



HIGHER APPRENTICESHIP

# Digital Infrastructure Engineer

Level 4

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# Apprenticeship Framework

The Level 4 Digital Infrastructure Engineer Apprenticeship has been designed with employers in Wales to equip employees with the primary digital infrastructure skills that they need to be able plan, build, and maintain the digital networks the economy depends upon. This apprenticeship programme is designed to provide a robust vocational route to obtaining the skills and knowledge required to succeed as a digital infrastructure engineer.

## Who is this apprenticeship for?

This programme is suitable for those seeking a career in the cutting-edge world of digital infrastructure engineering, or for those wishing to upskill themselves to take on a more responsible role in providing digital infrastructure within their organisation, or for digital infrastructure professionals who want an accredited qualification to affirm their existing experience in the field.

## On completion apprentices will achieve the following:

- Agored Cymru Level 4 Diploma in Digital Infrastructure Engineer
- Level 2 Essential Skill in Application of Number
- Level 2 Essential Skill in Communication



## Benefits of the apprenticeship programme:

**Accelerate Career Growth:** Undertaking the Level 4 Digital Infrastructure Engineer Apprenticeship will fast-track career development by providing invaluable hands-on experience alongside theoretical knowledge. Apprentices will be equipped with the tools to excel as a digital engineer and make a difference in any organisation.

**Industry-Recognised Certification:** Upon successful completion of this programme, apprentices will earn a prestigious industry-recognised certification, providing them with a competitive edge in the job market. Employers value the skills and expertise gained through this apprenticeship, opening doors to exciting opportunities.

**Practical and Real-World Learning:** Our programme emphasises practical, real-world learning. Apprentices will practice skills in a classroom environment and be able to apply within the workplace, collaborating with experienced colleagues who will guide the apprentice through every step of the process.

**Tailored Curriculum:** Our comprehensive curriculum is designed to meet the demands of the digital economy and the infrastructure it depends upon. Apprentices will cover essential topics such as networking principles and fault diagnostics, installing and maintaining IT hardware and equipment, planning and implementing digital network environments, governance and assurance of information systems and processes.

**Experienced and Knowledgeable Advisors:** Throughout the apprenticeship, we will provide access to a network of experienced advisors who will provide guidance, support, and feedback. Apprentices will learn from industry experts with a wealth of knowledge and experience across the digital sector.

## Course Delivery

- Typical duration of 24 months.
- Induction session for apprentices and for their line managers.
- 14x full day technical skills and knowledge workshops.
- Supported by self-study online resources.
- One to One tutor coaching and assessment support sessions
- 4 Essential skills assessment days. (2 Preparation days and 2 Live Task days) \*\*
- 2 hour long essential skills confirmatory tests. \*\*

*\*\*Essential Skills activities are not applicable to apprentices with exemptions.*



# Level 4 Diploma in Digital Infrastructure Engineer

## Course Delivery

This element of the programme will be delivered through blended learning with learners attending full day knowledge and technical skills workshops delivered either face to face or virtually using Microsoft Teams across the 24-month duration of the programme .

Additional development and assessment support will be provided through regular 1-to-1 sessions with a member of the ALS delivery team. An ALS assessor will meet with the learner, either in the workplace or through digital means. (for example, Microsoft Teams) to provide coaching, advice and assessment support.

Learners will also be set tasks to complete between each visit which are tailored to the different needs of each learner and the workplace activities they are involved with.

## Qualification Structure Summary

The Level 4 Diploma in Digital Infrastructure Engineer consists of 6 mandatory units, with a total of 65 credits plus a minimum of 21 optional credits.

Unit rules of combination.

- Mandatory Units (Learners must achieve all 6 units) – 65 credits.
- Optional units – minimum 21 credits.
- The same unit may not be selected at more than one level (e.g. IT Systems Management Level 3 and IT Systems Level 4)

## What you will learn

This programme is made up of a mixture of mandatory units (these have to be completed by all learners as part of the qualification) and optional units (we will work with you to decide what units are relevant to your role, and your business). A brief overview of these units is below.

Mandatory Units	
Unit Title	Level
Professional Practice in an IT Context	4
Health and Safety in an IT Context	3
Working with IT Hardware and Equipment	4
Principles of Information Governance and Assurance	4
Network Environments	4
Network Principles	4

Optional units		
Unit Title	Level	Credits
Principles of Data Management Infrastructure	4	18
Data Management Infrastructure	4	18
Investigating & Defining Customer Requirements for ICT Systems	4	15
Testing IT & Telecoms Systems	4	15
Testing the Security of Information Systems	4	15
IT & Telecom System Security 2	3	8
IT System Operation 2	4	14
Networking Principles	3	10
Principles of Information Security Testing	4	10
Testing the Security of Information Systems	3	12
Principles of Information Security Testing	3	12
IT System Operation	3	12
Remote Support for IT Products and Services	3	9
IT System Management	3	12
Investigating & Defining Customer Requirements for IT Systems	3	12
IT Fault Diagnosis	3	10
Testing IT Systems	3	12
IT Technical Advice and Guidance	3	7
IT System Management	4	15
IT Fault Diagnosis	4	12

IT System Security	4	12
IT Technical Advice and Guidance	4	12
Remote Support for IT Products and Services	4	12
Integrated Development and Operations (DevOps)	3	11
Integrated Development and Operations (DevOps)	4	15
Computer Coding	3	20

## Have any questions about our Level 4 Digital Infrastructure Engineer Apprenticeship?

We are here to help. If you have any further questions or enquiries about the main qualification element of the programme, please contact [info@alstraining.org.uk](mailto:info@alstraining.org.uk)

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## Essential Skills Qualifications

When you agree to undertake an apprenticeship, you may be required to complete Essential Skills as part of your Apprenticeship framework.

### Essential Skills Wales

The Essential Skills Wales (ESW) will be initially assessed via an online Wales Essential Skills Toolkit (WEST) Assessment. Where a Learner already holds an ESW certificate or equivalent qualification this can provide an exemption and learners will not need to complete that ESW element of the programme. Where a Learner is not exempt an Individual Learning Plan (ILP) will be generated from the initial assessment. The modules delivery will include independent learning via WEST, prior to guided learning sessions preparing the Learner for their assessment. ESWs are assessed via controlled tasks and confirmatory tests for Communication and Application of Number.

### Exemptions

If you already hold qualifications, these may be used as 'exemptions' towards your apprenticeship framework. As a result, you will be exempt from achieving that particular Essential Skill, if you wish. This will be discussed with you before you sign up with us and will also be followed up by your assessor before and during your first visit from us.

### Have any questions about Essential Skills?

We are here to help. If you have any further questions or enquiries about Essential Skills element of the programme, please contact [info@alstraining.org.uk](mailto:info@alstraining.org.uk)