

PEARSON EDEXCEL INTERNATIONAL GCSE (9-1) COMPUTER SCIENCE



4CP0-20IO3

First teaching in 2017, first assessment in 2019.

Welcome to Pearson Edexcel

Welcome to Pearson Edexcel,
the world's leading learning company
and the UK's largest awarding body.

We set the standard for worldwide
recognised qualifications, built on the
UK educational system and accepted
by universities worldwide.

We have a simple mission:
**to help make a measurable impact on
improving people's lives through
learning.**

***'We judge
ourselves – and
invite others to
judge us – not by
the products that
we make but by
the impact on
learners.'***

John Fallon,
Chief Executive Officer,
Pearson



About Pearson Edexcel

- ❖ As the UK's largest awarding organisation, we are best placed to provide qualifications that are most closely aligned to the British educational system.
- ❖ We are the most reliable awarding organisation in the UK, recognised and trusted by educators, learners and employers to provide high quality qualifications.
- ❖ By helping you to realise student potential, you can prepare and empower all your students to progress to further education, university and employment.
- ❖ Our technology capability allows us to provide you with more advanced support services, tools and resources to make life easier for school leaders, teachers and students.
- ❖ Pearson Edexcel are leading the way, challenging thinking and creating new ideas so you can be confident our qualifications will always be world-class.



Aims and objectives

- ❖ Learn about the teaching and learning support
- ❖ Understand how to access personal support and communities of practice
- ❖ Be able to find online and face-to-face training
- ❖ Investigate ResultsPlus and ResultsPlus Direct
- ❖ Understand Access to Scripts (ATS) and post-results support



Agenda

Time	Item
5	Welcome
5	Aims and agenda
17	Teaching and learning
20	Assessment support
5	Post-results support
3	Personal support
5	Questions



Teaching and learning

Free online support



Main qualification page

❖ Links to resources

Specification

Support for
teachers

Support for
students

❖ Information about contacts

Subject support
advisor

[Home](#) > [Our qualifications](#) > [International GCSEs and Edexcel Certificates](#) > [Computer Science \(2017\)](#)

Edexcel International GCSE

Computer Science (2017)

Specification

Course materials

News

Supporting success in Computer Science



Specification

The specification is freely downloadable from the main qualification page.



DOWNLOAD

PDF | 912.7 KB

Qualification type: International GCSE

Level: Level 1/2

Subject: Computer Science

Specification codes: 4CP0

Availability: International and UK independent schools

First teaching: 2017

First assessment: 2019



Finding course materials

 > [Our qualifications](#) > [International GCSEs and Edexcel Certificates](#) > [Computer Science \(2017\)](#)

Edexcel International GCSE Computer Science (2017)



[Specification](#)

[Course materials](#)

[News](#)

Find course materials

**Specification and sample
assessments (3)**

Exam materials (8)

**Forms and administration
(3)**

**Teaching and learning
materials (16)**



Course materials

The items of interest on this page are the sample assessment materials.

Paper 1

Sample question paper
Sample mark scheme

Paper 2

Sample question paper
Sample data files
Sample mark scheme

Specification



[Specification](#)

| PDF 912.7 KB | 09 Nov 2016

Data files



[Sample assessment materials - Data files - Paper 2](#)

| ZIP 22.8 KB | 24 May 2019

Sample assessment material



[Sample assessment materials](#)

| PDF 6.5 MB | 03 Jun 2019

Specification and sample assessments (3)

Exam materials (8)

Forms and administration (3)

Teaching and learning materials (16)



Paper 1: sample assessment materials

Write your name here							
Surname	Other names						
Pearson Edexcel Level 1/Level 2 International GCSE (9–1)	Centre Number <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>						
Candidate Number <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>							
Computer Science Paper 1: Principles of Computer Science							
Sample assessment material for first teaching September 2017 Time: 2 hours	Paper Reference 4CP0/01						
You must have: A pseudocode reference	Total Marks <table border="1"><tr><td></td></tr></table>						

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- You are not allowed to use a calculator.

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.
- Marks will not be awarded for using product or trade names in answers without giving further explanation.



Paper 1: question paper

(d) A simplified TCP/IP model can be represented using four layers.

(i) Three of the layers are Data Link, Transport and Network.

State the order of these layers from the highest to the lowest.

(1)

1 _____

2 _____

3 _____

(ii) A web browser sends a request to a web server.

State the name of the TCP/IP layer that first handles this request.

(1)

(Total for Question 2 = 7 marks)



Paper 1: mark scheme

Question number	Answer	Additional guidance	Mark
2(d)(i)	1 mark for the correct order (highest to the lowest). 1 Transport 2 Network 3 Data Link		(1)

Question number	Answer	Additional guidance	Mark
2(d)(ii)	Application		(1)



Paper 2: sample assessment materials

Write your name here			
Surname		Other names	
Pearson Edexcel		Centre Number	Candidate Number
Level 1/Level 2		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
International GCSE (9–1)			
Computer Science			
Paper 2: Application of Computational Thinking			
Sample assessment material for first teaching September 2017 Time: 3 hours		Paper Reference 4CP0/02	
You must have: A computer workstation with appropriate programming language code editing software and tools, including a code interpreter/compiler, CODES folder containing code and data files, pseudocode reference			Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions **requiring a written answer** in the spaces provided – *there may be more space than you need*.
- Only **one** programming language must be used throughout the test.
- Carry out practical tasks on the computer system and save new or amended code using the name given with the appropriate file extension.
- Do **not** overwrite the original code and data files provided to you.
- You must **not** use the internet during the test.

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
- This paper covers Python, C# and Java.
- The CODES folder in your user area includes all the code and data files you need.
- The invigilator will tell you where to store your work.

Advice

- Read each question carefully before you start to answer it.
- Save your work regularly.
- Check your answers and work if you have time at the end.



Paper 2: question paper

(c) (i) Give a definition of a syntax error.

(1)

(ii) Open the file **Q01c** in the code editor.

Amend the code to correct three program errors.

Save your amended code as **Q01cFINISHED** with the correct file extension for the programming language.

(3)

(Total for Question 1 = 10 marks)



Paper 2: data files

Q01a.java	Q01a.py	Q01a.cs
Q01b.java	Q01b.py	Q01b.cs
Q01c.java	Q01c.py	Q01c.cs
Q02a.java	Q02a.py	Q02a.cs
Q02c.java	Q02c.py	Q02c.cs
Q03b.java	Q03b.py	Q03b.cs
Q03c.java	Q03c.py	Q03c.cs
Q05a.java	Q05a.py	Q05a.cs
Q05b.java	Q05b.py	Q05b.cs
Q06.java	Q06.py	Q06.cs

Cities.txt

```
1 using System;
2 namespace Q01a
3 {
4     class Q01c
5     {
6         static void Main(String[] args)
7         {
8             for (int i = 10; i <= 100; i += 10)
9             {
10                 total = total + i;
11                 if (i % 2 == 0)
12                     Console.WriteLine("Even");
13                 else
14                 {
15                     Console.WriteLine("Odd");
16                 }
17             }
18             Console.WriteLine(total);
19             Console.ReadKey();
20         }
21 }
```



Paper 2: mark scheme – written response

Question number	Answer	Additional guidance	Mark
1(c)(i)	<p>Any one from:</p> <ul style="list-style-type: none">• an error in following the rules of the programming language• not following the grammar rules of the programming language• not being able to translate a line of code because of an error in using the language• misspelling command words in the programming language.		(1)



Paper 2: mark scheme – code response

Question number	Answer	Additional guidance	Mark
1(c)(ii)	<p>Python</p> <ul style="list-style-type: none"> Total is undefined/need to add initialisation for variable total (1). Equals symbol in If statement needs to be replaced with '==' (1). Print ("Odd") needs to be indented (1). <pre> 1 myNumbers = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100] 2 total = 0 3 for theNumber in myNumbers: 4 total = total + theNumber 5 if(theNumber % 2 == 0): 6 print("Even") 7 else: 8 print("Odd") 9 print(total) </pre>	<p>Candidates are required to open the file Q01c in the code editor. Amended code should be saved as Q01cFINISHED.</p> <p>Do not penalise logic errors such as</p>	

Java

- Total is undefined/need to add initialisation for variable total (1).
- Equals symbol in If statement needs to be replaced with '==' (1).
- Missing closed } after Print ("Odd") (1).

```

5         int total = 0;
6         for (int i=10;i<=100;i+=10)
7         {
8             total = total + i;
9             if(i % 2 == 0)
10                 System.out.println("Even");
11             else
12             {
13                 System.out.println("Odd");
14             }
15         }
16         System.out.println(total);
                
```



Paper 2: mark scheme – code response

Q01cCorrect.cs Q01cCorrect.java Q01cCorrect.py

Q02aCorrect.cs Q02aCorrect.java Q02aCorrect.py

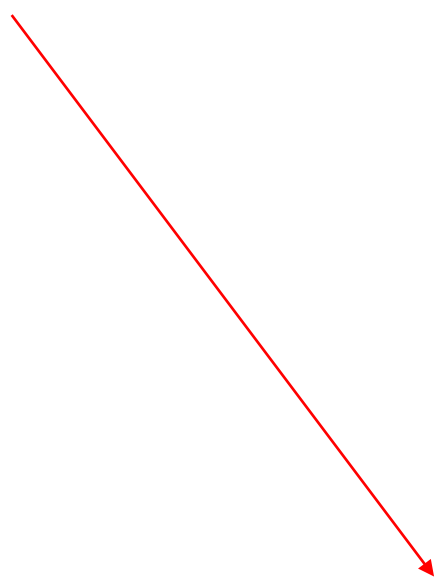
Q02cCorrect.cs Q02cCorrect.java Q02cCorrect.py

Q03bCorrect.cs Q03bCorrect.java Q03bCorrect.py

Q03cCorrect.cs Q03cCorrect.java Q03cCorrect.py

Q05bCorrect.cs Q05bCorrect.java Q05bCorrect.py

Q06Correct.cs Q06Correct.java Q06Co



```
1 myNumbers = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
2 total = 0
3 for theNumber in myNumbers:
4     total = total + theNumber
5     if(theNumber % 2 == 0):
6         print("Even")
7     else:
8         print("Odd")
9 print(total)
```



Exam materials

Paper 1

Question paper
Mark scheme
Examiner report

Paper 2

Question paper
Data files
Mark scheme
Examiner report

June 2019



Question paper - Paper 01 - June 2019

Paper 01

| PDF 672.8 KB | 02 Jul 2019



Modified papers - 4CP0 - June 2019

Modified papers to help candidates with varying needs to access past examination materials

| ZIP 335.8 KB | 26 Sep 2019



Mark scheme - Paper 01 - June 2019

Paper 01

| PDF 392.9 KB | 22 Jul 2019



Examiner report - Paper 01 - June 2019

Paper 01

| PDF 173.1 KB | 22 Aug 2019



Question paper - Paper 02 - June 2019

Paper 02

| PDF 728.0 KB | 02 Jul 2019



Mark scheme - Paper 02 - June 2019

Paper 02

| PDF 1007.9 KB | 22 Aug 2019



Examiner report - Paper 02 - June 2019

Paper 02

| PDF 175.2 KB | 22 Aug 2019



No Exam Series



Data Files - 4CP0 02 - June 2019

| ZIP 12.8 KB | 28 May 2019



Specification and sample
assessments (3)

Exam materials (8)

Forms and administration
(3)

Teaching and learning
materials (16)



Forms

Specification and sample assessments (3)

Exam materials (8)

Forms and administration (3)

Teaching and learning materials (16)

❖ The ICE document is crucial in understanding how to facilitate Paper 2.

❖ The pseudocode command set details how written algorithms will be presented to students.

❖ The pseudocode command set booklet is provided to students during the exam for both Paper 1 and Paper 2.

Centre guidance



[4CP0 02 Instructions for the Conduct of the Examination 2019](#)

| PDF 193.7 KB | 22 Jan 2019

Examination schedule pro forma



[Exam schedule pro forma](#)

| DOCX 38.3 KB | 18 Oct 2018

Resource booklet



[Pseudocode Command Set](#)

To be used for Component 1 and Component 2

| PDF 103.4 KB | 03 Dec 2018



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Teaching and learning

Specification and sample assessments (3)

Exam materials (8)

Forms and administration (3)

Teaching and learning materials (16)

Mapping documents

Between GCSE Computer Science and iG Computer Science

Skills for learning and work

Study skills guide

Past training content

Getting Ready to Teach

Sub Topic	GCSE Reference	GCSE Learning Objective	Level of difference	International GCSE Reference	International GCSE Learning Objective
Networks	5.1.1	understand why computers are connected in a network	Same	5.1.1	understand why computers are connected in a network
	5.1.2	understand the different types of networks (LAN, WAN) and usage models (client-server, peer-to-peer)	Similar	5.1.2	Understand the different types of networks (local area network (LAN), wide area network (WAN), personal area network (PAN)) and usage models (client-server, peer-to-peer).
	5.1.3	understand wired and wireless connectivity	Same	5.1.3	understand wired and wireless connectivity
	5.1.4	understand that network data speeds are measured in bits per second (Mbps, Gbps)	Same	5.1.4	understand that network data speeds are measured in bits per second (Mbps, Gbps)
	5.1.5	understand the role of and need for network protocols (Ethernet, Wi-Fi, TCP/IP, HTTP, HTTPS, FTP, email (POP3, SMTP, IMAP))	Same	5.1.5	understand the role of and need for network protocols (Ethernet, Wi-Fi, TCP/IP, HTTP, HTTPS, FTP, email (POP3, SMTP, IMAP))



Teaching and learning

Specification and sample assessments (3)

Exam materials (8)

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Teaching and learning materials (16)

Lesson plan example

Schemes of work

Five terms

Scheme of work



Scheme of Work - 2017
Year 2, Term 2
| ZIP 262.8 KB | 31 Aug 2017



Scheme of Work - 2017
Year 2, Term 1
| ZIP 6.9 MB | 01 Sep 2017



Scheme of Work Mapping
| DOCX 84.4 KB | 31 Aug 2017



Scheme of work - 2017
Year 1, Term 1
| ZIP 3.6 MB | 23 May 2017



Scheme of work - 2017
Year 1, Term 3
| ZIP 1.9 MB | 13 Feb 2017



Scheme of work - 2017
Year 1, Term 2
| ZIP 2.8 MB | 09 Jun 2017



Assessment support

ResultsPlus, ResultsPlus Direct, Communities





ResultsPlus is the free online results analysis tool for teachers.

- Provides a detailed breakdown of student performance in Edexcel exams.
- Helps identify topics where the student can benefit from further learning and allows this knowledge to inform teaching strategies and approaches.
- Provides a comparison of student performance at regional level.
- Allows you to view your school's performance against other Pearson Edexcel schools in your country. You can also find student results analysis from their previous Pearson Edexcel school.
- Mock exams results can also be fed into the system to produce an analysis.
- [ResultsPlus Direct](#) gives your students access to their final grades and performance breakdown, wherever they are.
- Sign up for free ResultsPlus account in just a few quick and easy steps [here](#).
- Access additional video guides here:
- [ResultPlus - Individual Student Analysis](#)
- [ResultsPlus - Cohort Analysis](#)
- [ResultsPlus - Mock Analysis](#)
- [ResultsPlus - Global Analysis](#)





Identify potential areas for further learning:

- topics
- skills
- question types

View scores per question by:

- student
- class
- group

Compare performance by class and Edexcel national averages

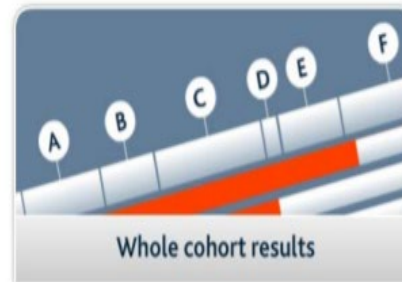




ResultsPlus for teachers

Log in using your Edexcel Online username and password if you have ResultsPlus access.

[➤ Teacher login](#)



ResultsPlus

Analysis Exam docs Highlight report Skills map Select skills map: GCSE Mathematics A (1MA0) H conte...

Paper	Date	Paper mark	Percent
Paper 1H - NON CALCULATOR (H)	June 2014	15/100	15%
Paper 2H - CALCULATOR (H)	June 2014	25/100	25%

Paper: Paper 1H - NON CALCULATOR (H) View exam paper

Over 70% 35 - 70% Under 35% Not tested

Question	Score	Performance	Edexcel Ave: ALL	Residual	Skill tested
Q01a	1/1	4	0.62/1	6	7
Q01b	0/2		1.22/2		
Q02	3/3		2.69/3		
Q03	1/4		3/4		
Q04	0/4		2.48/4		
Q05	0/2		1.64/2		
Q06a	1/1		0.73/1		
Q06b	0/2		1.08/2		
Q07	1/4		3.13/4		
Q08	1/3		1.93/3		
Q09a	0/2		1.7/2		
Q09b	1/2		1.49/2		
Q10	0/3		2.05/3		
Q11	0/3		1.28/3		
Q12a	1/3		1.99/3		
Total:	2	15/100	47.32/100		



Support topics

Services

Key dates

Resources

Live training



PUBLIC

+ Join Group

Computer Science and ICT

Discussions

Members & Resources



› Visit the Communities website [↗](#)





Search for support content



+ Join Group



PUBLIC

Computer Science and ICT

Discussions

Members & Resources

Post

Poll

Question

Share an update...

Share



[Redacted] (Customer)
13 December 2019 at 07:18



Hai I have a doubt regarding IAL ICT UNIT1 topic 5. Do we need to teach the basic ER diagram or annotate diagram to show the keys?I need a proper explanation thanks

Like

Comment

Share

2 comments • 20 views



ResultsPlus Direct (for students)

Support topics

Services

Key dates

Resources

Live training

- ❖ View all their Edexcel results in one place
- ❖ See a question-by-question breakdown of their results, by paper
- ❖ Compare their performance to all those sitting that paper
- ❖ Use tools to identify areas of improvement



ResultsPlus Direct



ResultsPlus Direct



ResultsPlus Direct

ResultsPlus Direct

GCSE Award: 2107 › Unit: 5039 › Paper 01 - STRUCTURED PAPER C3

June 2008 15/60 25%

Highlights Questions Skills

Questions Sort Refine

Title	Performance	Score	Edexcel ALL	vs Edexcel ALL
Q01a	<div><div></div></div>	1/1	0.96/1	+4%
Q01b	<div><div></div></div>	0/1	0.66/1	-66%
Q01ci	<div><div></div></div>	1/2	1.59/2	-30%
Q01cii	<div><div></div></div>	1/1	0.93/1	+7%
Q1ciii	<div><div></div></div>	1/1	0.68/1	+32%
Q02a	<div><div></div></div>	1/2	1.33/2	-16%
Q02b	<div><div></div></div>	2/2	1.18/2	+41%
Q02ci	<div><div></div></div>	0/1	0.21/1	-21%
Q02cii	<div><div></div></div>	0/3	1.27/3	-42%



Main support page



Teachers



Students



Exam Officers



Quality Nominees



Work-based learning

Most popular

- › Results 2017 for teachers and exams officers
- › Results 2017 for students and parents
- › Information manual
- › Past papers
- › International employment and professional recognition
- › Grade boundaries
- › EDI and basedata



Support for teachers

 > Support > Teachers

Teachers

Overview

Work with us

Associate gateway

Most popular

› Subjects

› Published resources

› Work with us as an examiner

› Results 2019

› Training events and bookings

› Assessment Associate Gateway



Training events (live)

[➤ Training events and bookings](#)

Live training

On-demand training

Centre-based training

About

FAQs

You can use the search tool to find and book live training events.

Keyword

🔍 mathematics

Date



Filter Events

Point of Interest



Places, Cities...



International or UK



All



International

Getting Ready to Teach Pearson Edexcel's Updated International Advanced Level Mathematics specifications for first teaching in September 2018 (XMA01/YMA01)

🕒 21 November 2019 at 10:00 – 16:00 WET

📍 Warsaw, Poland

[More Details](#)

Essex (Loughton) Collaborative Maths Network

🕒 21 November 2019 at 14:15 – 16:15 GMT



Training events (pre-recorded)

[› Training events and bookings](#)

[Live training](#)

[On-demand training](#)

[Centre-based training](#)

[About](#)

[FAQs](#)

Pre-recorded events can be found here.

Accessing them is as easy as downloading the materials.

[Step 1. International GCSEs and Edexcel Certificates](#)

[Change](#)

[Step 2. Chemistry](#)

[Change](#)

[Step 3. Available Resource](#)

This pre-recorded training is designed for teachers wishing to receive feedback on the International GCSE and The Edexcel Certificate in Chemistry and Double Award Science (Chemistry) specification.

[› Edexcel International GCSE and The Edexcel Certificate in Chemistry: Feedback on June 2016 \(Pre-recorded Training\)](#)

Delegates will:

- Receive feedback on national performance of candidates in the June 2016 examination



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Post-results support

Review of marking

Access to scripts



Review of marking

[Home](#) > [Support](#) > [Support topics](#) > [Post-results services](#)

Results and certification

Post-results services

Students' marks or grades can go up, down or stay the same.

[Support topics](#)

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Clerical check

Ensures all parts of the exam paper have been marked.

Ensures marks have been recorded/added up correctly.

Ensures special consideration has been applied (where appropriate).

Ensures the grade boundaries have been applied accurately.

Review of marking

A senior examiner ensures that the mark scheme has been applied to the students' papers consistently with the way it has been applied to all other scripts.



Services

Access to Scripts

[Support topics](#)

Services

[Key dates](#)

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[Live training](#)

Electronically marked papers

An online portal is used to view students' marked scripts online or downloaded as a PDF.

Paper 1 is electronically marked.

Traditionally marked papers (by hand)

The 'Post Results' section of Edexcel Online provides a way to request copies of scripts.

Paper 2 is traditionally marked.



Personal support



Subject advisor

Tim Brady Computer Science and ICT Subject Advisor



UK: 0333 016 4160

Intl: +44 (0)333 016 4160

[➤ Contact us](#)

Please have a look at your new community



@pearsonICT

@Pearson_CS



BTEC Tech Award in DIT Facebook group

BTEC Firsts in I&CT Facebook group

CiDA/DiDA Facebook group

GCSE Computer Science Facebook group



Pearson
Edexcel

Any questions?

Thank you for attending.



ALWAYS LEARNING