Training Qualifications UK

Alternative Academic Qualification Factsheet

TQUK Level 3 Alternative Academic Qualification in IT and Computing (Extended Certificate)

Contents

What are AAQs?

Alternative Academic Qualifications (AAQs) have been approved by the Department for Education (DfE). When combined with A Levels as part of a mixed-study programme, AAQs provide learners with a high-quality entry route into higher education with the added reassurance of allocated UCAS tariff points.

The purpose of the AAQs in IT and Computing is to provide learners with the knowledge and skills necessary to progress to higher education and ultimately work within the computing industry. They provide learners with a strong foundation of knowledge and skills in IT and computing principles that complement theoretical concepts covered in the A Level curriculum.

This integrated approach enables learners to gain a full understanding of academic principles and their practical application. This will showcase their ability to apply concepts and techniques and strengthen their university/college applications giving them a competitive edge.

The target age group

This extended certificate has been designed for learners aged 16-19 who wish to develop core knowledge and understanding of IT and computing fundamentals and principles.

What will learners study?

The AAQ seeks to equip learners with in-depth knowledge and understanding of the approaches required when designing and creating computer programs. The diploma comprises five mandatory units outlined in this table:

Units
Unit 1. Fundamentals of Computing
Unit 2. Programming
Unit 3. Cyber Security
Unit 4. Network Security Management
Unit 5. Website Technology

The focus of the qualification

Learners will study the fundamentals and core principles that underpin IT and computing.

They will explore the features of computers, operating systems, and types, and the functions of hardware and software. They will gain an in-depth understanding of computing languages, testing and debugging techniques, and will explore designing and creating computer programs.

Learners will develop skills throughout the qualification to understand appropriate approaches for specific IT projects.

They will then further develop their knowledge of computing principles and techniques, explore cyber security technologies and firewall configurations, and the importance of managing risks and system vulnerabilities.

Network security management is a key aspect of the diploma, where learners will gain an understanding of legislation, explore the principles of network maintenance, and investigate data gathering to include sequence calculation and probability. The final theme allows learners to investigate website technologies and standards and use and select scripting and programming languages.

Total qualification time

An estimate of the overall time a learner will typically take to achieve and demonstrate the required level of attainment:

Qualification	Guided Learning Hours (GLH)	Direct Study	Total qualification time (TQT)
TQUK Level 3 Alternative Academic Qualification in IT and Computer (Extended Certificate)	360	40	400

Assessment

The qualifications are assessed holistically and comprise an examined assessment (EA) and a non-examination assessment (NEA). The NEA will be released each year in September. The assessment weightings are:

Year	Unit	Assessment method
Year 1	Unit 1. Fundamentals of Computing	Examined assessment
	Unit 2. Programming	Non-examination assessment
Year 2	Unit 3. Cyber Security	External assessment
	Unit 4. Network Security Management	Non-examination assessment
	Unit 5. Website Technology	Non-examination assessment
Assessment weighting	**Examined assessment**	40%
	Non-examination assessment	60%

HE progression

The TQUK Level 3 Alternative Academic Qualification in IT and Computing (Extended Certificate) can support progression to higher and further education qualifications in subjects to include:

- Computer Science
- Computing (Networks, Cyber Security and Forensics)
- Cyber Security
- Computer engineering
- Data Science/ Analytics

- Information Systems
- Artificial Intelligence
- Cyber Security
- Computer engineering
- Data Science/ Analytics

Knowledge and skills and benefits for future study

Learners will develop specialist skills as they explore computer components, processors, hardware, and software.

They will gain skills in the selection and use of the most appropriate technologies and devices for specific tasks and applications. Programming forms a large part of knowledge and skills building in both the certificate and diploma. Learners will gain core knowledge of programming languages, the purpose of code, and its applications for website technologies and business.

Learners will be able to build their knowledge of technical support to include effective network security management, data gathering, and monitoring networks. They will explore the management of cyber-attacks on computer networks and the approaches to risk mitigation.

A Levels to complement this AAQ

The A Level subject areas that would complement the AAQ include Business, Computer Science, Economics, Mathematics, Further Mathematics, Media Studies, and Physics.

Combining the qualifications with A Levels in Mathematics, or Physics would support learners with the development of analytical skills and a strong foundation in numerical concepts. These skills would be relevant for degrees in computer science, software engineering, cyber security, and engineering.

Combining the AAQ with A levels in Business Studies and Economics would benefit learners interested in business processes and economic principles as they can apply their knowledge of IT within business solutions. This combination would support entry to

degrees in business management, economics, finance with technology, and information technology management.

Combining the AAQ with A Levels in Graphic Design or Media Studies would support an exploration of creative design and multimedia production, providing an understanding of media trends and communication. This combination would support entry to degrees in graphic design, digital media, game design, and interactive media.

More information

For further information about the TQUK Level 3 Alternative Academic Qualification Certificate and Diploma in IT and Computing (Extended Certificate), please visit the TQUK website. If you're new to Training Qualifications UK, you can contact us by calling 03333 583 344 or emailing business.development@tquk.org.