ST JOSEPH'S INSTITUTION
INTERNATIONAL SCHOOL
"Enter to Learn, Leave to Serve"

Sixth Form Subject Guide

COMPUTER SCIENCE

★★★ CAREERS RELATED TO STUDYING THIS SUBJECT

If you're considering a career in computer science or ICT, you might be wondering if both disciplines mean the same thing. So, do they? Not quite. Although both share many similarities, each discipline has a different focus. For a start, ICT is not just about computers, rather, it has a broad approach that studies how digital information is communicated. ICT focuses on hardware and the way computers process data, while computer science focuses on theory and programming.

However, both subjects can lead to careers in the following areas: Computer programming, web design, database analysis, project management, social media management, security/networking analysis, technology support, mobile application development, e-marketing, and public relations.

★★★ A LEVEL COURSE CONTENT

The aim of the Cambridge International AS and A Level Computer Science syllabus is to encourage learners to develop an understanding of the fundamental principles of computer science and how computer programs work in a range of contexts.

Learners will study topics including information representation, communication and internet technologies, hardware, software development, and relational database modelling. As they progress, learners will develop their computational thinking and use problem solving to develop computer-based solutions using algorithms and programming languages. Studying Cambridge International AS and A Level Computer Science will help learners develop a range of skills such as thinking creatively, analytically, logically, and critically.

★★★ METHODS OF STUDY FOR A LEVEL

You will be engaged in course topics, studying with one another, and contributing to the learning process. You will work individually, in pairs, or in small study groups.

Tasks could involve using the textbook, online research, producing programs, building PC's, presentations, and class discussions.

★★★ ENTRY REQUIREMENTS FOR A LEVEL

A Level Computer Science – A minimum of a B in IGCSE Computer Science and minimum of B in IGCSE Mathematics (or equivalent).

★★★ A LEVEL METHODS OF ASSESSMENT

Assessment Component	Weighting	
	AS Level	A Level
Paper 1: Theory Fundamentals • Short answer and structured questions.	50%	25%
Paper 2: Fundamental Problem-solving and Programming Skills • Short answer and structured questions based on pre-release material.	50%	25%
Paper 3: Advanced Theory • Short answer and structured questions.	N/A	25%
Paper 4: Practical • Submission of complete program code and evidence of testing.	N/A	25%