Pearson

Pearson Edexcel International AS/A Levels

Computer Science

NEW QUALIFICATION

First teaching September 2026

SCAN ME

Choosing Pearson Edexcel as your school's International AS/A Level (IAL®) partner

Equipping your students to reach the world's best universities and compete for global employment opportunities will happen throughout their school life, but is even more key when it comes to choosing their International A Levels. We want to reassure you that with Pearson as your qualifications partner, you can be certain both you and your students are setting yourselves up for future success.

In this guide, you'll learn more about who we are, the recognition and progression our Pearson Edexcel international qualifications enjoy, and we'll take a closer look at International A Level Computer Science.

We wish you the best of success for your International Advanced Level journey!

IAS = International Advanced Subsidiary.

IAL® = International Advanced Level.

IAL is a registered trademark of Pearson Education Ltd in the UK and other countries. Pearson Edexcel IAL® qualifications are available to students attending International Schools (outside the UK) and any students attending Online Schools. They are not available to schools in the UK, the Channel Islands, the Isle of Man or in British Armed Forces schools overseas.

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Learn about the popular modular approach to Pearson Edexcel International A Levels, which gives students the flexibility to sit examinations when they feel fully prepared and ready.

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Pearson for international schools

With you. For you.

With you, whichever direction you take

Dreams are all different. And that means the best way for each student and each school to achieve theirs is different too. So we've made sure we've got all the options covered: innovative qualifications that can be modular or linear; assessments on paper or online; in-school or remote invigilation.

Whatever your vision looks like, we'll help you get there.

Built with you, for you

The right curriculum can unlock everything.

Our globally respected curriculum is shaped with educators, for students. It builds the skills that matter most: problem solving, critical thinking, collaboration, leadership. Skills that help students grow into confident, curious young adults. Skills that universities love. Skills that life demands.

And we're here to help you shape it, adapt it, and make it work for your school – so your teaching stays relevant, purposeful, and rooted in real progress.

With you, wherever you are

Wherever you are, we're there too. We have Pearson consultants in most of the countries we serve. They speak your language. They know your schools. They get your world.

And most importantly, they're always on hand to support you.

With you, from the first day to results day (and beyond)

Getting qualifications right isn't just about assessment. It's about having the right support around it – before, during, and after.

From helping you choose the best-fit qualifications to guiding your team through setup, teaching, timetabling, and admin – we've got you.

You'll also get tools to help you track progress and boost performance, and dedicated support every step of the way. So you'll always know you've done everything to help your students succeed.

With you. Ahead of the rest.

When it comes to shaping the minds of the next generation, trust really matters. At Pearson, we've been earning that trust for over 100 years.

We work with schools and learners in over 115 countries. Every year, we award over 2.3 million qualifications. And we mark 10 million exam scripts for the UK government – more than any other international exam board.

But it's not just about scale. It's about what that scale makes possible. Access to top universities. Global careers. And lives filled with purpose, passion, and possibility.

- Our qualification heritage stretches back **over 100 years**
- Our Pearson Edexcel international and UK qualifications are offered in **more than 115 countries worldwide**
- More than **3.5 million students** take our qualifications globally each year
- We mark **over 10 million exam scripts** per year on behalf of the UK Department for Education
- Our international and UK qualifications are **recognised and accepted** by universities all over the world

Why choose Pearson for your international school?

We will support you – every step of the way

When you partner with us to deliver our Pearson Edexcel international qualifications and curricula, you will have access to our outstanding support, including pre- and post-assessment services, analytical tools, teaching and learning resources and excellent professional development opportunities.

1 In-country teams to support you locally

Whether you're considering moving to Pearson or already offer our international curriculum, resources and qualifications in your school, our local team will work in partnership with you to understand your needs and will provide you and your school with personalised support to help you achieve your goals.

Find your local team at **pearsoninternational-schools.com/contact**

2 Fully integrated international qualifications and content

Our Pearson international curriculum and Pearson Edexcel international qualifications are all supported by print and digital teaching and learning content, to provide a complete, integrated teaching and learning experience for learners aged 3–19.

See more at **quals.pearson.com/iprogress**

3 Free international qualifications support services

When you choose us as your international qualifications partner, you have access to an unrivalled range of free services to support you, including Access to Scripts, ResultsPlus, and examWizard.

Read about these support services and more at **quals.pearson.com/support**

4 Impactful innovation to help you stand out

Onscreen assessment, modular qualifications and AI have the potential to be truly transformative, unlocking real benefits for learners of all abilities. As the world's leading learning company, you can trust us to expertly guide you through the changing education landscape and help your school stand out from the crowd.

See how we're innovating at **pearson.com/international-schools**

5 An extensive global and local events programme

We host and run an extensive global and regional events programme from the biennial Pearson International School Leaders Conference to regional workshops and hands-on training, we'll connect you with the educational experts you want to hear from.

See more at **pdacademy.pearson.com** and **pearsoninternational-schools.com/events**
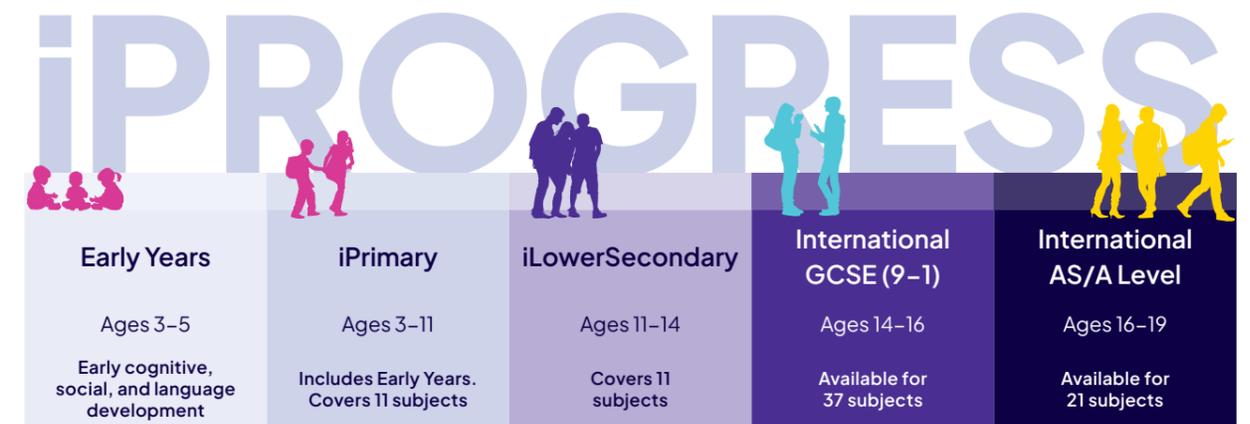
Modern, progressive International A Level qualifications

For globally minded learners aged 16–19

Renowned across the world for academic excellence, Pearson Edexcel International International Advanced Levels provide learners with the skills and knowledge they need to progress onto the most prestigious universities across the world.

Pearson Edexcel International Advanced Levels are part of iProgress, our complete series of academic qualifications for 3 to 19 year-olds at international schools following a UK curriculum.

At every stage, our iProgress continuum delivers a consistent learning journey with world class support, assessments, and teaching and learning resources for students and teachers, everywhere in the world.

iPROGRESS

Early Years	iPrimary	iLowerSecondary	International GCSE (9–1)	International AS/A Level
Ages 3–5	Ages 3–11	Ages 11–14	Ages 14–16	Ages 16–19
Early cognitive, social, and language development	Includes Early Years. Covers 11 subjects	Covers 11 subjects	Available for 37 subjects	Available for 21 subjects

Qualifications for globally minded learners

Introducing Pearson Edexcel International AS/A Levels

Pearson Edexcel International AS/A Levels, also known as Advanced Subsidiary Level/Advanced Levels, have been developed in consultation with the international school community specifically for international learners.

They take the popular and flexible modular approach* where exams are taken at the end of each unit of study, throughout the programme of study when a student feels prepared and ready, or all together at the end of the course. This flexibility, together with exam series in January, June and October, for most subjects, means that students have more opportunities to get feedback to improve their performance and get the grade they need to progress.

Available in 22 popular subjects, they offer progression from International GCSEs, and are comparable to the linear UK A Level, equipping students for progression to university and employment.

World class assessment design for international students

Pearson Edexcel qualifications go through a rigorous world class assessment design process, which ensures that the content is relevant for international learners, and that there is a clear and consistent relationship between command words, marks and skills. With logical progression of difficulty throughout and consistency in template and design, our question papers are clear and provide suitable challenge and support for students of all abilities.

> ❝I wanted to study subjects that were relevant to a future career. Pearson Edexcel iAL provides learners with a firm knowledge base.❞
>
> Nasim Mirzajani, now studying Chemical Engineering at Yale University, USA
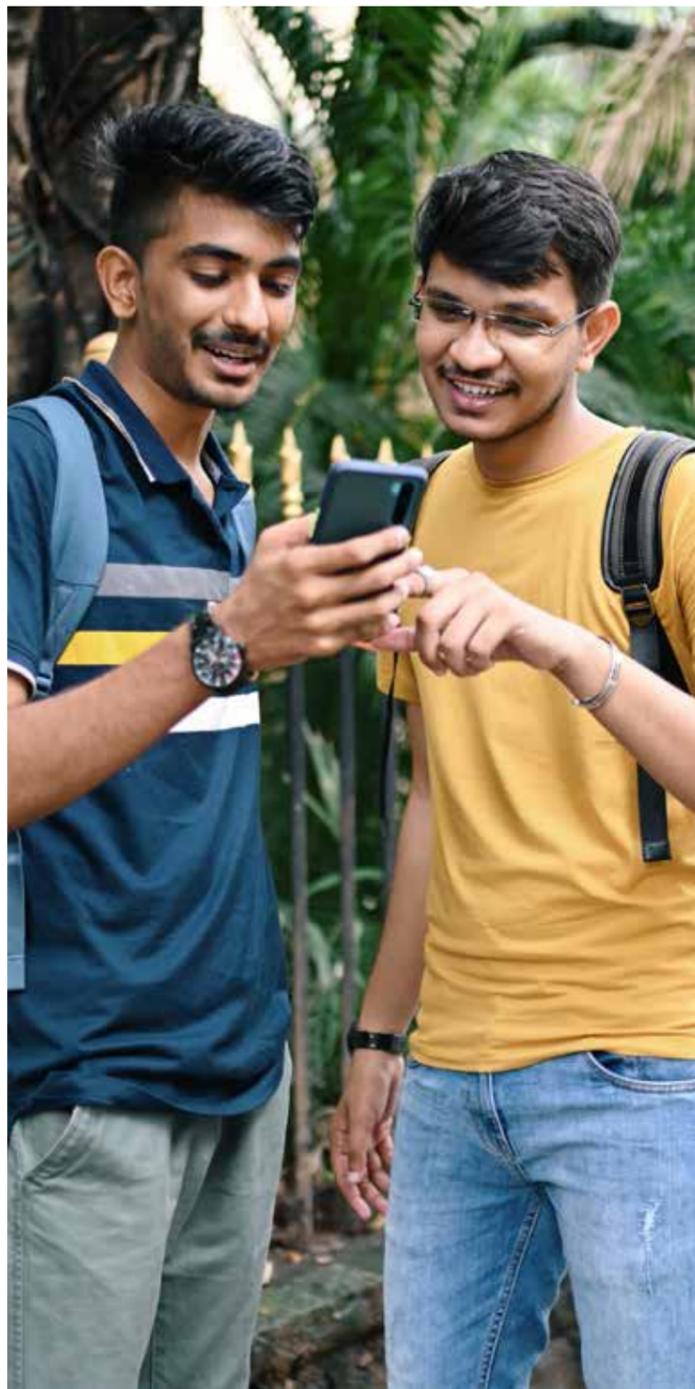
*for all subjects except Law

Recognised worldwide for academic excellence

Opening doors to the world's best universities

Pearson Edexcel sets the standard for worldwide recognised qualifications aligned to the British educational system. Accepted by over 650 higher education institutions across the world – including top universities such as Oxford, Cambridge, Columbia University and Yale University – and with 21st century skills embedded in the curriculum, you can be confident students will have qualifications, skills and knowledge that admissions teams and employers are looking for.

Read about some of our IAL learner journeys with Pearson Edexcel at **pearson.com/iprogressed**

Comparability with GCE AS/A Level

International A Levels (IAL®) are comparable to the UK A Level, as confirmed by NARIC, the national agency responsible for providing information and expert opinion on qualifications and skills worldwide. See the table below for a comparison. The same rigorous standards are applied to all Pearson Edexcel qualifications.

Learn more at **qualifications.pearson.com/progress-to-uni**

	Pearson Edexcel GCE AS Level (UK AS Level)	Pearson Edexcel International AS Level (IAS)	Pearson Edexcel GCE A Level (UK A Level)	Pearson Edexcel International A Level (IAL®)
Structure	Linear (all exams taken at the end of a one year programme) Standalone qualification and no longer contributes to GCE A Level grades	Modular and flexible structure with all units examined Contributes 50% to the IAL grade or can be a standalone qualification	Linear (all exams taken at the end of a 2 year programme)	Modular and flexible structure with all units examined Typically studied over a 2 year period
Assessment	Mainly examination based* May/June examinations only	100% examination based Examinations in January, May/June and October	Mainly examination based* May/June examinations only	100% examination based Examinations in January, May/June and October
Grading	A – E		A* – E	
Regulator	Regulated by Ofqual	Regulated by Pearson and confirmed by UK NARIC to be comparable to UK AS standard	Regulated by Ofqual	Regulated by Pearson and confirmed by UK NARIC to be comparable to UK A Level standard

*Other types of assessment used only where needed to test essential skills.

Pearson Edexcel International A Level Computer Science qualifications

New

Equipping learners with the theory and practical skills needed to thrive in today's fast-paced digital world

Why choose Pearson Edexcel IAL Computer Science?

No pseudocode

Instead, students use a real programming language (Python) to learn the foundations and skills.

Onscreen assessment

We are driving innovative assessment practices with all our assessments available onscreen, and the choice of paper or onscreen for theory based exams.

Practical skills

The qualifications have a real focus on developing hands-on coding skills by providing opportunities for learners to analyse, design and test solutions.

Seamlessly aligned textbooks

Resources are ready and waiting to support teachers and learners with what they need to know as soon as they start teaching.

Total hours of assessment

There are the same hours of assessment in IAS and IA2, with our purely practical programming exams provding real-life experience for how they would work in higher education and industry.

Programming language subset

Familiar constructs strike a balance between support and flexibility.

Learning and outcomes that will help students progress

This qualification will enable learners to:

- understand and apply key principles of computer science, including computational thinking, logic, algorithms, data representation and abstraction

- develop problem-solving skills by designing, writing, testing and refining programs using Python 3 within a suitable Integrated Development Environment (IDE)

- apply programming techniques and system knowledge to develop practical and effective solutions

- build knowledge of computer systems, architecture, networks, cybersecurity and data handling in both theoretical and practical contexts

- think creatively and critically when exploring computing systems, networks, Artificial Intelligence (AI) and emerging technologies

- explore emerging technologies and understand the social, ethical, legal and environmental impact of computing in a global digital society

- communicate computing ideas effectively using appropriate technical terminology and structured reasoning

- gain transferable skills such as independent learning, critical thinking, and problem-solving, supporting progression to higher education and associated careers

- apply mathematical skills relevant to computer science.

Computer Science:
a closer look

IAS results contribute to IAL grade

The IAS is the first half of the IAL qualification and consists of two IAS units: Unit 1 and Unit 2. This qualification may be awarded as a discrete qualification or may contribute 50 per cent to the IAL qualification. Students wishing to take the IAL must complete all four units.

IAS Computer Science exam structure and content summary

Unit 1: Principles of Computer Science
Written/onscreen examination: 1 hour 30
80 Marks 50% of the total IAS 25% of the total IAL
Availability: Available in January and June. First assessment May/June 2027.
Content overview • Computer systems • Data representation • Networks and encryption • Structuring data • Problem solving • Enabling technologies
Assessment overview This unit may include multiple choice, short/medium open response, extended open response, tabular and diagrammatic items.

Unit 2: Practical Programming and Problem-solving
Practical programming examination: 3 hours
80 Marks 50% of the total IAS 25% of the total IAL
Availability: Available in January and June. First assessment May/June 2027.
Content overview • Programming • Organising and handling data • Best practice • Computational thinking and algorithms
Assessment overview This practical unit requires learners to design, write, test and refine a program or solve a problem using Python 3 in an Integrated Development Environment (IDE) of choice. Learners will complete the assessment onscreen under secure examination conditions.

IA2 Computer Science exam structure and content summary

Unit 3: Advanced Principles of Computer Science
Written/onscreen examination: 1 hour 30
80 Marks 50% of the total IA2 25% of the total IAL
Availability: Available in January and June. First assessment May/June 2028.
Content overview • Computer systems and data representation • Networks and cybersecurity • Programming languages • Structuring data • Problem solving • Emerging technologies and professional practice
Assessment overview This unit may include multiple choice, short/medium open response, extended open response, tabular and diagrammatic items.

Unit 4: Advanced Practical Programming and Problem-solving
Practical programming examination: 3 hours
80 Marks 50% of the total IA2 25% of the total IAL
Availability: Available in January and June. First assessment May/June 2028.
Content overview • Programming • Representing and handling data • Best practice • Additional programming paradigms • Algorithms
Assessment overview This practical unit requires learners to design, write, test and refine a program or solve a problem using Python 3 in an Integrated Development Environment (IDE) of choice. Learners will complete the assessment onscreen under secure examination conditions.

For further information and to download the specification, visit **qualifications.pearson.com/ IALComputerScience**

Modular assessment

Why is the modular approach so popular?

The modular assessment structure offers students the flexibility to sit examinations when they feel fully prepared and ready. Once they have sat a unit exam and received a unit grade, that result is banked until they have completed all units. Students then 'cash-in' the completed unit exam results to receive an overall qualification grade.

The structure of Pearson Edexcel IAL qualifications allows teachers to construct a course of study that can be taught and assessed as either distinct modular units or a linear course assessed in its entirety at the end.

How the modular approach works

Bank robust and ongoing evidence of performance

This 'building blocks' approach means that students can 'bank' their unit exam results throughout their period of study. This provides robust evidence of their studies and performance, providing more options to obtain the grade they need to progress.

Multiple exam opportunities throughout the year

Students can take and re-sit individual unit assessments in any series, with examination opportunities in January, June and October in most subjects. This means students have more opportunities to get feedback to improve their performance and get the grades they need to progress.

Students 'cash in' unit results when ready

Once a student has all their unit results for the qualification they are taking, they exchange those for a grade – this is called 'cashing in'. To cash in, all units must have been entered. International AS qualifications can be taken as a separate, standalone qualification, as well as contributing to an Advanced Level qualification.

The benefits of a modular route

A modular approach allows students to take their exams when they feel ready and prepared. They benefit from more exam practice and familiarity. Unit exam results provide formal feedback earlier on in their studies, so students understand the standard required to reach the final level of achievement they are aiming for. This understanding motivates them to improve and builds a sense of ownership through bite-size, short-term goals.

The modular approach can help reduce the mental load and stress at exam time by allowing learners to focus on one year of curriculum content at a time and spread out their high stakes exams over two years and multiple exam series. Learners can also take advantage of multiple re-sit opportunities if needed.

A modular route provides teachers with rich mid-cycle data on learner performance. It offers international schools greater flexibility for exam administration across the school year. And where parents pay exam fees, it helps with budgeting by enabling families to spread their child's exam fees over two years.

> 66 I like the modular nature of IAL, the fact that I can choose whichever core units I want to do, whichever applied units I want to do. It's very comprehensive. It opens up many doors to many international universities. 99
>
> Wang, Pearson Edexcel International Advanced Level student from Sri Lanka, studying Chemistry, Biology, Physics, and Mathematics.

What this means for you

Pearson Edexcel were the first awarding organisation to introduce the modular International AS/A Levels, so can offer a wealth of experience and support for international schools. The modular approach is so popular with schools, teachers, parents, and students, that we now offer a modular approach for International GCSE which is great preparation for Pearson Edexcel International AS/A Level.

Onscreen or paper-based assessments

The first awarding organisation to offer onscreen exams

Pearson has led the way for many years in onscreen assessment for International GCSE and International A Level exams alongside traditional paper-based exams.

The natural choice for students

Onscreen assessment is the natural evolution in a world where so much teaching and learning is onscreen. Students love sitting their exams in a format that is familiar to them. Offering students the choice to sit either onscreen or paper exams ensures the best possible outcomes, preparing them for the workplace and further education.

> 66 The overwhelming response from students is that they really enjoyed taking their exams onscreen. 99
>
> Samantha Roden, Head of English, Qatar International School

Students love it

90% of students who sat their exams onscreen in 2022 said they wanted their school to offer more onscreen exams in the future.

- "I had more time to plan"
- "I could write more"
- "I felt more confident in the exam"

Teachers love it

100% of teachers who registered students for onscreen exams in 2022 registered students for the 2023 onscreen exam series too.

- Easy to organise and manage
- Boosts student confidence
- Excellent support from Pearson

Deliver with confidence

The technology, processes, and tools used stem from the successful worldwide delivery of millions of onscreen assessments in the last 10 years, in more than 115 countries. We have been delivering Onscreen Assessment for UK curriculum qualifications since 2022.

In 2024 we saw the number of schools offering exams onscreen triple. This led to a five-fold increase in students choosing to take onscreen assessment for their International GCSE and International A Level exams across 7 different subjects.

What this means for you

We have a wealth of experience of developing and delivering onscreen high stakes assessments at scale in a range of educational settings, from our International GCSE and International A Level qualifications, the Pearson Test of English – a certification of language proficiency – and our partnership with the Egyptian Ministry of Education which sees us delivering more than 14 million assessments to over 1.6 million students each year. This means our onscreen platform is tried and tested. It's a platform you can trust.

Building transferable skills

Supporting the development of transferable skills in your school

If you follow Pearson Edexcel IAL specifications, or your students are using our IAL textbooks, you've already started integrating transferable skills into your teaching.

That's because our qualifications and resources are mapped to the National Research Council's framework for 21st century skills, which includes cognitive, intrapersonal and interpersonal skills. They are embedded and signposted in the specifications and schemes of work, with accompanying skills mapping and transferable skills definitions for every subject.

Transferable skills are also developed as part of activities in the Student Books. These are clearly labelled, so you and your learners can easily identify the skills they are building.

We help you instil and embed these skills, supporting children to grow into resilient, curious and globally connected young adults.

The most in demand skills are human skills

In recent years, higher education institutions and employers have consistently flagged the need for students to develop a range of transferable skills to enable them to respond with confidence to the demands of undergraduate study and the world of work.

In fact, universities and employers consider transferable skills – otherwise known as Core Competencies, or 21st century skills – to be the largest skills gap overall.

87% of companies say they have skill gaps, or expect to within a few years[1]

No.1

The highest priority for skills training is analytical thinking, followed by creative thinking[2]

9/10 of the most in-demand skills are human skills[3]
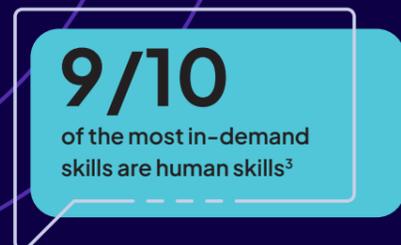
[1] McKinsey & Company (2020) Available from: www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/beyond-hiring-how-companies-are-reskilling-to-address-talent-gaps

[2] World Economic Forum (2023) Future of Jobs Report [online]. Available from: www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf

[3] Pearson (2022) Pearson Skills Outlook: Power Skills [online]. Available from: plc.pearson.com/en-GB/news-and-insights/pearson-skills-outlook-powerskills

Supporting you at every stage

We provide an unparalleled level of support services, tools, resources and training alongside our qualifications, making teachers and students lives easier at every stage.

At a glance: support for you at every stage			
FREE resources and support	Planning, teaching & learning	Exam preparation and assessment	Results support
Getting started guide	✓		
Schemes of Work	✓		
Specification	✓		
Suggested teaching resources	✓		
Training events (face-to-face, online & downloadable content)	✓	✓	
Subject advisor support	✓	✓	✓
Ask the expert	✓	✓	✓
Community forums	✓	✓	✓
Sample assessment materials	✓	✓	
Examiner reports		✓	✓
Exemplar marked responses		✓	
Past papers		✓	
examWizard		✓	
Mark schemes		✓	
ResultsPlus mock exam analysis		✓	
ResultsPlus		✓	✓
FREE Access to Scripts service (ATS)			✓
Additional paid for resources			
Printed Student Books and digital ActiveBooks	✓	✓	

Pre and post exam support for your educators

Supporting you every step of the way – for free

Offering Pearson Edexcel qualifications provide you with a range of integrated support services, tools and resources to support the delivery of your International A Levels.

Unlike some awarding bodies, with Pearson Edexcel there are no additional costs for the following support:

- Easy, all year-round access to our specifications, sample assessment materials and teaching resources.
- **Teacher training** in-person and online including 'Getting Ready to Teach' sessions to help your educators make the most of our qualifications.
- **Expert subject advisors** on hand to help with any subject-specific queries you may have and available to support your educators throughout the year.
- **examWizard**: a huge bank of past papers and mark schemes to create topic tests and revision activities in minutes.
- **ResultsPlus**: our popular online results analysis tool, which also includes an insightful group analysis service.
- **Access to Scripts**: our service that allows you to view your candidates' marked exam papers for free online or as downloaded PDFs, providing a rich source of information to inform future teaching plans and approaches.
- Plus, local, experienced Pearson Regional Development Managers who are there to support you every step of the way.

Additional paid for support

Professional development

Enhanced training combining the qualification framework, support and feedback mechanisms with teaching and learning strategies, will be available from September 2027.

Your free subject support

Our subject advisors provide fast, reliable, expert help and aim to answer all emailed questions within 48 hours and resolve 90% of issues phoned in on the first call.

Email
TeachingComputerScience@pearson.com

Call **+44 (0) 344 463 2535**

A valued support partner

> 66 One of the good features of ResultsPlus is that it provides the top ten questions that students scored poorly in, so we as the lecturers can actually identify the topics that students found difficult and can incorporate a different approach when teaching our current students. 99

Dr Khong Yoke Kum, A Levels Department, HELP Academy, Malaysia

> 66 Because of ResultsPlus, students can learn about their mistakes and rectify. 99

Kanagambigai, Chief Counsellor, A levels Department, HELP Academy, Malaysia commenting on the ResultsPlus mocks service.

> 66 I used the website with its course outlines, past papers, summaries of key points, revision notes and mark schemes... they provide great tips about possible exam questions and how you could answer them. 99

Alexia Kattavenos, student,
The Nicosia Grammar School, Cyprus

What this means for you

We will support you to deliver an outstanding teaching and learning experience for every student taking Pearson Edexcel International A Levels.

With examWizard, they will be able to prepare topic tests and revision activities based on past exam questions to help prepare students for their final assessments, and using ResultsPlus, they will be able to analyse their mock results to pinpoint where they may need further support and can then tailor their teaching to support them.

Post-exams, our Access to Scripts service will allow your educators to review students' exam papers for free, providing greater visibility and a deeper understanding of individual students' exam performance and helping them identify skills gaps to tailor teaching plans for future cohorts.

Published teaching and learning resources

New

Written specifically to support our qualifications

These resources are written for the new specification, so you can be confident that you are providing your students with the best chance of succeeding. With appropriate international content, all resources include a strong focus on progression, recognition and transferable skills, enabling learning in a local context to a global standard.

Pearson Edexcel IAS Computer Science

Student Book 1

Print bundle:
9781292486161

ActiveBook:
9781292486185

Pearson Edexcel IAL Computer Science

Student Book 2

Print bundle:
9781292753980

ActiveBook:
9781292754000

NEW! Student Books

There are two Student Books, one for International AS Level and one for International A Level. These provide full coverage of the new specification content.

Developed by experienced subject experts to provide students with the best preparation possible for the examination, these resources feature:

- 2–year access to an online ActiveBook.
- Theory first and then the practice, with links between the two clearly signposted.
- Rich international content grounded in real-world scenarios, accessible to learners of all backgrounds.
- Annotated code samples with full commentary to clarify new concepts and walk students through step-by-step.
- Built-in exam practice.
- Signposted transferable skills to prepare for further education and employment.
- Key terms included and explained throughout.

NEW! Student Books
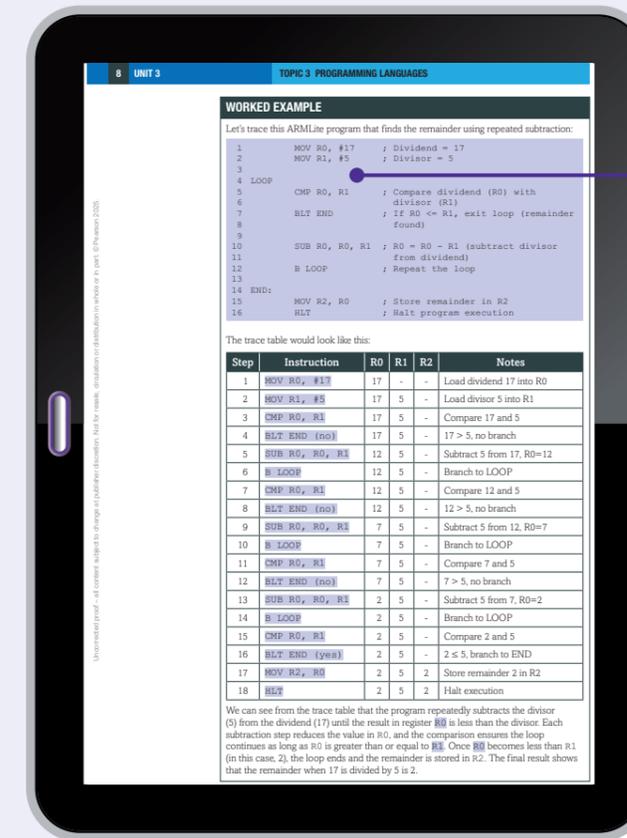
Annotated code samples with full commentary clarify new concepts and walk students through **step–by–step**.

Sample page from Pearson Edexcel International AS/A Level Computer Science Student Book 2

Focus on **real–world applications** and careers.

Links between theory and practice are clearly **signposted**.

Sample page from Pearson Edexcel International AS/A Level Computer Science Student Book 1

)》Pearson

About Pearson qualifications

Pearson's qualifications heritage stretches back over 100 years and our qualifications are offered in more than 115 countries worldwide. We also mark over 10 million exam scripts per year on behalf of the UK Department for Education. Pearson Edexcel is regulated by Ofqual, the UK's qualifications regulator, ensuring our curricula meet the highest standards and our exams follow carefully controlled procedures at every stage of their development, delivery, marking and reporting.

Learn more about our qualifications at **quals.pearson.com**

Pearson for International Schools

Whether you're a teacher inspiring achievement in the classroom, a parent supporting your child's learning journey, or a school owner seeking the best outcomes for your students, we can support you with our inspiring and proven international curriculum, qualifications and published resources.

Learn more about how we support international schools at **pearson.com/international-schools**