Pearson Edexcel GCSE (9–1)

Pearson Edexcel

Computer Science

Your switching support guide

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Before we get started

We know that choosing a new awarding body is a big decision. We've worked with many teachers making the move to us and are here to make it as easy as possible. We've created a range of specific switching support to save you time, give you confidence and help you from the moment you start delivering the qualification, through to results day and beyond.

Start exploring > >

This switching support guide brings together the information you've told us you need in one handy place, along with clear guidance about where to go next with further questions.

Simply choose the step that's right for you…

Discover the support >

We're here to support you every step of the way with unparalleled free and paid-for resources.

Explore the course >

Here are the essential things to know about the course if you're thinking of switching to us.

Get in touch >

If you like what you see, feel free to get in touch directly about how the course could work for you and your students.

Our Specification

Our **new GCSE (9–1) Computer Science 2020 qualification** offers an exciting, practical focus on real-life programming, equipping students with the computational skills they need to thrive in the fast-changing world of Computer Science.

Paper 1
Principles of Computer Science

Paper code: **1CP2/01**

✓ *75 marks* *Written examination: 1 hour 30 minutes*
50% of the qualification

Content overview

This paper will assess Topics 1 to 5.

- **Computational thinking** - understanding of what algorithms are, what they are used for and how they work; ability to follow, amend and write algorithms; ability to construct truth tables.
- **Data** - understanding of binary, data representation, data storage and compression.
- **Computers** - understanding of hardware and software components of computer systems and characteristics of programming languages.
- **Networks** - understanding of computer networks and network security.
- **Issues and impact** - awareness of emerging trends in computing technologies, and the impact of computing on individuals, society and the environment, including ethical, legal and ownership issues.

Assessment overview

This paper consists of five compulsory questions, each one focused on one of the topic areas. The questions consist of multiple-choice, short-, medium- and extended-open-response, tabular and diagrammatic items.

Paper 2
Application of Computational Thinking

Paper code: **1CP2/02**

✓ *75 marks* *Practical onscreen examination: 2 hours*
50% of the qualification

Content overview

This paper will assess Topic 6: Problem solving with programming.

The main focus of this paper is:

- ✓ understanding what algorithms are, what they are used for and how they work in relation to creating programs
- ✓ understanding how to decompose and analyse problems
- ✓ ability to read, write, refine and evaluate programs.

Assessment overview

This paper is practical in nature and requires students to design, write, test and refine programs in order to solve problems.

Students will complete this assessment onscreen using their Integrated Development Environment (IDE) of choice.

They will be provided with:

- ✓ coding files
- ✓ a hard copy of the question paper
- ✓ Programming Language Subset (PLS) – as a booklet alongside the question paper and as a PDF document on the student's computer.

Students should then answer the six compulsory questions onscreen using Python 3.

New for paper 2:
Practical onscreen assessment

Get started straight away

We have everything you need to save time and help you hit the ground running.

- **A Getting Started Guide**
- **Mapping documents** to help ease the transition from your current exam board
- **A free Scheme of Work to help you start planning straight away.**

Unbeatable support and resources

Unbeatable free support and help with resourcing

- **Four sets of samples papers** (one sample assessment set plus **three complete specimen paper sets**) ready before the first live assessment, to give students plenty of time to prepare for the exams.
- A **Getting Started Guide**, providing guidance on what needs to be covered for each topic area.
- **Lesson plans, activities and solutions** full of practical activities and high quality resources from Pearson and our partners.

- **Exemplar exam materials**, go through the specimen papers and provide expansive examiner commentary on application of the mark scheme as well as showcasing some exemplar answers to the questions.
- A **series of short videos** on the paper 2 assessment illustrating the logistics of the exam, and delving into each question and mark scheme in details.
- Pre-recorded **Getting Ready to Teach training** to help you get up and running.

Our assessments

Clear, straightforward and engaging assessments

Designed with an **underpinning pedagogical approach** derived from NCCE Hubs, our assessments ensure real-world programming skills are assessed via a realistic, practical and engaging assessment experience.

- New **onscreen assessment** allows schools to choose which Integrated Development Environment (IDE) to use.
- Students are able complete activities by using their **IDE of choice**, so they are programming in a familiar environment – without the need for Internet access.
- **Gradual ramping of demand** throughout questions helps students build confidence.

Clear, straightforward and engaging assessments

- The papers' consistent assessment structure and straightforward mark schemes make expectations clear to both teachers and students.
- We've chosen python as a vehicle to facilitate the teaching, learning and assessment for all students to get the best possible experience.

Post-results support

Comprehensive assessment support

We provide comprehensive support for understanding the assessment requirements and tracking progress.

- Comprehensive range of **examiner marked student exemplars** covering a range of topics and question types.
- **Detailed assessment guides** for GCSE Computer Science.
- Free access to **ResultsPlus** analysis, allowing you to track your students progress.
- Free **access to marked exam scripts** for Paper 1, so you can easily see your student's performance.

Unparalleled support

Expert subject advice from Tim

Tim Brady, your dedicated Computer Science Subject Advisor, is on hand to help with any questions you may have and make your switch as easy as possible.

You can sign up for regular updates, or email him at

TeachingComputerScience@pearson.com

call Tim on **0333 016 4160**

or join the **Facebook support group**.

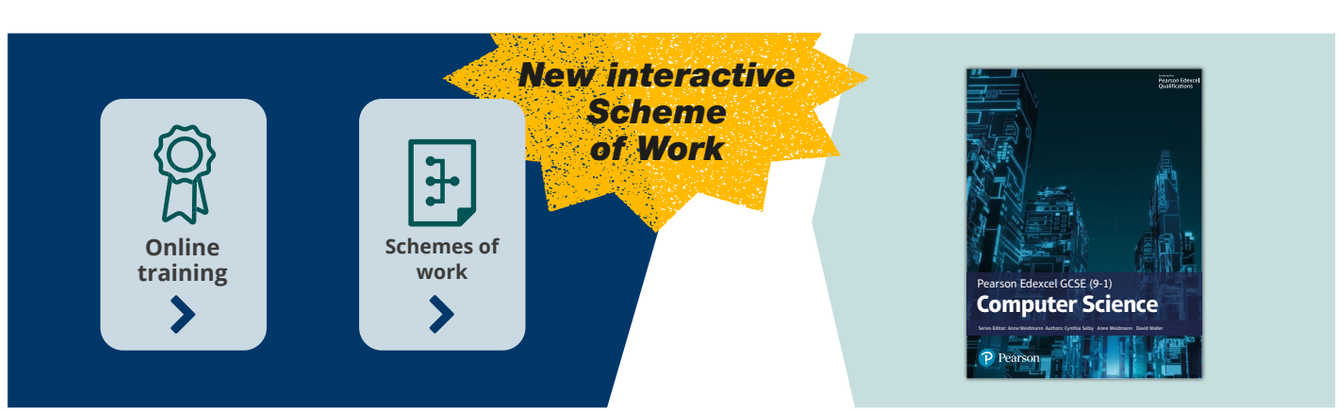
Unparalleled support

Unparalleled support

Discover our wide range of free and paid-for resources for Computer Science

Free support

Pearson published resources



Click on book cover to see sample material.

Help with resourcing

Help with resourcing

We're here to help make sure that cost isn't a barrier to you making the move, so get in touch › to discuss the offers and packages open to you.

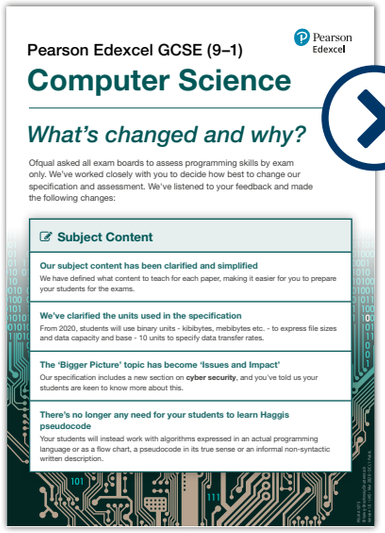
REVISE

ActiveLearn

Course essentials

Course essentials

Our '**What's changed and why?**' document, alongside our '**Assessment at a glance**' page and our '**Frequently Asked Questions**' give you an overview of our specification and what it contains.



Pearson Edexcel GCSE (9–1)

Computer Science

What's changed and why?

Ofqual asked all exam boards to assess programming skills by exam only. We've worked closely with you to decide how best to change our specification and assessment. We've listened to your feedback and made the following changes:

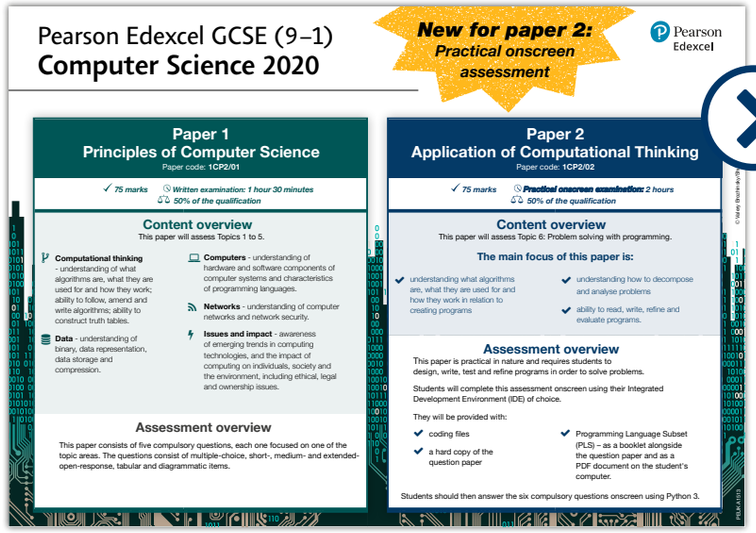
Subject Content

Our subject content has been clarified and simplified
We have defined what content to teach for each paper, making it easier for you to prepare your students for the exams.

We've clarified the units used in the specification
From 2020, students will use binary units - kibibytes, mebibytes etc. - to express file sizes and data capacity and base - 10 units to specify data transfer rates.

The 'Bigger Picture' topic has become 'Issues and Impact'
Our specification includes a new section on **cyber security**, and you've told us your students are keen to know more about this.

There's no longer any need for your students to learn Haggis pseudocode
Your students will instead work with algorithms expressed in an actual programming language or as a flow chart, a pseudocode in its true sense or an informal non-syntactic written description.



Pearson Edexcel GCSE (9–1)
Computer Science 2020

New for paper 2:
Practical onscreen assessment

Paper 1
Principles of Computer Science
Paper code: 1CP2/01

75 marks *Written examination: 1 hour 30 minutes*
50% of the qualification

Content overview
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Assessment overview
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Paper 2
Application of Computational Thinking
Paper code: 1CP2/02

75 marks *Practical onscreen examination: 2 hours*
50% of the qualification

Content overview
This paper will assess Topic 6: Problem solving with programming.

The main focus of this paper is:

- understanding what algorithms are, what they are used for and how they work in relation to creating programs
- understanding how to decompose and analyse problems
- ability to read, write, refine and evaluate programs.

Assessment overview
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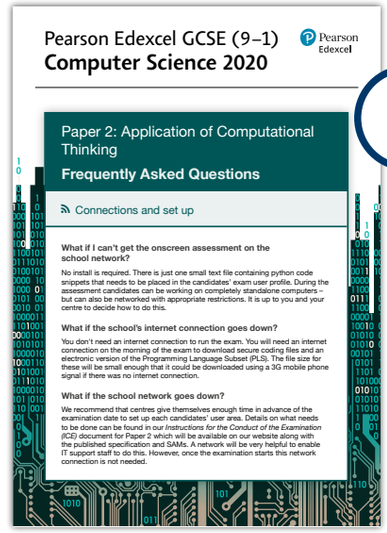


Pearson Edexcel GCSE (9–1)
Computer Science 2020

Paper 2: Application of Computational Thinking

Frequently Asked Questions

Connections and set up

What if I can't get the onscreen assessment on the school network?
No install is required. There is just one small text file containing python code snippets that needs to be placed in the candidates' exam user profile. During the assessment candidates can be working on completely standalone computers – but can also be networked with appropriate restrictions. It is up to you and your centre to decide how to do this.

What if the school's internet connection goes down?
You don't need an internet connection to run the exam. You will need an internet connection on the morning of the exam to download secure coding files and an electronic version of the Programming Language Subset (PLS). The file size for these will be small enough that it could be downloaded using a 3G mobile phone signal if there was no internet connection.

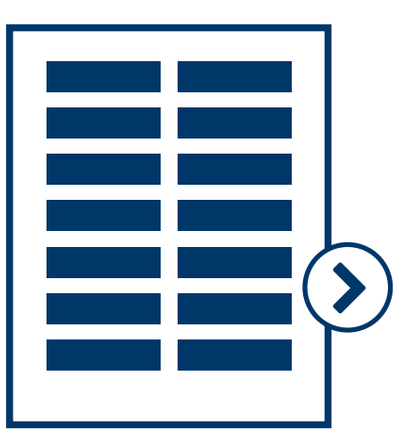
What if the school network goes down?
We recommend that centres give themselves enough time in advance of the examination date to set up each candidates' user area. Details on what needs to be done can be found in our *Instructions for the Conduct of the Examination (ICE)* document for Paper 2 which will be available on our website along with the published specification and SAMs. A network will be very helpful to enable IT support staff to do this. However, once the examination starts this network connection is not needed.

Mapping documents

Mapping document

Transitioning from your current exam board

To see the side by side comparison of topics between exam boards and a comparison of their assessments download the evaluation document courtesy of paullong.net:



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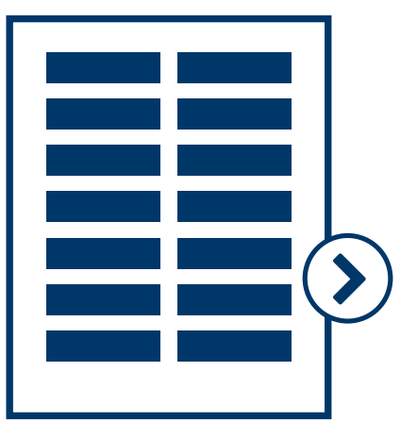
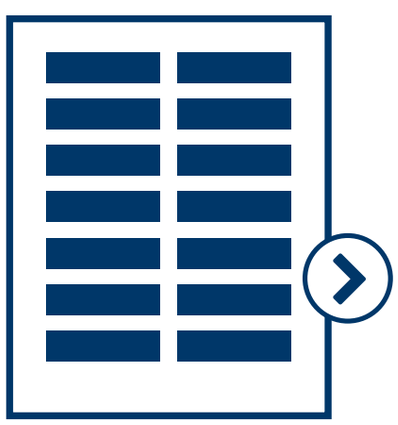


AQA



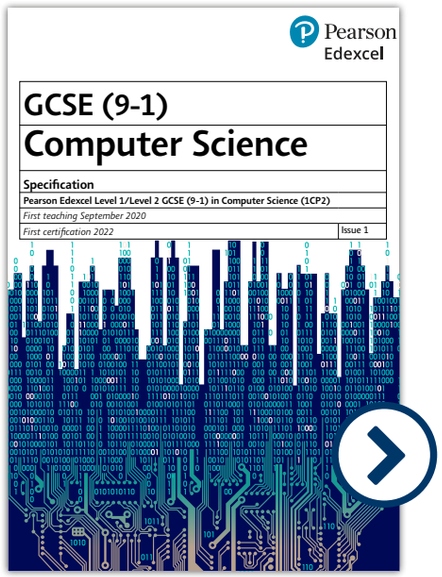
OCR

Specifications and sample exam papers

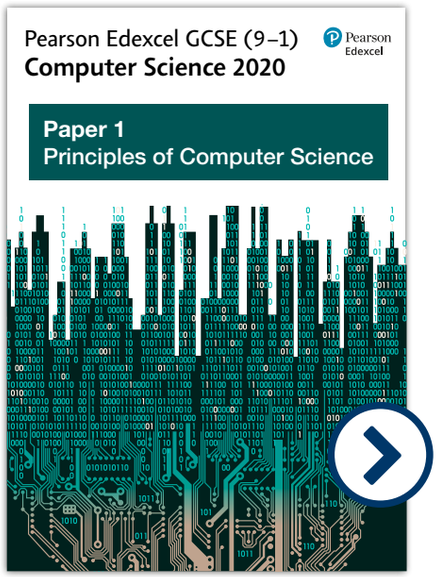
Specifications and SAMs

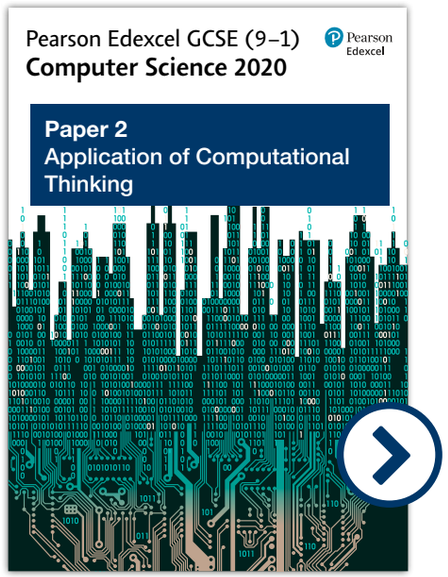
Delve deeper into the detail

Digital copies of our full specification and sample assessment materials are available, so you can explore these documents in detail.



Specification





Sample assessment materials

What next?

If you like what you've seen so far, please sign up here.

We'll be in touch via email highlighting our range of support and how we can help you make the transition.

However, **if you've seen enough already and want to make the transition to Pearson Edexcel GCSE (9-1) Computer Science 2020**, then let us know › so we can make sure you can get your hands on to the full range of support our centres enjoy.

Get in touch

Our experts are on hand to answer any questions you may have about the course and how it could work for you and your students.

Give us a call if you're ready to switch

0333 016 4160

Still got questions?

Contact Tim Brady for more information:

Join the facebook support group

Contact us

If there's anything else we can do to help you in making your decision to switch to Pearson, please don't hesitate to let us know.

Many thanks,

The Pearson Edexcel **Computer Science** Qualification Team