

**APPRENTICESHIP** 

# Digital Infrastructure Engineer

Level 3



## 1 Apprenticeship Framework

The Level 3 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 develop as a digital infrastructure engineer.

#### Who is this apprenticeship for?

This programme is suitable for those seeking a developing career in the cuttingedge world of digital infrastructure, for those wishing to upskill themselves to take on a more responsible digital infrastructure role 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 3 Diploma in Digital Infrastructure Engineer
- Essential Skills Wales Level 2 in Communication
- Essential Skills Wales Level 2 in Application of Number



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#### Benefits of the apprenticeship programme:

**Accelerate Your Career Growth:** Undertaking the Level 3 Digital Infrastructure Engineer Apprenticeship, will enhance the apprentice's career by gaining invaluable hands-on experience alongside theoretical knowledge. Apprentices will develop the tools and know how to deliver as a digital engineer and make a difference in the organisation.

**Industry-Recognised Certification:** Upon successful completion of this programme, apprentices will earn an 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 the workplace collaborating with experienced colleagues and supported by ALS professionals who will guide them 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 professionalism, principles of networks, installing and maintaining IT hardware and equipment, supporting 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 offer guidance, coaching, support, and feedback.

#### **Course Delivery**

- Typical duration of 21 months.
- Induction session for apprentices and for their line managers.
- One to One tutor coaching and assessment support sessions.
- Supported by self-study online resources.
- 4 Essential skills assessment days. (2 Preparation days and 2 Live Task days) \*\*
- 2 hour long essential skills confirmatory tests. \*\*

<sup>\*\*</sup>Essential Skills activities are not applicable to apprentices with exemptions.

# Level 3 Diploma in Digital Infrastructure Engineer

#### **Course Delivery**

This programme will primarily be delivered through 1-to-1 sessions with a member of the ALS delivery team, using a mixture of face-to-face and remote learning sessions. An ALS assessor will meet with the learner, either in the workplace or through digital means once a month for approximately two hours to support progress.

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 Agored Cymru Level 3 Diploma in Digital Infrastructure Engineer consists of 6 mandatory units, with a total of 53 credits plus a minimum of 16 optional credits.

#### Unit rules of combination

- Mandatory Units (Learners must achieve all 6 units) 53 credits.
- Optional units minimum 16 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). Below is a brief overview of the units available.

#### **Mandatory Units**

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

#### **Optional units (16 credits required)**

Unit Title	Level	Credits
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
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
Improving Existing Software	3	6
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
Improving Existing Software	4	10
Integrated Development and Operations (DevOps)	3	11
Integrated Development and Operations (DevOps)	4	15
Computer Coding	3	20

## Have any questions about our Level 3 Diploma in Digital Infrastructure Engineer?

We are here to help. If you have any further questions or enquiries about the main qualification element of the programme, please contact at <a href="mailto:info@alstraining.org.uk">info@alstraining.org.uk</a>

# 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 <a href="mailto:info@alstraining.org.uk">info@alstraining.org.uk</a>