



Qualification Specification

# **ProQual Level 3 Award in Understanding Water Networks**

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This qualification is part of ProQual's broad offer of qualifications in the Water Industry Sector.

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## Introduction

The Level 3 Award in Understanding Water Networks is aimed at candidates who wish to demonstrate their knowledge and understanding of regulatory compliance requirements and best practice in Water Networks.

The awarding body for this qualification is ProQual AB. This qualification has been approved for delivery in England and Northern Ireland. The regulatory body for this qualification is Ofqual, and this qualification has been accredited onto the Regulated Qualification Framework (RQF), and has been published in Ofqual's Register of Qualifications.

## Qualification Profile

<b>Qualification Title:</b>	ProQual Level 3 Award in Understanding Water Networks
<b>Qualification Number:</b>	610/4582/2
<b>Level:</b>	Level 3
<b>Total Qualification Time (TQT):</b>	60 Hours
<b>Guided Learning Hours (GLH):</b>	50 Hours
<b>Credit Value:</b>	6 Credits Pass / Fail
<b>Assessment:</b>	Internally assessed and verified by centre staff External quality assured by ProQual Verifiers
<b>Qualification Start Date:</b>	01/08/2024
<b>Qualification Review Date:</b>	01/08/2027

## Learner Profile

There are no formal academic entry requirements for this qualification. Centres should carry out their own initial assessment of a candidate's initial knowledge and skills.

## Qualification Structure

This qualification consists of **one** unit. Candidates must complete the mandatory to achieve this qualification.

Unit Number	Unit Title	Level	TQT	GLH
Mandatory Units – Candidates must complete <b>all</b> units in this group.				
D/651/2662	Introduction to Water Networks	3	60	50

## Centre Requirements

Centres must be approved to deliver this qualification. If your centre is not approved to deliver this qualification, please complete and submit the **ProQual Additional Qualification Approval Form**.

Materials produced by centres to support candidates should:

- Enable them to track their achievements as they progress through the learning outcomes and assessment criteria.
- Provide information on where ProQual's policies and procedures can be viewed.
- Provide a means of enabling Internal and External Quality Assurance staff to authenticate evidence.

### Certification

Candidates who achieve the requirements for this qualification will be awarded:

- A certificate listing all units achieved, and
- A certificate giving the full qualification title:

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#### Claiming certificates

Centres may claim certificates for candidates who have been registered with ProQual and who have successfully achieved the qualification. All certificates will be issued to the centre for successful candidates.

#### Unit certificates

If a candidate does not achieve all of the units required for a qualification, the centre may claim a unit certificate for the candidate which will list all of the units achieved.

#### Replacement certificates

If a replacement certificate is required a request must be made to ProQual in writing. Replacement certificates are labelled as such and are only provided when the claim has been authenticated. Refer to the Fee Schedule for details of charges for replacement.

## Assessment Requirements

Each candidate is required to produce a portfolio of evidence which demonstrates their achievement of all of the learning outcomes and assessment criteria for each unit.

Evidence can include:

- Observation report by assessor
- Assignments/projects/reports
- Professional discussion
- Witness testimony
- Candidate product
- Worksheets
- Record of oral and written questioning
- Recognition of Prior Learning

Candidates must demonstrate the level of competence described in the units. Assessment is the process of measuring a candidate's skill, knowledge and understanding against the standards set in the qualification.

Centre staff assessing this qualification must be **occupationally competent** and qualified to make assessment decisions.. Assessors who are suitably qualified may hold a qualification such as, but not limited to:

- ProQual Level 3 Certificate in Teaching, Training and Assessment.
- ProQual Level 3 Award in Education and Training.
- ProQual Level 3 Award in Assessing Competence in the Work Environment.  
*(Suitable for assessment in the workplace only.)*
- ProQual Level 3 Award in Assessing Vocational Achievement.  
*(Suitable for assessment taking place in a simulated training environment only.)*

Candidate portfolios must be internally verified by centre staff who are **occupationally knowledgeable** and qualified to make quality assurance decisions. Internal verifiers who are suitably qualified may hold a qualification such as:

- ProQual Level 4 Award in the Internal QA of Assessment Processes and Practice.
- ProQual Level 4 Certificate in Leading the Internal QA of Assessment Processes and Practice.

**Occupationally competent** means capable of carrying out the full requirements contained within a unit. **Occupationally knowledgeable** means possessing relevant knowledge and understanding.

## Enquiries, Appeals and Adjustments

Adjustments to standard assessment arrangements are made on the individual needs of candidates. ProQual's Reasonable Adjustments Policy and Special Consideration Policy sets out the steps to follow when implementing reasonable adjustments and special considerations and the service that ProQual provides for some of these arrangements.

Centres should contact ProQual for further information or queries about the contents of the policy.

All enquiries relating to assessment or other decisions should be dealt with by centres, with reference to ProQual's Enquiries and Appeals Procedures.



## Units – Learning Outcomes and Assessment Criteria

<b>Title:</b>		Introduction to Water Networks		<b>Level:</b>	3
<b>Unit Number:</b>		D/651/2662	<b>TQT:</b>	60	<b>GLH:</b> 50
<b>Learning Outcomes</b> <i>The learner will be able to:</i>			<b>Assessment Criteria</b> <i>The learner can:</i>		
1	Understand regulatory compliance with respect to Water Networks.	1.1	Explain the regulatory framework with regards to the Water Industry.		
		1.2	Identify legislation and regulations pertaining to the Water Network.		
		1.3	Identify relevant industry health and safety standards.		
		1.4	Explain how regulatory performance is measured.		
		1.5	Explain the importance of good customer service.		
2	Understand the design requirements of the Water Network.	2.1	State the minimum levels of service required from the Water Network.		
		2.2	Explain the minimum levels of service required from the Water Network.		
		2.3	Explain, with examples, how to complete basic calculations relating to the Water Network, including: <ul style="list-style-type: none"> <li>• Pressure.</li> <li>• Flow.</li> <li>• Velocity.</li> <li>• Storage capacity.</li> <li>• Turnover.</li> <li>• Flushing times.</li> </ul>		

2	Continued	2.4	<p>Describe the key components and their functions in a Water Network, including:</p> <ul style="list-style-type: none"> <li>• Pipes. <ul style="list-style-type: none"> <li>○ Valves.</li> <li>○ Gate.</li> <li>○ Butterfly.</li> <li>○ Hydrant.</li> <li>○ Washout.</li> <li>○ Non-return.</li> <li>○ Pressure reducing/sustaining.</li> <li>○ Air.</li> </ul> </li> <li>• Pumps.</li> <li>• Service reservoirs and towers.</li> <li>• Meters.</li> </ul>
		2.5	<p>List and describe materials used in the construction of water pipes, including factors that influence the selection.</p>
3	Understand the principles of and best practice associated with the successful operation of the Water Network.	3.1	<p>Describe the Water Quality Regulations and Water Hygiene practices associated with Water Network operations.</p>
		3.2	<p>Explain Tower and Service Reservoir operation, including:</p> <ul style="list-style-type: none"> <li>• Turnover.</li> <li>• Retention time.</li> <li>• Chlorine residual level.</li> <li>• Emergency overflow.</li> </ul>
		3.3	<p>Explain the Tower and Service Reservoir cleaning procedure.</p>
4	Understand the causes of failure and customer complaints relating to the performance of the Water Network and the techniques used to restore the performance of the Water Network.	4.1	<p>Describe how demand management is achieved and how it relates to regulatory performance.</p>
		4.2	<p>Describe how leakage is managed and how it relates to regulatory performance.</p>
		4.3	<p>Describe the causes of poor performance of the Water Network, including:</p> <ul style="list-style-type: none"> <li>• Leaks.</li> <li>• Burst mains.</li> <li>• Dirty water.</li> <li>• Water quality.</li> <li>• Low pressure.</li> <li>• No water.</li> </ul>

4	<i>Continued</i>	4.4	Describe the procedures followed to investigate and determine the causes of poor performance.
		4.5	Describe the procedures followed when managing incidents.
		4.6	Explain regulatory requirements relating to reporting of poor performance.
5	Understand the techniques used to restore the performance of the water network.	5.1	Describe the techniques used to repair the Water Network.
		5.2	Compare trench and trenchless techniques for repairing or replacing water mains.
		5.3	Explain the procedures required to be followed when repairing and/or replacing components of the network.
		5.4	Explain the Flushing procedure and when it is used.
6	Understand the need for the Water Industry to become more resilient.	6.1	Explain the customer and regulatory drivers for increased resilience of the Water Network.
		6.2	State the potential impacts of climate change on the supply of water to customers.
		6.3	Describe the effect of climate change on a risk and resilience strategy.

## Appendix One – Command Verb Definitions

The table below explains what is expected from each **command verb** used in an assessment objective. Not all verbs are used in this specification

<b>Apply</b>	Use existing knowledge or skills in a new or different context.
<b>Analyse</b>	Break a larger subject into smaller parts, examine them in detail and show how these parts are related to each other. This may be supported by reference to current research or theories.
<b>Classify</b>	Organise information according to specific criteria.
<b>Compare</b>	Examine subjects in detail, giving the similarities and differences.
<b>Critically Compare</b>	As with compare, but extended to include pros and cons of the subject. There may or may not be a conclusion or recommendation as appropriate.
<b>Describe</b>	Provide detailed, factual information about a subject.
<b>Discuss</b>	Give a detailed account of a subject, including a range of contrasting views and opinions.
<b>Explain</b>	As with describe, but extended to include causation and reasoning.
<b>Identify</b>	Select or ascertain appropriate information and details from a broader range of information or data.
<b>Interpret</b>	Use information or data to clarify or explain something.
<b>Produce</b>	Make or create something.
<b>State</b>	Give short, factual information about something.
<b>Specify</b>	State a fact or requirement clearly and in precise detail.



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