Training Qualifications UK

Part of the AQA group

Alternative Academic Qualifications

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

The Basics

www.tquk.org

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 offer learners a high-quality entry route into higher education with the added benefit of UCAS tariff points.

The TQUK Level 3 Alternative Academic Qualification in IT and Computing (Extended Certificate) (RQF) is designed for learners aged 16-19. Its purpose is to provide learners with the knowledge and skills necessary for progression to higher education and careers within the computing industry.

It provides 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 will enable learners to gain a thorough understanding of academic principles and their practical application. It will also enhance their university/college applications, giving them a competitive edge.

What will Learners Study?

This AAQ seeks to provide learners with in-depth knowledge and understanding of the approaches required when designing and creating computer programs.

It comprises five mandatory units, outlined in this table:

Unit	Unit Title
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

This AAQ is equivalent to one A Level and may typically be completed as part of a two-year study programme.

In Unit 1, learners will explore the features of various computing systems, including personal computers, mainframes, and hyper-converged systems, highlighting their advantages, limitations, and real-world applications.

In Unit 2, learners are introduced to core programming concepts and techniques, covering procedural, object-oriented, and event-driven programming paradigms. Learners will explore programming constructs such as variables, data types, loops, conditionals, and functions, developing a structured approach to problem-solving and software development.

In Unit 3, learners will explore key cyber security concepts, focusing on network threats, vulnerabilities, and risk management. Learners will examine web application attacks, including injection attacks, authentication flaws, and API security, alongside tools for scanning and testing vulnerabilities.

In Unit 4, learners will be introduced to network security legislation, technical security measures, and data gathering techniques, equipping them with the knowledge and skills necessary to support and maintain secure networks.

In Unit 5, learners will be introduced to the essential technologies and tools used to build websites. They will explore the hardware and software needed for web development, including web servers, databases, computers, and mobile devices. They will also learn about browsers, file transfer tools, and website-building software like Dreamweaver and Notepad++.

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) (RQF)	360	40	400

Assessment

The assessments are unitised and consist of an Examination 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	Examination Assessment
	Unit 2. Programming	Non-examination Assessment
Year 2	Unit 3. Cyber Security	Examination Assessment
	Unit 4. Network Security Management	Non-examination Assessment
	Unit 5. Website technology	Non-examination Assessment
Assessment Weighting	**Examination Assessment (EA)**	40%
	Non-examination Assessment (NEA)	60%

HE Progression

This AAQ has been designed to support progression to higher education and may support entry into the following degree programmes:

Degree Programmes		
Computer Science	Computing (Networks, Cyber Security and Forensics)	Computer Networking and Cloud Security
Cyber Security	Computer Engineering	

Benefits for Future Study

Throughout the AAQ, learners will have the opportunity to develop written and verbal communication skills, proficiency in academic writing, critical thinking and analysis, time management skills, and the ability to carry out independent research and collaborative work. Learners will also develop specialist skills in the exploration of computer components, processors, hardware, and software.

These skills closely align with university expectations and will ensure that the learners are prepared for the rigour of higher-level study, where they can apply them at an advanced level.

This knowledge and skills development will be invaluable to learners wishing to further their studies in disciplines such as computer science, cyber security, and computer engineering.

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 AAQ with A Levels in Mathematics or Physics would introduce learners to analytical skills and a strong foundation of numerical concepts. These skills would be particularly relevant for degrees in computer science, cyber security, and computer engineering.

Studying the AAQ with A levels in Business Studies and Economics would be advantageous for learners interested in business processes and economic principles. This combination provides a focus on applying their knowledge of IT within business solutions. It would support entry to degrees in business management, economics, finance, with technology, and information technology management.

Learners may choose to combine the AAQ with A Levels in Graphic Design or Media Studies. This would allow learners to explore 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.