEMS

Course Code - H446 - 01
Exam Weighting - 40% of A Level

Brief description content of unit:

- The characteristics of contemporary processors, input, output and storage devices
- Software and software development
- Exchanging data
- Data types, data structures and algorithms
- Legal, moral, cultural and ethical issues

COM2 - ALGORITHMS AND PROGRAMMING

Course Code - H446 - 02
Exam Weighting - 40% of A Level

Brief description content of unit:

- Elements of computational thinking
- Problem solving and programming
- Algorithms to solve problems and standard algorithms

COM3 - PROGRAMMING PROJECT

Course Code – H446 - 03
Exam Weighting - 200% of A Level

Brief description content of unit:

This unit provides students with the opportunity to complete a substantial project involving the production of a computer system over an extended period of time. In so doing, students will enhance their transferable practical skills.

BRIEF OUTLINE OF NUMBER /TYPE/ LENGTH OF EXAM

Com1 and Com2 - 2 hour 30 minutes written examination - 140 marks

Com 3 - 70 marks - Coursework project report, marked internally moderated by a board.

COURSE READING LIST: (Course text Book and other recommended reading materials)

OCR A level – Computer Science by George Rouse, Jason Pitt, Sean O’Byrne

PROGRESS PATHS

The specification has been developed for students who wish to progress to higher education or to the world of work, where understanding how computing can be used in almost every aspect of life.

THE COMPUTING DEPARTMENT

Mrs Madhura Dandekar joined the college September 2001. Madhura is qualified BSc. Hons. , PGDSE, PGCE (Post -16).