

The background of the image is an abstract, dynamic composition of swirling, concentric lines in various shades of green and yellow. The lines create a sense of motion and depth, resembling a topographical map or a stylized representation of energy or technology. The colors transition from bright yellow-green at the edges to a darker, more saturated green in the center.

# **CONSTRUCTION AND ENGINEERING TECHNOLOGY**

## Computer Aided Draughting and Design Using AutoCAD

7579

### Aim

This qualification is designed to help individuals use AutoCAD software to produce a variety of drawings including graphic design, architecture and engineering.

### Career

- Cad Draughtsperson
- Engineering Craft/Cnc Machinist
- Engineering Operative

### Level

2, 3, 4

### Pathways

- 2D Computer Aided Design
- 2D Computer Aided Design
- 3D Design and Solid Modelling
- 3D design using AutoCAD
- Auto LISP Programming
- AutoCAD AEC use in the Built Environment
- AutoCAD Customisation and System Management
- Computer Aided Draughting Design Using AutoCAD

### Delivery

Written examination and practical assignment.

**EV 24**

## Construction Industry

6161

### Aim

This qualification is designed for individuals who want to start a career in the construction industry and for those looking to take on advanced skills and responsibilities in a wider range of craft areas.

### Careers

- Bricklayer
- Carpenter/joiner
- Construction operative
- Construction supervisor/manager
- Electrical engineer
- Electrician
- Painter and decorator
- Plumber
- Refrigeration engineer
- Supervisor/team leader

### Level

- Level 1 IVQ Certificate

- Level 2 IVQ Diploma
- Level 3 IVQ Advanced Diploma

### Pathways

- Electrical Installation
- Painting and Decorating
- Plumbing
- Refrigeration and Air Conditioning
- Timber Vocations (site carpentry/bench joinery)
- Trowel Vocations

### Delivery

Written examination and practical assessment.

**EV IVQ**

## Engineering Skills

1155

### Aim

This qualification is designed for individuals who want to start a career in one of the craft engineering occupations. It is also suitable for people already in employment who want to gain formal recognition for their skills and knowledge and those wishing to re-train and work in the engineering sector.

### Career

- Electrical Engineer
- Electrical Engineering Technician
- Electrician
- Electronic Engineering Technician
- Electronics Engineer
- Engineering Maintenance Technician
- Engineering Operative
- Mechanical Engineering Technician
- Metals Engineering Technician
- Plater/Fabricator
- Sheet Metal Worker
- Steel Erector/Fabricator
- Welder

### Level

- Level 1 IVQ Certificate
- Level 2 IVQ Diploma

### Pathways

(IVQ Diploma level only)

#### Electrical Engineering

- Metal Machining
- Mechanical Fitting and Plant Maintenance
- Fabrication, Welding and Pipework
- Electronic Engineering

### Delivery

Written examination and practical assessment.

**EV IVQ**

## Oil and Gas

8510

### Aim

The qualification focuses on the development of the underlying principles and practical skills required in the oil and gas industry. The qualification is designed to deliver a high level of occupational capability and provide a sound foundation for progression into managerial positions or higher education.

### Level

Level 3 IVQ Advanced Diploma.

### Career

- Process Technician
- Electrical Maintenance Technician
- Mechanical Maintenance Technician
- Instrumentation Maintenance Technician

### Pathways

- Mechanical Maintenance Technician
- Electrical Maintenance Technician
- Instrumentation Maintenance Technician
- Process Technician

### Delivery

Practical tasks as well as written and oral knowledge questions.

**EV IVQ**

## Process Technology

0603

### Aim

This qualification is aimed at individuals working across a wide range of process industries, such as chemical processing, metal production, petroleum operations and pharmaceutical operations.

### Career

- Chemical Plant Process Worker
- Engineering Maintenance Fitter
- Engineering Maintenance Technician
- Engineering Operative
- Foundry Process Operator
- Metals Industry Production Operative
- Production Engineer.

### Level

2, 3

### Pathways:

Level 2: Certificate in Process Technology

- Chemical Process
- Metal Production

- Petroleum Operations

Level 3: Certificate in Process Technology

- Chemical process
- Metal production
- Petroleum operations

### Delivery

Core level 2 units will be assessed using an on-line GOLLA system using multiple choice tests. All other units are either City & Guilds set assessments or centre set assignments based on City & Guilds guidance.

**EV IVQ**

## Technician Awards in Electrical and Electronic Engineering

8030 (2000)

### Aim

This qualification is designed to provide future engineers with the knowledge and practical skills required in electrical and electronic engineering. It has a progressive structure suitable for front-line workers or individuals beginning an academic training programme through to those preparing for or working at first line management.

The qualification is designed to deliver a high level of occupational capability and provide a sound foundation for progression into managerial positions or higher education.

### Career

- Electrical Engineer
- Electrical Engineering Technician
- Electrician
- Electronic Assembler
- Electronic Engineering Technician
- Electronic Engineer

### Level

- Level 2 IVQ Technician Certificate
- Level 3 IVQ Technician Diploma
- Level 5 IVQ Advanced Technician Diploma

### Pathways

- Electrical Engineering (Level 3 and Level 5)
- Electrician (Level 3 and Level 5)

### Delivery

Technician Certificate and Technician Diploma: written examination and practical assignment.

Advanced Technician Diploma: written examination and a project.

**EV FTD IVQ**

## Technician Awards in Engineering

2565

### Aim

This qualification is designed to provide future engineers with the knowledge and practical skills required in engineering. It has a progressive structure suitable for front-line workers or individuals beginning an academic training programme through to those preparing for or working at first line management.

The qualification is designed to deliver a high level of occupational capability and provide a sound foundation for progression into managerial positions or higher education.

### Level

- Level 2 IVQ Technician Certificate
- Level 3 IVQ Technician Diploma
- Level 5 IVQ Advanced Technician Diploma

### Pathways

#### Level 2 IVQ Technician Certificate in Engineering

- Mechanical
- Mechanical, Electrical and Electronic
- Electrical and Electronic

#### Level 3 IVQ Technician Diploma in Engineering

- Mechanical Engineering – Manufacturing
- Mechanical Engineering – Plant Technology
- Mechanical and Electrical Engineering – Design and Manufacture
- Mechanical and Electrical Engineering – Plant Technology
- Mechanical and Electrical Engineering – Mechatronics

#### Level 5 IVQ Advanced Technician Diploma in Engineering

- Mechanical Engineering – Manufacturing
- Mechanical Engineering – Plant Technology
- Mechanical and Electrical Engineering – Design and Manufacture
- Mechanical and Electrical Engineering – Plant Technology
- Mechanical and Electrical Engineering – Control Systems

### Delivery

Written examination and practical assignment.

**EV FTD IVQ**

## Technician Awards in the Construction Industry

6165

### Aim

This qualification is designed to prepare learners for their intended roles as technologists, engineers and managers in a wide range of construction and related occupations.

### Career

- Construction Manager
- Construction Supervisor
- Quantity Surveyor

### Level

- Level 2 IVQ Technician Certificate
- Level 3 IVQ Technician Diploma
- Level 5 IVQ Advanced Technician Diploma

### Pathways

- Construction
- Quantity Surveying (only at Technician Diploma and Advanced Technician Diploma levels)

### Delivery

Written examination and practical assessment.

**EV FTD IVQ**

## Telecommunication Systems

2730

### Aim

This qualification is designed for individuals who are seeking a career as a technician in the telecommunications industry. It is suitable for those who want to become supervisors or senior technicians, or those who want to work in ICT management.

### Career

- International Telecommunications Network Manager
- Network Planner
- Radio Systems Design Engineer
- Satellite Communications Engineer
- Systems Production Supervisor

### Level

- Advanced Technician Diploma
- Technician Certificate
- Technician Diploma

### Delivery

Written examination or online test and practical assignment.

**EV FTD IVQ 24**

NB: If centres opt to offer the online test GOLA approval is required.





