Training Qualifications UK

Alternative Academic Qualification Factsheet

TQUK Level 3 Alternative Academic Qualification in Design, Engineer, and Construct in the Digital Built Environment (Extended Certificate)

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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 AAQ in Design, Engineer, and Construct in the Digital Built Environment is to provide learners with the knowledge and skills necessary to progress to higher education and ultimately to work within the built environment sector. It provides learners with a strong foundation of knowledge and skills in design, engineering, and construction principles that complement theoretical concepts covered in the A Level curriculum. This integrated approach will enable learners to gain a full understanding of academic principles and their practical application. This will, in turn, 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 design and engineering principles.

What will learners study?

The AAQ seeks to equip learners with in-depth knowledge and understanding of the approaches required when designing a sustainable construction project. The extended certificate comprises five mandatory units as outlined in the following table:

Units
Unit 1. Sustainability and Planning
Unit 2. Research, Concept and Context
Unit 3. Facilities Management and Financial Planning
Unit 4. Design and Information Management
Unit 5. Evaluating and documenting a sustainable construction project

The focus of the qualification

The qualification is equivalent to one A Level and comprises five units that learners would typically complete within a two-year study programme. It allows learners to develop their knowledge and skills in design, the use of Building Information Modelling (BIM), financial planning, and a building's lifecycle as well as honing review and evaluation skills.

Learners will explore the key stages of a sustainable construction project from the initial design idea to its review and evaluation.

Project management will form a large part of the knowledge and essential skills-building, and learners will gain an understanding of techniques to include, such as 3-D modelling, floor planning, and the use of BIM. Learners will study financial planning, budgeting, and financial control to create cost-effective design solutions. They will also learn about the key role of a building's lifecycle when designing a construction project and its economic and social impact.

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 Design, Engineer, Construct in the Digital Built Environment (Extended Certificate)	360	40	400

Assessment

Assessments for this qualification are unitised and consist of examined assessments (EA) and non-examination assessments (NEA). The NEA will be released each year in September. The assessment weightings are:

Year	Unit	Assessment method
Year 1	Unit 1. Sustainability and Planning	Examined assessment
	Unit 2. Research, Concept and Context	Non-examination assessment
Year 2	Unit 3. Facilities Management and Financial Planning	Examined assessment
	Unit 4. Design and Information Management	Non-examination assessment
	Unit 5. Evaluating and documenting a sustainable construction project	Non-examination assessment
Assessment weighting	**Examined assessment**	40%
	Non-examination assessment	60%

HE progression

The qualifications have been designed to support progression to higher education. They may support entry to the following degree programmes:

Degree programmes			
Architectural Engineering	Architectural Technology	Building Services Engineering	Building Surveying
Construction Site Management	Landscape Architecture	Civil and Structural Engineering	Electrical Engineering
Mechanical Engineering	Construction Project Management	Geographical Information Systems	Property Development and Planning
Geospatial Science and Mapping	Quantity Surveying and Construction	Interior Architecture and Design	Urban Planning

Knowledge and skills and benefits for future study

Learners will develop specialist skills, such as conducting research to inform the creation of initial design concepts, developing and adapting designs, responding to feedback, project management and planning, teamworking, and presenting a design to an audience.

Learners will also gain knowledge of the approaches to use when evaluating site conditions, conducting a feasibility study, applying sustainable construction principles and practices involving energy efficiency, waste management, and assessing the environmental impact of a construction project.

This knowledge and skills base will be invaluable for learners wishing to further their studies in design engineering, architecture, urban planning, building surveying, construction management, and quantity surveying.

A Levels to complement this AAQ

The A Level subject areas that would complement this qualification include Mathematics, Physics, Art and Design, Design and Technology, Environmental Technology, Business Studies, and Economics.

Combining the qualification with A Levels in Mathematics, Chemistry, or Physics would introduce learners to the quantitative and analytical skills required in a range of engineering disciplines. This would be particularly relevant for degrees in civil, mechanical, or chemical engineering.

Studying the qualification with A levels in Mathematics, Computer Science, or Physics would benefit learners interested in structural engineering or robotics. This combination integrates technical with analytical skills fostering creativity with practical design elements.

Learners may also combine the qualification with A Levels in Geography, Biology, or Chemistry. This would allow them to explore the sustainable and environmental aspects of construction and develop a greater understanding of ecological and chemical principles. This combination would support entry to degrees in environmental science or engineering.

More information

For further information about the TQUK Level 3 Alternative Academic Qualification Design, Engineer, and Construct in the Digital Built Environment (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.