

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

Cambridge International General Certificate of Secondary Education (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
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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. 20 of the marks in this paper are from questions set on tasks provided in the Paper 2 Problem-solving and Programming pre-release material.

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	60%
2	40%

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 eight interrelated sections. These sections should be read as an integrated whole and not as a progression. The sections are as follows:

Section 1

Theory of Computer Science

1. Data representation
2. Communication and Internet technologies
3. Hardware and software
4. Security
5. Ethics

Section 2

Practical Problem-solving and Programming

6. Algorithm design and problem-solving
7. Programming
8. Databases

Course Outline

<i>Module</i>	<i>Section(s) Covered</i>	<i>Study Hours</i>
<i>Module 1: Fundamental Programming</i>	6, 7	30 (20 Lessons)
<i>Module 2: Programming & Databases</i>	7, 8	30 (20 Lessons)
<i>Module 3: Data Representation & Communication</i>	1, 2	18(12 Lessons)
<i>Module 4: Computer Architecture & Software</i>	3	18 (12 Lessons)
<i>Module 5: Internet Technologies & Security</i>	2, 4, 5	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 on every Saturday from 9:30am to 11:00am or 3:30pm to 5:00pm

Module	Date			Fee
Module 1: Fundamental Programming (I)	Saturday:	2019	May 04, 11, 18, 25, Jun 01, 08, 15, 22, 29, Jul 06	10 lessons \$5,550
Fundamental Programming (II)	Saturday:	2019	Jul 13, 20, 27, Aug 03, 10, 17, 24, 31, Sep 07, 14	10 lessons \$5,550
Module 1 Test	12 Oct or 19 Oct 2019, Time to be confirmed			\$500
Module 2: Programming & Databases (I)	Saturday :	2019	Sep 21, 28, Oct 05, 12, 19, 26, Nov 02, 09, 16, 23	10 lessons \$5,550
Programming & Databases (II)	Saturday :	2019 2020	Nov 30, Dec 07, 14, 21, 28, Jan 04, 11, 18, 25, Feb 01	10 lessons \$5,550
Module 2 Test	29 Feb or 07 Mar 2020, Time to be confirmed			\$500
Module 3: Data Representation & Communication	Saturday :	2020	Feb 08, 15, 22, 29, Mar 07, 14, 21, 28, Apr 04, 11, 18, 25	12 lessons \$6,660
Module 3 Test	23 May or 30 May 2020, Time to be confirmed			\$500
Module 4: Computer Architecture & Software	Saturday :	2020	May 02, 09, 16, 23, 30, Jun 06, 13, 20, 27, Jul 04, 11, 18	12 lessons \$6,660
Module 4 Test	15 Aug or 22 Aug 2020, Time to be confirmed			\$500
Module 5: Internet Technologies & Security	Saturday :	2020	Jul 25, Aug 01, 08, 15, 22, 29, Sep 05, 12	12 lessons \$6,660
Module 5 Test	07 Nov or 14 Nov 2020, Time to be confirmed			\$500
Examinations	May - Jun 2021, 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 \$180 administration fee.
3. No class on public holiday, make-up class will be arranged.
4. A course book will be chosen for student to study, student can buy the book through bookshop or Futurekids.
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. Price are subject to change in due course, details will be announced one month before the module begins.