



# Cambridge International General Certificate of Secondary Education (IGCSE) -Computer Science (0478)



Cambridge International General Certificate of Secondary Educations (IGCSE) are considered to be an excellent preparation for Cambridge International AS and A Levels, the Cambridge AICE (Advanced International Certificate of Education) Group Award, Cambridge Pre-U, and other education programmes, such as the US Advanced Placement program and the International Baccalaureate Diploma programme. They are the world's most popular international qualification for 14 to 16 year olds.

Cambridge IGCSE Computer Science enables learners to develop an interest in computing and to gain confidence in computational thinking and programming. They develop their understanding of the main principles of problem-solving using computers.

Futurekids Computer Learning Center (Sch Reg No: 29075, 29076)

Registered Cambridge International School

Futurecyber Technology Solution Limited

(Centre No: HK071)

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# Introduction

Cambridge IGCSE Computer Science enables learners to develop an interest in computing and to gain confidence in computational thinking and programming. They develop their understanding of the main principles of problem-solving using computers. Learners apply their understanding to develop computer-based solutions to problems using algorithms and a high-level programming language. They also develop a range of technical skills, as well as the ability to test effectively and to evaluate computing solutions. This qualification will help learners appreciate current and emerging computing technologies and the benefits of their use. They learn to recognise the ethical issues and potential risks when using computers. Cambridge IGCSE Computer Science is an ideal foundation for further study in Computer Science.

# **Scheme of Assessment**

All candidates will be entered for Paper 1 and 2.

#### Paper 1 Theory (1 hour 45 minutes)

This paper is consisting of short-answer and structured questions set on Section 1 of the syllabus content. All questions are compulsory. Candidates will answer on the question paper.

### Paper 2 Problem-solving and Programming (1 hour 45 minutes)

This paper is consisting of short-answer and structured questions set on Section 2 of the syllabus content. All questions are compulsory. Candidates will answer on the question paper.

Both papers will take place at FUTUREKIDS Computer Learning Center, by means of a CIE-set assessments, under controlled examination conditions. The documentation and printouts produced in the assessment will be externally marked by CIE.

### Weighting of Papers

Paper	Weighting	
1	50%	
2	50%	

### **Examinations Schedule**

Examinations are held in June and November each year with results issued in August and February respectively.

# **Grading System**

Cambridge IGCSE results are shown by one of the grades  $A^*$ , A, B, C, D, E, F or G indicating the standard achieved,  $A^*$  being the highest and G the lowest.

# Recognition

IGCSE is a high-profile qualification. It has exactly the same value in admitting students to institutes of further education and employment as the UK equivalent -GCSE.

- ♦ IGCSE is comparable with GCE O Level and the UK GCSE
- ♦ IGCSE has an excellent reputation amongst international schools worldwide
- ♦ IGCSEs are recognised as a reliable record of attainment which counts towards entry to universities and colleges around the world

# **Curriculum Content**

The curriculum content is set out in ten interrelated sections. These sections should be read as an integrated whole and not as a progression. The sections are as follows:

#### Section 1

#### Computer System

- 1. Data representation
- 2. Data transmission
- 3. Hardware
- 4. Software
- 5. The internet & its uses
- 6. Automated and emerging technologies

#### Section 2

#### Algorithms, programming & logic

- 7. Algorithm design and problem-solving
- 8. Programming
- 9. Databases
- 10. Boolean logic

# **Course Outline**

Module	Section(s) Covered	Study Hours
Module 1: Fundamental Programming	7, 8	30 (20 Lessons)
Module 2: Programming & Databases	8, 9	<i>30 (20 Lessons)</i>
Module 3: Data Representation & Communication	1, 2, 3	18(12 Lessons)
Module 4: Computer Architecture & Software	3, 4, 10	18 (12 Lessons)
Module 5: Internet Technologies & Security	5, 6	18 (12 Lessons)

### **Prerequisite**

Students should pass a computer programming aptitude test. Please contact Futurekids for further details.

### Further Enquiries

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# **Course Schedule**

The course is scheduled every Thursday or Friday from 4:30 - 6:00pm or Saturday from 9:30 - 11:00am /11:00am -12:30pm /1:30 - 3:00pm /3:30 - 5:00pm

Module	Date	Lessons	Fee
<b>Module 1:</b> Fundamental Programming (I)	2025 Sep 04 to 2025 Nov 08	10 lessons	\$6,000
Fundamental Programming (II)	2025 Nov 13 to 2026 Jan 17	10 lessons	\$6,000
Module 1 Test	Date and time to be confirmed		\$500
Module 2: Programming & Databases (I)	2026 Jan 22 to 2026 Mar 28	10 lessons	\$6,000
Programming & Databases (II)	2026 Apr 02 to 2026 Jun 06	10 lessons	\$6,000
Module 2 Test	Date and time to be confirmed		\$500
Module 3: Data Representation & Communication	2026 Jun 11 to 2026 Aug 29	12 lessons	\$7,200
Module 3 Test	Date and time to be confirmed		\$500
<b>Module 4:</b> Computer Architecture & Software	2026 Sep 03 to 2026 Nov 21	12 lessons	\$7,200
Module 4 Test	Date and time to be confirmed		\$500
Module 5: Internet Technologies & Security	2026 Nov 26 to 2027 Feb 13	12 lessons	\$7,200
Module 5 Test	Date and time to be confirmed		\$500
Examinations	May - Jun 2027, details will be announced later		

#### Remarks:

- 1. Full payment should be made one week before the commencement date of each module.
- 2. Any make up class other than the scheduled time will require a \$200 administration fee.
- 3. No class on public holiday, make-up class will be arranged.
- 4. Students will study a selected course book, available for purchase from Futurekids or any online retailer.
- 5. Enhancement courses and mock examinations will be held after course end for students to re-enforce their knowledge in each module covered and familiarise the examination patterns. Details of schedule and fee will be announced later.
- 6. Prices are subject to change in due course; details will be announced one month before the module begins.