

Pearson AAQ in IT

Each year students will undertake one internally assessed, externally verified set of tasks. These will use Pearson Set Assignment Briefs (PSABs) which will differ for each submission window. They will also undertake an external examination.

Year 12

Unit 1 IT Systems – Externally Examined	Unit 4 Relational Database Development
<p>A1 Functions and use of digital devices, and the notation used to represent the design of IT systems</p> <ul style="list-style-type: none"> Students should apply their knowledge and understanding of the features and uses of digital devices in IT systems to meet the needs of individuals and organisations. Students should apply their knowledge of notation used in designing IT systems and flowcharts. This knowledge is essential for the effective use of technology in both personal and professional settings. <p>A2 Peripheral devices and media</p> <ul style="list-style-type: none"> Students should apply their knowledge and understanding of the features and uses of peripheral devices and media in IT systems to meet the needs of individuals and organisations. <p>A3 Computer software in an IT system</p> <ul style="list-style-type: none"> Students should know and understand the concepts, implications and impact on individuals and organisations of the use of, and relationships between hardware and software. <p>A4 Choosing IT systems</p> <ul style="list-style-type: none"> Students should know and understand how the features of an IT system can affect its performance and the factors impacting on the choice. 	<p>A Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions.</p> <ul style="list-style-type: none"> A1 Relational database management systems A2 Manipulating data structures and data in relational databases A3 Normalisation A4 Planning a relational database solution in response to a client brief <p>B Design a relational database solution to meet client requirements.</p> <ul style="list-style-type: none"> B1 Relational database design techniques and Processes B2 Design documentation B3 Reviewing and refining designs <p>C Develop a relational database solution to meet client requirements.</p> <ul style="list-style-type: none"> C1 Producing a database solution C2 Testing the database solution C3 Reviewing the database solution C4 Optimising the database solution

A5 Emerging technologies

- Students should understand how emerging technologies can be used by individuals and organisations.

B1 Connectivity

- Students should know and understand the wired and wireless methods of connecting computers and the factors impacting on the choice of these.

B2 Networks

- Students should know the concepts and implications for individuals and organisations of connecting devices to and from a network.

B3 Issues relating to transmission of data

- Students should know and understand how the features and processes of data transmission affect the use and performance of IT systems.

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C2 Online communities

- Students should know and understand the features of online communities and the implications of their widespread use for individuals and organisations.

D1 Threats to data, information, and systems

- Students should know and understand the types of accidental and malicious threats to the security and integration of data, held in and used by IT systems.

<p>D2 Protecting data</p> <ul style="list-style-type: none"> Students should know the uses and implications of systems and procedures used to protect the data of individuals and organisations. <p>E1 Online services Understand how the features of online services are used to meet the needs of individuals and organisations.</p> <p>E2 Using and manipulating data</p> <ul style="list-style-type: none"> Understand the uses, processes and implications for individuals and organisations of accessing and using data and information in digital form. <p>F1 Moral and ethical issues</p> <ul style="list-style-type: none"> Understand the moral and ethical factors and implications of using information technology for individuals and organisations. <p>F2 Legal issues</p> <ul style="list-style-type: none"> Understand the legal issues relating to the use of IT systems, and the implications for individuals and organisations. 	
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Year 13

Unit 2 Cyber Security and Incident Management	Unit 3 Website Development
<p>A1 Cyber security threats Students should apply their knowledge and understanding of the function and impact of internal and external threats.</p> <p>A2 System vulnerabilities Students should apply their knowledge and understanding of the different types of systems and their vulnerabilities, tools to assess the vulnerabilities and the risk management measures.</p>	<p>A Understand how the principles of website development are used to create effective websites.</p> <ul style="list-style-type: none"> A1 Purpose and principles of websites A2 Planning a website in response to a client brief <p>B Explore website design skills and techniques to meet client requirements</p> <ul style="list-style-type: none"> B1 Website design B2 Asset management techniques

A3 Legal responsibilities

Students should know the responsibilities in relation to current legal legislation.

A4 Software and hardware security measures

Students should apply their knowledge and understanding of the use and effectiveness of security measures for software and hardware, use of encryption and precautions to protect wireless local area network (WLAN)

B: Use of networking architectures and principles for security

Students should apply their knowledge and understanding of the security issues of networked systems and how to secure them in organisational contexts. Students should be able to interpret and amend schematic diagrams.

C: Cyber security documentation

Students should know and understand the governance policies and documents needed to establish and maintain security on an ongoing basis.

D1 Forensic collection of evidence

Students should apply their knowledge and understanding of the methods for collecting forensic evidence following a security incident.

D2 Systematic forensic analysis of a suspect system

Students should apply their knowledge and understanding of the requirements and processes for forensic analysis.

C Develop a website to meet client requirements

- C1 Common tools and techniques to produce a website
- C2 Website development processes
- C3 Testing