An introduction to our Level 3 technical and vocational qualifications

Giving learners the knowledge and skills for higher apprenticeships, university or employment

Find out more about our Tech-levels at: aqa.org.uk/tech-levels
Find out more about our Applied Generals at: aqa.org.uk/applied-general
Technical and vocational qualifications from a name you can trust

Why choose our Tech-levels?

We’ve worked with employers and professional bodies to design our Technical Level qualifications in response to government reform. Our qualifications support learners’ career choices and help fill workplace skills gaps as identified by employers and progression to higher education.

In designing our Tech-level qualifications we have contextualised essential transferable skills – such as team working and communication – so that our qualifications go one step further in preparing learners for employment.

Aimed at learners who already know the job or sector they’d like to go into, we believe these exciting new qualifications offer fantastic opportunities, and are a real alternative to A-levels and other vocational qualifications in supporting 16–18 Study Programmes.

“‘We’ve worked with employers, professional bodies and universities from the very start, so each qualification will open doors for learners, whether they choose to go straight into the workplace, a higher apprenticeship or university.”

Andrew Hall
Chief Executive
AQA

Why choose our Applied Generals?

Developed in collaboration with teachers, learned societies and higher education institutions, these qualifications will help learners to develop the fundamental knowledge and practical skills that are valued in universities and the world of work.

These broad vocational qualifications are ideal for studying alongside A-levels in support of 16–18 Study Programmes and are supported by universities.

The qualification structure also enables effective curriculum planning and delivery – a combination of mandatory and optional units underpinned by compensatory internally assessment.

Find out more about our technical and vocational qualifications

Visit aqa.org.uk/tech-levels
Or aqa.org.uk/applied-general

All our Tech-levels and Applied General qualifications attract UCAS tariff points and are included in the DfE 16-19 performance tables.
Level 3 technical and vocational qualifications available

Our Foundation Tech-levels give learners general knowledge and skills for the workplace.

Our Tech-levels give learners a broad range of knowledge and skills for specific roles and business sectors.

Tech-levels

- **Business:** Marketing Communications (360 GLH)
- **Business:** Marketing (720 GLH)
- **Entertainment technology:** Video Games, Art and Mechanics (360 GLH)
- **Entertainment technology:** Video Games, Art and Animation (540 GLH)
- **Entertainment technology:** Video Games, Art and Design (720 GLH)
- **Entertainment technology:** Video Games, Art and Design Production (1080 GLH).
- **Engineering:** (360 GLH)
- **Engineering:** Mechatronics (720 GLH)
- **Engineering:** Design (720 GLH)
- **IT:** Cyber Security (360 GLH)
- **IT:** Technical Support (360 GLH)
- **IT:** Scripting and App Programming (360 GLH)
- **IT:** Networking (720 GLH)
- **IT:** Programming (720 GLH)
- **IT:** User Support (720 GLH)
- **IT:** Cyber Security and Security Administration (720 GLH)

Level 3 Applied Generals

These vocational qualifications offer a practical alternative to A-levels in business and science. Both subjects include clear pathways to further study and employment.

- Certificate in Applied Business (180 GLH)
- Extended Certificate in Applied Business (360 GLH)
- Certificate in Applied Science (180 GLH)
Level 3 Tech-level qualifications – IT

All seven of our Tech-level IT qualifications have been developed with The Tech-Partnership and the British Computer Society (BCS).

Upon completion of these qualifications, learners can embark on a higher apprenticeship, go on to higher education or start work.

Tech-levels in IT (720 GLH)
- IT: Networking
- IT: Programming
- IT: User Support
- IT: Cyber Security and Security Administration.

Foundation Tech-levels in IT (360 GLH)
We offer three Foundation Tech-levels in IT:
- Scripting and App Programming
- Technical Support
- Cyber Security.

Each qualification covers half of the 720GLH route content and equips learners with one or more of the transferable skills of problem-solving, communication, research and teamwork.

IT: Networking (720 GLH)
Learners cover topics such as:
- fundamental principles of computing
- communication technologies
- developing and maintaining computer networks
- supporting end users
- maths for computing
- network security management.

Transferable skills gained:
Problem-solving, communication, research and teamwork.

This qualification is supported by organisations including:
- BCS
- Tech-Partnership.

Find out more
Visit aqa.org.uk/ittech-levels

“We’ve helped AQA to come up with modules that will be fit for purpose in terms of delivering employability into the skills we currently find a challenge in our market place.”

Mark Morris
Business Manager
Microsoft Education UK
IT: Cyber Security and Security Administration (720 GLH)

Learners cover topics such as:

- fundamental principles of computing
- communication technologies
- managing identity and access to systems
- network threats and vulnerabilities
- maths for computing
- network and cyber security administration.

Transferable skills gained:

Problem-solving, communication, research and teamwork.

This qualification is supported by organisations including:

- Cyber Security Forum
- Intel Security.

Find out more

Visit [aga.org.uk/ittech-levels](aga.org.uk/ittech-levels)

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IT: Programming (720 GLH)

Learners cover topics such as:

- fundamental principles of computing
- computer programming
- website technologies
- mobile applications programming
- mathematics for programmers
- event driven programming.

Transferable skills gained:

Problem-solving, communication, research and teamwork.

This qualification is supported by organisations including:

- Microsoft
- Burton and South Derbyshire College.

Find out more

Visit [aga.org.uk/ittech-levels](aga.org.uk/ittech-levels)
IT: User Support (720 GLH)

Learners cover topics such as:

- fundamental principles of computing
- communication technologies
- developing and maintaining computer networks
- computer forensic investigation
- organisational systems security
- an industrial project.

Transferable skills gained:

Problem-solving, communication, research and teamwork.

This qualification is supported by organisations including:

- Toshiba
- University of Bedfordshire.

Find out more

Visit [aqa.org.uk/ittech-levels](http://aqa.org.uk/ittech-levels)
Level 3 Tech-level qualifications: Business

These pioneering new qualifications were developed with employers and the Chartered Institute of Marketing (CIM).

Upon completion, learners can join a higher apprenticeship, continue higher education or start work.

**Business: Marketing Communications (360 GLH)**

Learners cover topics such as:
- the establishment, growth and survival of a business
- concepts and terminology of marketing and how it fits within the organisation.

**Transferable skills gained:**
Communication, research and teamwork.

This qualification is supported by organisations including:
- We Love Digital
- Alfa People.

**Business: Marketing (720 GLH)**

Learners cover topics such as:
- the establishment, growth and survival of a business
- concepts and terminology of marketing and how it fits within the organisation
- legal, ethical and social concerns influencing business activities
- how to plan for, deliver and evaluate collaborative projects, exploring the importance of team dynamics and cooperation.

Find out more
Visit [aqa.org.uk/business-tech-levels](http://aqa.org.uk/business-tech-levels)
Level 3 Tech-level qualifications – Engineering

All three of our Tech-level qualifications are approved by the Engineering Council as contributing to the requirements for professional registration as an engineering technician (EngTech) and equip learners with key employability skills.

Upon completion, learners can join a higher apprenticeship, continue higher education or start work.

- Engineering: Design Engineering
- Engineering: Mechatronic Engineering.

Find out more
Visit aqa.org.uk/engineeringtech-levels

Foundation Tech-level in Engineering (360 GLH)

This covers 50% of the content from our Tech-levels in Design or Mechatronic engineering.

Highly regarded in its own right, upon completion, learners may choose to progress to the 720 GLH Tech-levels in Design or Mechatronic Engineering.

Engineering: Design Engineering (720 GLH)

Learners cover topics such as:

- modern design use of computer aided design procedures for engineering to produce 3D models and 2D drawings, including the use of rendering and animation in their designs
- the systematic approaches to design such as design for manufacture (DFM) and design for assembly (DFA)
- process of engineering design
- scientific principles used by engineers to identify suitable materials in a given engineering context
- how to use maths to model and solve problems across practical engineering contexts
- mechanical engineering systems and components, their applications to the design of engineering products and systems for consumers and industry
- the relevance and role that manufacturing processes and systems have in the production of multiple components.

Transferable skills gained:
Problem-solving, communication, research and teamwork.

This qualification is supported by organisations including:
- Institution of Engineering Designers
- Autodesk.

Find out more
Visit aqa.org.uk/engineeringtech-levels
Engineering: Mechatronic Engineering (720 GLH)

Learners cover topics such as:

- the interface between mechanical and electrical engineering and the use of programmable computers and control systems
- the core principles and technologies that underpin mechatronics
- scientific principles used by engineers to identify suitable materials in a given engineering context
- how to use maths to model and solve problems across a range of practical engineering contexts
- mechatronic engineering systems and components
- the design and construction of mechatronic control systems
- the process of engineering design.

Transferable skills gained:

Problem-solving, communication, research and teamwork.

This qualification is supported by organisations including:

- The Institute of Engineering and Technology
- Siemens.

Find out more

Visit aqa.org.uk/engineeringtech-levels

“We believe that AQA’s Mechatronic Engineering qualification will provide learners with the specialist knowledge and competencies required for onward progression.”

Brenda Yearsley
School and Education Development Manager
Siemens

“We have a skills gap in the field of Design Engineering; this qualification will fill that and prepare students for the workforce, or continued studies at university.”

Mike Westlake
UK and Ireland Manager
Autodesk Education
Level 3 Tech-level qualifications: Entertainment Technology

Unlock and excite your imagination with the new Entertainment Technology qualifications we’ve developed with support from leading employers in the entertainment industry.

They equip learners with the skills and experience to embark on a higher apprenticeship, continue further education or start work.

• Foundation Tech-level Entertainment Technology: Video Games Art and Mechanics
• Tech-level Entertainment Technology: Video Games Art and Animation
• Tech-level Entertainment Technology: Video Games Art and Design
• Tech-level Entertainment Technology: Video Games Art and Design Production.

Find out more
Visit aqa.org.uk/videogamestech-levels

Foundation Entertainment Technology: Video Games Art and Mechanics (360 GLH)

Learners gain knowledge of:
• the games industry – including how to set up and run a games business and the production process involved in making games
• fundamental drawing principles for 2D game art – including the ability to use media to communicate to different audiences
• 3D environment art – focusing on modelling and texturing principles used to create efficient/modular game ready assets
• game mechanics and theory – developing playable game mechanics to begin designing their own gameplay concepts and ideas.

Transferable skills gained:
Communication and research.

This qualification is supported by organisations including:
• Creative Assembly.

Find out more
Visit aqa.org.uk/videogamestech-levels
INTRODUCTION TO TECHNICAL AND VOCATIONAL QUALIFICATIONS

Entertainment Technology: Video Games Art and Animation (540 GLH)

This qualification is open to learners who have completed the Foundation Tech-level Entertainment Technology: Video Games Art and Mechanics.

Alternatively, learners can join the course straight after their GCSEs.

Learners cover topics including:

• concept art – analysing the creative processes of planning and developing concept art and investigating digital techniques to create concept art for imagined characters, objects and environments

• animation and VFX – developing character and environment animations for games and an introduction to visual effects for games engines including particle systems and dynamics.

Transferable skills gained:

Communication and research.

This qualification is supported by organisations including:

• Creative Skillset
• Rodeo Games.

Find out more

Visit aqa.org.uk/videogamestech-levels

Entertainment Technology: Video Games Art and Design (720 GLH)

This qualification is open to learners who have completed the Foundation Tech-level in Entertainment Technology: Video Games Art and Mechanics or the Tech-level Entertainment Technology: Video Games Art and Animation.

Alternatively, learners can join the course straight after GCSEs.

Learners cover topics such as:

• an understanding the nature of assets created, developed and stored using digital media, learning best practice for storing, versioning and archiving them

• awareness of the implications of digital rights management and intellectual property rights

• level design, focussing on the design process required to take a level from idea through to playable concept help from engine tools and scripting.

Transferable skills gained:

Communication and research.

This qualification is supported by organisations including:

• Ella Romanos
• Radiant Worlds.

Find out more

Visit aqa.org.uk/videogamestech-levels
Level 3 Tech-level qualifications: Entertainment Technology

Entertainment Technology: Video Games Art and Design Production (1080 GLH)

Learners can progress onto this qualification having completed any of the video game focused Tech-levels in Entertainment Technology. Alternatively, learners can join the course straight after their GCSEs.

Learners will gain knowledge of:

- 3D character art – developing pre-production materials and presenting a fully modelled, game-ready 3D character that adheres to industry specification
- user interfaces, designing a user interface specifically with games as the target medium as well as how to utilise the design choices made to create a fully functioning user interface in a games engine
- games audio – understanding the principles and practice of creating, processing and synchronising sound to image for use within the computer game industry
- working on a collaborative games development project – working through the game development process and team working environments to produce a playable game.

Transferable skills gained:

Communication, teamwork and research.

This qualification is supported by organisations including:

- Creative Assembly.

Find out more

Visit aqa.org.uk/videogamestech-levels
Applied General qualifications in Business and Science

Level 3 Certificate (180 GLH) and Extended Certificate in Applied Business (360 GLH)

Learners will:
- enjoy the emphasis on entrepreneurship and the realism of the qualification
- fully apply their learning in relation to practical and integrated units of assessment
- benefit from new and current subjects including event management and e-business modules.

Learners can progress to the Extended Certificate (360 GLH) when they have completed the Certificate (180 GLH).

The 180 Certificate covers key areas of business entrepreneurship, the Extended Certificate covers a broader skillset and enables the learner to begin to practically realise their business ideas.

This qualification is supported by organisations including:
- Institute of Enterprise and Entrepreneurs (IOEE)
- Young Enterprise
- Leeds Beckett University
- University of Bath
- University of Liverpool
- Birmingham City University.

Find out more
Visit aqa.org.uk/appliedbusiness

Level 3 Certificate (180 GLH) and Extended Certificate in Applied Science (360 GLH)

Learners will:
- practice experimental scientific techniques and explore how they are applied in industry
- develop their knowledge and understanding of a broad range of concepts in biology, chemistry and physics
- have the opportunity to plan and carry out a scientific investigation of their own choosing
- explore the way in which topical scientific issues are presented in the media
- investigate the many roles of scientists and the different career pathways open to them
- use the optional unit to decide on the scientific pathway they wish to follow.

Learners can progress to the Extended Certificate (360 GLH) when they have completed the Certificate (180 GLH).

This qualification is supported by The Association for Science Education.

Find out more
Visit aqa.org.uk/appliedscience

“Core content is excellent. Nothing but commendation in the approach... linking the learning back to the business planning unit.”

Dr Kerry Sullivan
University of Surrey, referring to the Marketing communications unit
Free support and materials

We’ve worked closely with employers, higher education institutes and tutors to create support materials that you’ll find useful and inspiring – they’ll also help you hit the ground running.

Each resource will help you with a specific aspect – either planning your lessons, delivery or preparing your learners for exams or assignments.

Our free support includes:

• sample schemes of work for every unit
• direct access to our subject and curriculum experts
• delivery models to support curriculum planning
• specimen question papers and mark schemes
• sample assignment briefs
• specific subject pages to access bespoke resources.

Supporting you all the way

Our free introductory and prepare to teach events provide you an overview of the qualification and in-depth training on content, delivery and assessment. Available online or face-to-face. Book your course at aqa.org.uk/professional-development

If you have any queries email tvq@aqa.org.uk or call 0800 085 0391.
Clear assessment and marking you can trust

Our new qualifications are a combination of internally and externally assessed units. Internally assessed units are assessed by centre-devised tasks or assignments; externally assessed units are set and marked by us.

Our qualifications are graded using very clear and unambiguous grading criteria, designed to ensure that teachers and internal assessors are confident in their judgements.

The criteria have been developed in consultation with employers, professional bodies and higher education to ensure that learners are always being assessed in a meaningful and relevant manner.

In addition to the qualification certificate, our Tech-level learners receive a Skills statement. This confirms the transferable skills covered in the qualification and can be used to support job or university applications.
We’re here to help

If you have any queries or if you’d like to become a centre, email tvq@aqa.org.uk or call 0800 085 0391.

Explore our Tech-level specifications further by visiting aqa.org.uk/tech-levels

Find out more about our Applied Generals at aqa.org.uk/applied-general

Centre approval

Centre approval is free for all our technical and vocational qualifications.