Pearson
Edexcel

New innovations and support

See inside!

# International AS/A Levels

## Information Technology

SCAN ME

First teaching September 2018

# 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 Information Technology.

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.

# Inside this guide

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## Key International Advanced Level Information Technology highlights

New

### Additional resources

From December 2024, curriculum-matched Student Books for Information Technology will be available for the first time.

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### Modular approach

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.

See page 10

# Welcome to Pearson

## We're pleased to meet you!

Pearson is the world's leading learning company. We provide world class qualifications, assessments, digital content and learning experiences to international schools all over the world to enable more effective teaching and learning and to help learners increase their skills and global employability prospects.

We partner with more than 6,500 schools, universities, and employers worldwide:

- **at school level**, to offer Pearson Edexcel International and UK qualifications to over 3.5 million students annually;
- **at university level**, to ensure Pearson Edexcel qualifications are recognised and accepted by universities all over the world;
- **and with employers**, by building 21st century skills into our qualifications at the outset, to ensure learners have transferable skills alongside the knowledge they need to progress into the careers of their choice.

## Our qualifications heritage stretches back over 150 years

Pearson's qualifications heritage stretches back over 150 years, our qualifications are offered in over 100 countries worldwide and we mark over 10 million exam scripts per year on behalf of the UK Department for Education.

Pearson Edexcel is regulated by Ofqual, ensuring our curricula meet the highest standards and our exams follow carefully controlled procedures at every stage of their development, delivery, marking and reporting.

As the largest exam board in the UK, Pearson Edexcel regularly achieves the highest marking accuracy of all UK boards.

### What this means for you

You can trust Pearson Edexcel International Advanced Level qualifications. Thousands of students around the world take these same qualifications every year, progressing from our popular International GCSEs and on to the world's most respected universities.

**"Cambridge Colleges welcome applications from those taking International A Levels... and these are recognised as equivalent to UK Board AS and A Levels."**

The University of Cambridge

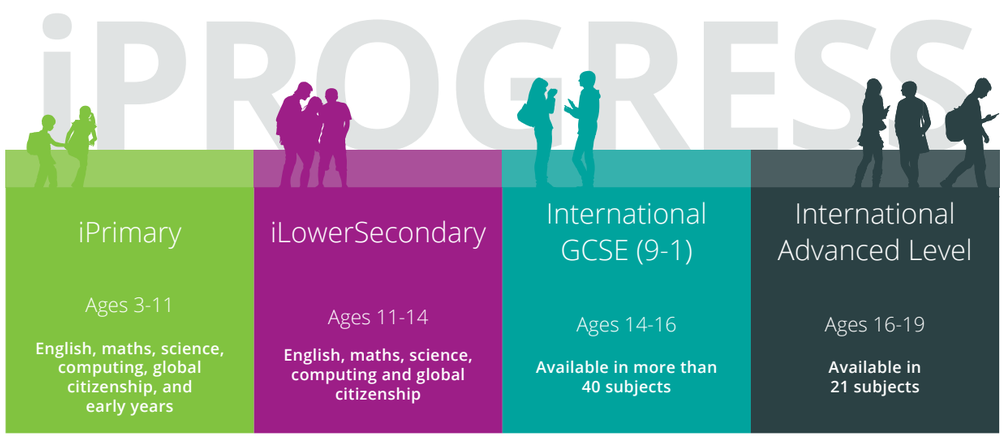
# Modern, progressive International A Level qualifications

## For globally minded learners aged 16 - 19

Renowned across the world for academic excellence, Pearson Edexcel 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-old learners 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.



# 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 21 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.

*for all subjects except Law

## 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

# 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 here.**

## 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)<br>Standalone qualification and no longer contributes to GCE A Level grades | Modular and flexible structure with all units examined<br>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<br>Typically studied over a 2 year period |
| Assessment | Mainly examination based*<br>May/June examinations only | 100% examination based<br>Examinations in January, May/June and October | Mainly examination based*<br>May/June examinations only | 100% examination based<br>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 Information Technology qualifications

## Clear and flexible practical qualifications

### Flexible structure

The International Advanced Subsidiary is the first half of the International Advanced Level qualification and can also be claimed as a discrete qualification on its own. The structure of these qualifications allows teachers to construct a course of study that can be taught and assessed as either:

- distinct modules of teaching and learning with related units of assessment taken at appropriate stages during the course; or, if wished,
- a linear course assessed in its entirety at the end.

### Broad and deep development of learners' skills

We designed the International Advanced Level qualifications to expand students' knowledge by broadening and deepening skills. For example, students will:

- engage with web and database design in a practical, externally-assessed examination. This allows students to apply the knowledge and understanding they gain in the classroom
- discover how to plan and implement an IT project and learn about key areas such as emerging technologies, the online environment and systems analysis and design.

### Clear and straightforward question papers

Our question papers are clear and accessible for students of all ability ranges. Our mark schemes are straightforward so that the assessment requirements are clear.

### Seamless progression from International GCSE

Pearson Edexcel International A Level is the next step in the iProgress learning journey after International GCSE, continuing a consistent path for students and teachers, everywhere in the world.

### Progression to further study or employment

International Advanced Level qualifications enable successful progression to undergraduate studies, further education or employment. Through our world-class qualification development process we consulted with higher education, teachers and professional bodies to validate the appropriateness of these qualifications, including content, skills and assessment structure. Our International A Level in Information Technology sits within our wider subject offer for information technology. We also offer BTEC National qualifications in Information Technology and Computer Science.



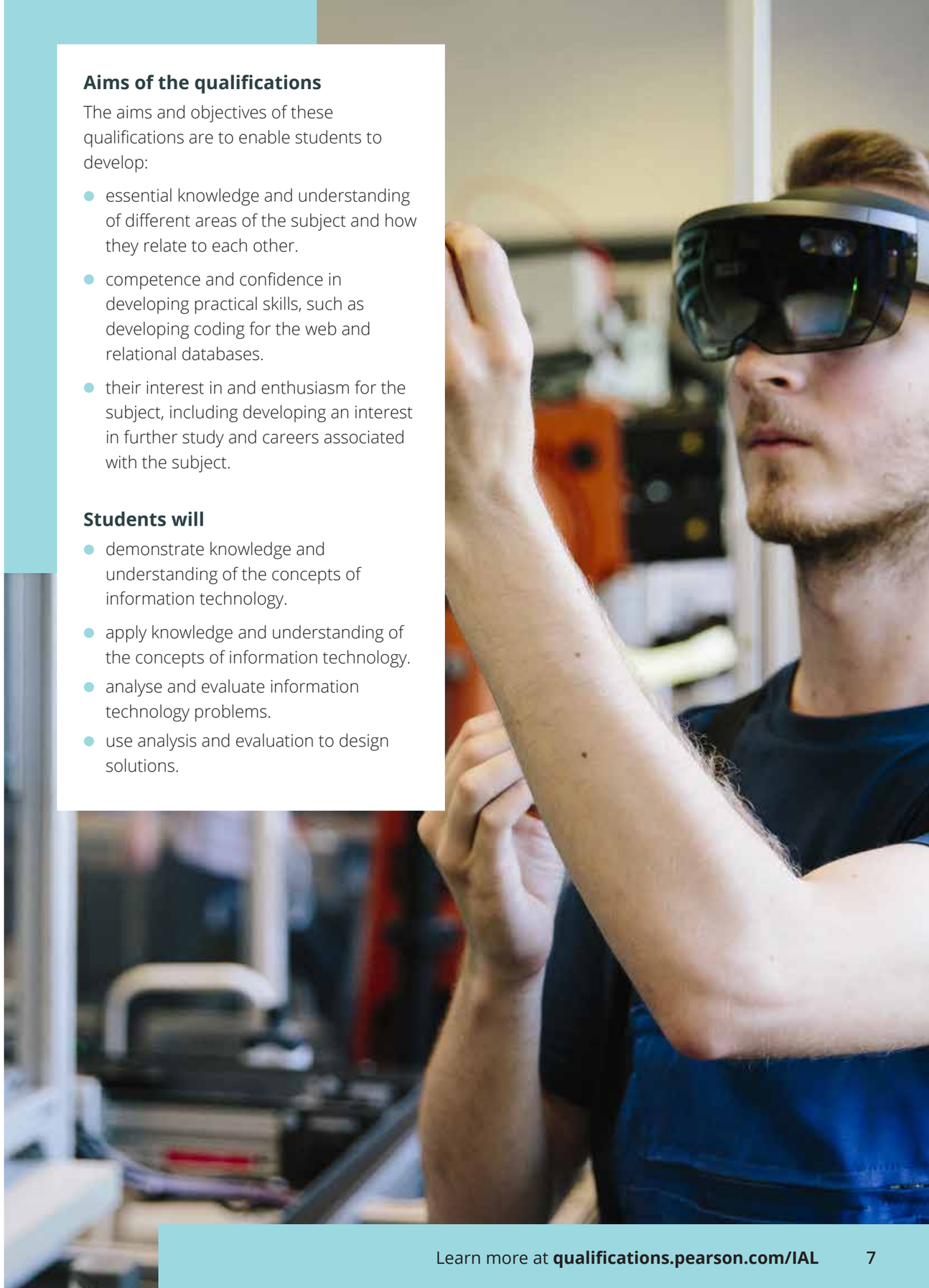
### Aims of the qualifications

The aims and objectives of these qualifications are to enable students to develop:

- essential knowledge and understanding of different areas of the subject and how they relate to each other.
- competence and confidence in developing practical skills, such as developing coding for the web and relational databases.
- their interest in and enthusiasm for the subject, including developing an interest in further study and careers associated with the subject.

### Students will

- demonstrate knowledge and understanding of the concepts of information technology.
- apply knowledge and understanding of the concepts of information technology.
- analyse and evaluate information technology problems.
- use analysis and evaluation to design solutions.



# Information Technology:
a closer look

Exams in June

## 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.

100% externally assessed

## IAS Information Technology exam structure and content summary

**IAS: Unit 1**

| Unit code: WIT11/01 | 50% of the total IAS | 25% of the total IAL |
|---|---|---|
| **Written examination:** 2 hours | **80 marks** | **Availability:** June |

| Content overview | Assessment overview |
|---|---|
| Students must study **all** of the following topics:<br>• Topic 1: Hardware and software<br>• Topic 2: Networks<br>• Topic 3: The online environment<br>• Topic 4: IT systems<br>• Topic 5: Data and databases<br>• Topic 6: Wider issues | • Students are assessed through a 2-hour written examination, set and marked by Pearson.<br>• Students must answer all questions.<br>• The examination paper may include multiple-choice, short-open, open-response and extended-writing questions.<br>• The examination assesses all assessment objectives. |

**IAS: Unit 2**

| Unit code: WIT12/01 | 50% of the total IAS | 25% of the total IAL |
|---|---|---|
| **Written examination:** 3 hours | **80 marks** | **Availability:** June |

| Content overview | Assessment overview |
|---|---|
| Students must study **all** of the following topics:<br>• Topic 7: Understanding the functionality of HTML<br>• Topic 8: Understanding the functionality of CSS<br>• Topic 9: Understanding the functions of Javascript<br>• Topic 10: Designing web pages<br>• Topic 11: The semantic web | • Students are assessed through a 3-hour examination, including practical and theoretical questions, set and marked by Pearson.<br>• Each student will need to access a computer during the examination.<br>• Students must answer all questions.<br>• The examination paper may include short-open, open-response and extended-writing questions. Data files will be provided for some questions. Some responses will be written, others will involve the submission of files.<br>• The examination assesses all assessment objectives. |



## IA2 Information Technology exam structure and content summary

**IA2: Unit 3**

| Unit code: WIT13/01 | 50% of the total IA2 | 25% of the total IAL |
|---|---|---|
| **Written examination:** 2 hours | **80 marks** | **Availability:** June |

| Content overview | Assessment overview |
|---|---|
| Students must study **all** of the following topics:<br>• Topic 12: Manipulating data<br>• Topic 13: Enabling technologies<br>• Topic 14: Using IT systems in organisations<br>• Topic 15: Systems development<br>• Topic 16: Emerging technologies | • Students are assessed through a 2-hour written examination, set and marked by Pearson.<br>• Students must answer all questions.<br>• The examination paper may include short-open, open-response and extended-writing questions.<br>• The examination assesses all assessment objectives. |

**IA2: Unit 4**

| Unit code: WIT14/01 | 50% of the total IA2 | 25% of the total IAL |
|---|---|---|
| **Written examination:** 3 hours | **80 marks** | **Availability:** June |

| Content overview | Assessment overview |
|---|---|
| Students must study **all** of the following topics:<br>• Topic 17: Use of features of database solutions<br>• Topic 18: Relational database concepts<br>• Topic 19: Database solutions | • Students are assessed through a 3-hour examination, including practical and theoretical questions, set and marked by Pearson.<br>• Each student will need to access a computer during the examination.<br>• Students must answer all questions.<br>• The examination paper may include short-open, open-response and extended-writing questions.<br>• The examination assesses all assessment objectives. |

For further information and to download the specification, visit **qualifications.pearson.com/ialinfotech2018**

# 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.

## The benefits of a linear route

Whilst the modular approach works well for students who want to spread the exam load and bank their performance throughout their studies, doing the exam all in one go at the end of the period of study suits others better.

This approach means assessments for all units are taken together in one exam series so students study all the content and then prepare for all the assessments at the end of their period of study, rather than a more continuous pattern of study and assessment.

## 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.

**The choice is yours though! The structure of the Pearson Edexcel International A Level qualifications means you can choose the right assessment approach to benefit students and help create a compelling competitive advantage for your school.**

> **"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."**
>
> Wang, Pearson Edexcel International Advanced Level student from Sri Lanka, studying Chemistry, Biology, Physics, and Mathematics.

# Building transferable skills

## 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.

## 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.

[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 | ✓ | | |
| Student Guide | ✓ | | |
| 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 | ✓ | ✓ | |
| Online Teacher Resource Pack | ✓ | ✓ | |

*Available for any exam paper marked online, e.g. Unit 1 and Unit 3. Visit our website for more information on ATS.

# Pre and post exam support for your educators

## Supporting you every step of the way - for free

As a Pearson Edexcel centre, you will have free access to a full 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 "Welcome to Pearson' 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

**Mocks Service**
We provide exam papers for your students to sit in mock examinations. Marked by Pearson examiners, results are uploaded to ResultsPlus for item level analysis.

## 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 **teachingICT@pearson.com** or call **+44 (0) 344 463 2535**

## A valued support partner

**"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."**

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

**"Because of ResultsPlus, students can learn about their mistakes and rectify."**

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

**"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."**

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

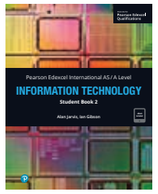
These resources are written for the specifications, so you can be confident that you are providing your students with the best chance of succeeding. With appropriate international content, all resources include a strong focus on progression, recognition and transferable skills, enabling learning in a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

### NEW! Student Books

Available December 2024

- Full coverage of the specification content, with a chart to show where each specification point is covered in the books.
- Varied activities, definitions of key terms and Getting started activities enhance the student's experience.
- Clear layout, with regular illustrations, diagrams and tables to explain new concepts.
- Checkpoint questions, Thinking Like an IT Specialist questions and exam practice questions facilitate revision at the end of each topic.

| Title | ISBN |
|---|---|
| Pearson Edexcel International IAS Information Technology Student Book | 9781292736129 |
| Pearson Edexcel International IAL Information Technology Student Book | 9781292468075 |

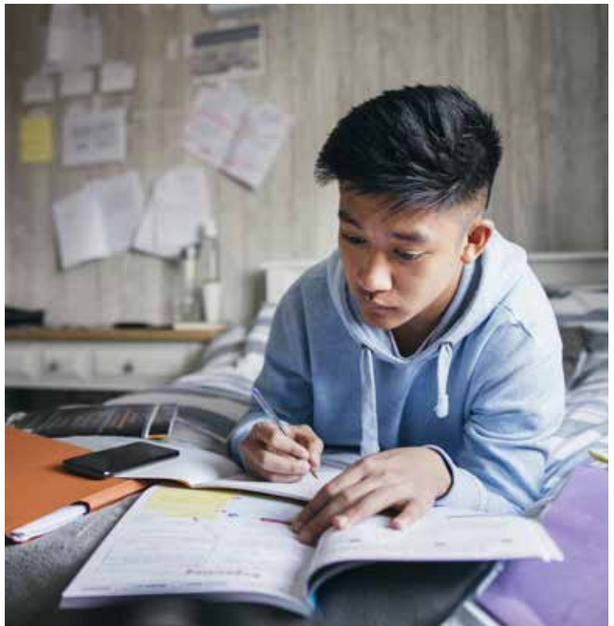



### Online Teacher Resource Pack

This curriculum-matched, up-to-date teacher resource is designed to save you time, enabling you to deliver a high quality experience to your students, ensuring the best possible learner outcomes.

- Available through a two-year subscription.
- Lesson plans.
- Worksheets.
- Two end-of-unit summative tests.
- A slide deck of model answers with 'dos and don'ts' and common errors.
- Exam-style practice and mark scheme.

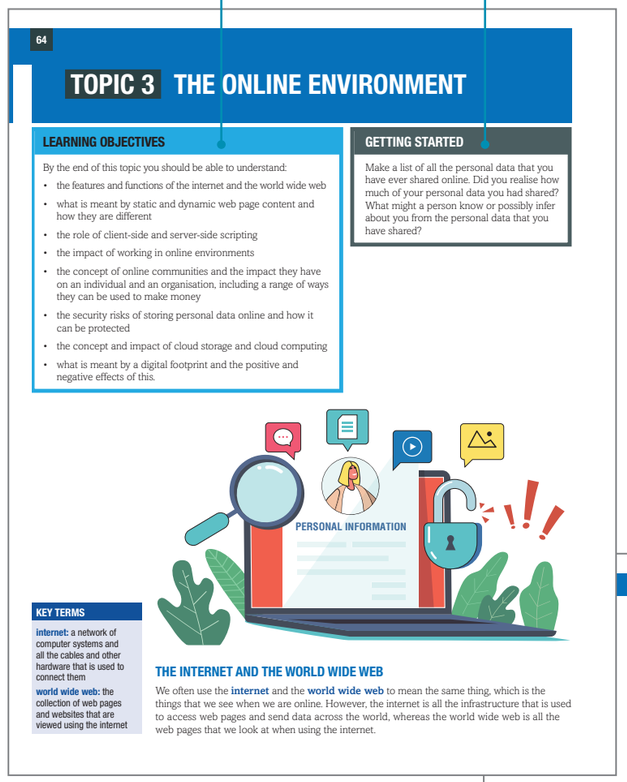
| Title | ISBN |
|---|---|
| Pearson Edexcel International AS/A Level Information Technology Teacher Resource Pack | 9781292255255 |



## NEW! Student Books

Each Student Book comes with 3-year access to an ActiveBook, a **digital version of the Student Book**, which can be accessed online, anytime, anywhere, supporting learning beyond the classroom.

Learning objectives set expectations at the beginning of each topic and **Getting started activities** engage students' interest.


64

TOPIC 3 THE ONLINE ENVIRONMENT

LEARNING OBJECTIVES

By the end of this topic you should be able to understand:

- the features and functions of the internet and the world wide web
- what is meant by static and dynamic web page content and how they are different
- the role of client-side and server-side scripting
- the impact of working in online environments
- the concept of online communities and the impact they have on an individual and an organisation, including a range of ways they can be used to make money
- the security risks of storing personal data online and how it can be protected
- the concept and impact of cloud storage and cloud computing
- what is meant by a digital footprint and the positive and negative effects of this.

GETTING STARTED

Make a list of all the personal data that you have ever shared online. Did you realise how much of your personal data you had shared? What might a person know or possibly infer about you from the personal data that you have shared?



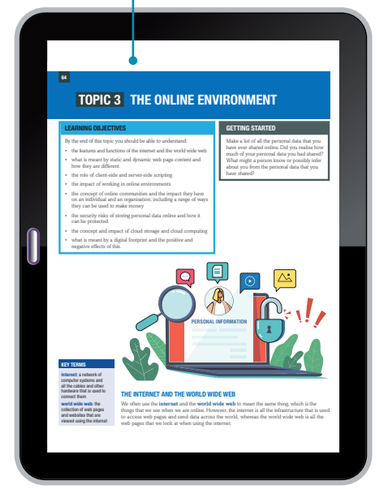
KEY TERMS

**internet:** a network of computer systems and all the cables and other hardware that is used to connect them

**world wide web:** the collection of web pages and websites that are viewed using the internet

THE INTERNET AND THE WORLD WIDE WEB

We often use the **internet** and the **world wide web** to mean the same thing, which is the things that we see when we are online. However, the internet is all the infrastructure that is used to access web pages and send data across the world, whereas the world wide web is all the web pages that we look at when using the internet.



Definitions of **key terms** throughout and a glossary at the back of each book.

Varied **activities** to build a deeper understanding.

KEY TERMS

**domain name system:** a type of server or service that stores a database of domain names and their matching IP addresses

**domain names:** a part of a URL that has the name of the web page; for example, the domain name for the URL https://www.pearson.com is pearson.com

**web browser:** software that is used to access web pages

**web server:** hardware that is used to store web pages and respond to requests for those web pages

**uniform resource locator (URL):** a text-based address for a website

▲ The world wide web is a very large collection of web pages

All the web pages that we access when using the internet are stored on **web servers** around the world. Each web server has a unique IP address. Each web page has a **uniform resource locator (URL)**, for example https://www.pearson.com. A user enters the URL into their **web browser** to access a web page. The web browser needs to send a request to the web server for the web page, but first the URL must be converted to an IP address. To do this the web browser first sends a request to a **domain name system** (DNS) server. This is a computer that stores a list of **domain names** and their matching IP addresses. The IP address is the address of the web server where the web page is stored.

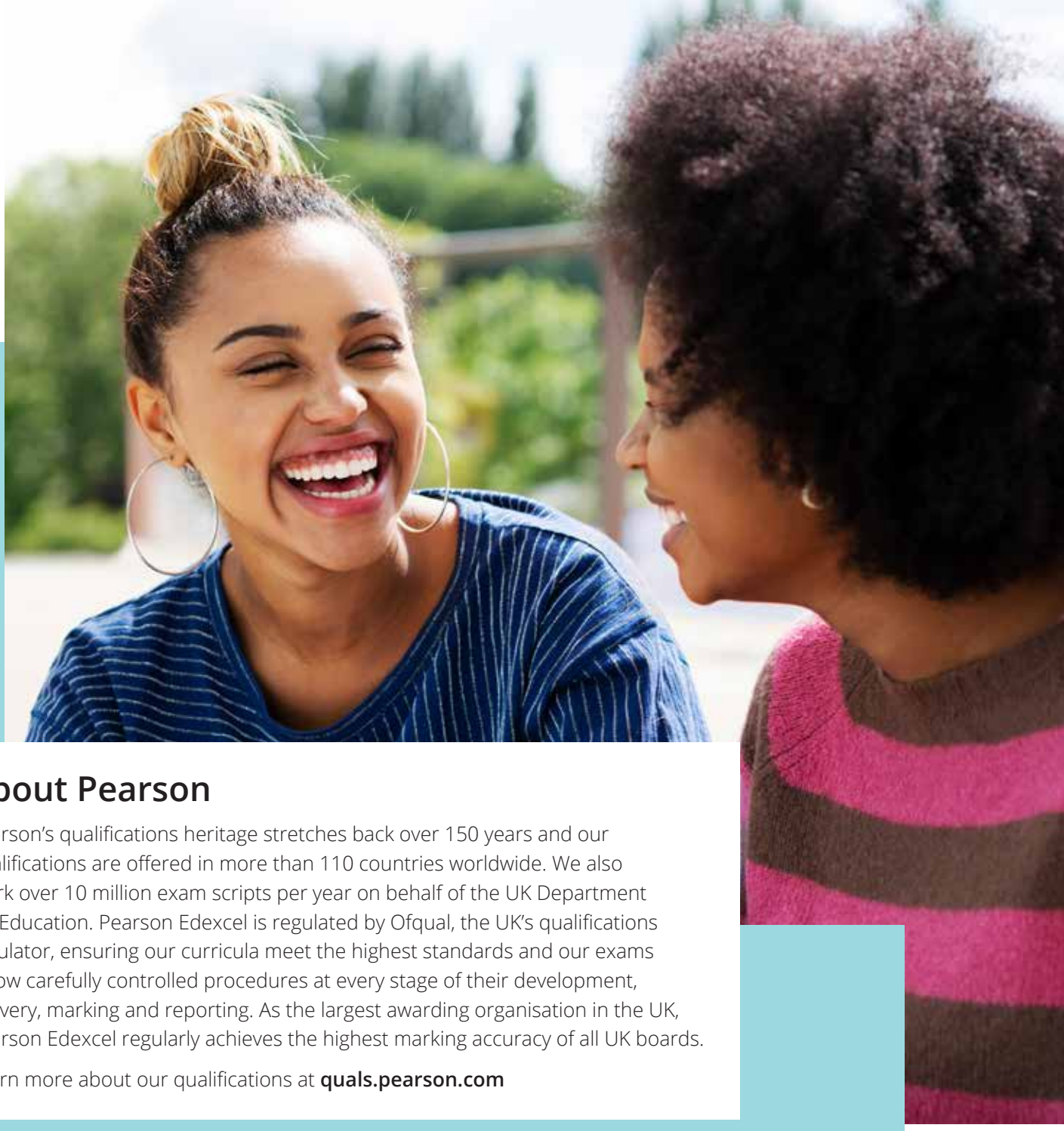
As there are over a billion different domain names, there are many DNS servers to store them all. The web browser extracts the domain name from the URL and sends this to a DNS server. The DNS server searches its database to see if it can find the domain name. If it can, it sends the matching IP address back to the web browser. If it cannot find the domain name, it sends it on to a DNS server at the next level so that it can search its database. The name request will keep on being sent up the DNS hierarchy as far as a top-level DNS server (at the 'root' level) until the name is found. If no result is found, a message will be sent back to the web browser to state that the web page could not be found. When the web browser has the IP address where the web page is stored, it uses this to send a request to the web server. The web server responds by sending the data for the web page back to the web browser.

SKILLS
CREATIVITY

**ACTIVITY 1**

Draw a diagram that shows how a web page is requested and sent to a user's computer.

Web pages are the main feature of the world wide web, but there are several other features that you need to know about. These are listed in Table 3.1.



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Published April 2024

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