Qualification Specification

ProQual Level 5 Diploma in Draughting

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This qualification is part of ProQual's broad offer of qualifications in the Construction and Civil Engineering Sector.

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Introduction

The ProQual Level 5 Diploma in Draughting provides a nationally recognised qualification for draughting personnel who have completed a Level 3 Draughting qualification or an equivalent Class 2 ME Draughtsman course and who are progressing into more advanced technical and design responsibilities.

This qualification develops the higher-level analytical, technical, and evaluative skills required to undertake complex design and draughting activities within engineering, construction, and built environment projects. Learners will strengthen their ability to assess design information, apply parametric modelling principles, plan technical tasks, and coordinate multidisciplinary design outputs in line with organisational, regulatory, and project requirements.

The aims of this qualification are:

- Develop advanced draughting and design skills to support complex technical tasks and project requirements.
- Equip learners to apply modelling principles, industry standards, and information management processes to produce accurate and coordinated design outputs.
- Support progression into senior draughting roles, specialist technical positions, or design coordination responsibilities within engineering and construction environments.

There are 2 pathways available:

- Pathway 1: Level 5 Diploma in Draughting – Electrical and Mechanical.
- Pathway 2: Level 5 Diploma in Draughting – Construction.

The awarding body for this qualification is ProQual AB. This qualification has been approved for delivery in England. 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

Qualification Title:	ProQual Level 5 Diploma in Draughting
Qualification Number:	610/6996/6
Level:	5
Total Qualification Time (TQT):	Minimum 470 Hours (Dependent on Pathway) Minimum 47 Credits
Guided Learning Hours (GLH):	Minimum 310 Hours (Dependent on Pathway)
Assessment:	Pass/Fail
	Internally assessed and verified by centre staff
	Externally quality assured by ProQual Verifiers
Qualification Start Date:	04/02/2026
Qualification Review Date:	04/02/2029

Learner Profile

Candidates who complete this qualification should hold:

• Level 3 Diploma in Design Draughtsman.

OR

• Have successfully completed a Class 2 ME Design Draughtsman course or equivalent Draughtsman qualification.

OR

• Level 3 Diploma in Electrical and Mechanical Draughtsman.

OR

• Have successfully completed a Class 2 ME Draughtsman Electrical and Mechanical course or equivalent Draughtsman qualification.

Centres should carry out an initial assessment of candidate skills and knowledge to identify any gaps and help plan the assessment.

Candidates must be at least **18 years old** on the day that they are registered for this qualification, centres are reminded that no assessment activity may take place before a candidate has been registered.

Qualification Structure

Each pathway consists of **four mandatory units**. Candidates must complete all mandatory units within their chosen pathway to complete this qualification.

Pathway One: Electrical and Mechanical

Unit Number	Unit Title	Level	TQT	GLH
Mandatory Units – Candidates must complete **all** units in this group.				
K/651/9155	Conduct and Evaluate Reviews of Draughting Activities	5	90	60
L/651/9156	Plan and Analyse Requirements for Technical Tasks	5	80	50
M/651/9157	Parametric Modelling Principles and Techniques	5	90	60
R/651/9158	Design and Technical Drawing in Electrical and Mechanical Building Services Engineering	5	220	150

Pathway Two: Construction

Unit Number	Unit Title	Level	TQT	GLH
Mandatory Units – Candidates must complete **all** units in this group.				
K/651/9155	Conduct and Evaluate Reviews of Draughting Activities	5	90	60
L/651/9156	Plan and Analyse Requirements for Technical Tasks	5	80	50
M/651/9157	Parametric Modelling Principles and Techniques	5	90	60
T/651/9159	Design and Technical Drawing in Construction and Civil Engineering	5	210	140

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.

Centres must have the appropriate equipment to enable candidates to carry out the practical requirements of this qualification.

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:

ProQual Level 5 Diploma in Draughting - Electrical and Mechanical

OR

ProQual Level 5 Diploma in Draughting - Construction

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.

Assessors may wish use to use a checklist or evidence matrix to organise and track the assessment outcomes that have been achieved, but these do not, in themselves, constitute evidence of achievement.

An assessor's report or witness statement alone is unlikely to be sufficient evidence of achievement. Reports and statements should always be accompanied by photographic and/or video evidence.

Where a knowledge-based assessment criteria is included within an otherwise competence-based learning outcome, it is expected that it be assessed within the context of the required practical competency.

It is expected that competence of each assessment criteria will be observed at least twice before it is awarded. A single piece of evidence may be used to cover multiple assessment criteria.

Evidence of practical skills may be demonstrated in a simulated environment, where appropriate.

Centres may use the appropriate ProQual Candidate Workbook to organise candidate evidence or may use their own portfolio templates.

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 taking place in a working environment 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

Title:	Conduct and Evaluate Draughting Activities			**Level:**	5
Unit Number:	K/651/9155	**TQT:**	90	**GLH:**	60

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Review and evaluate technical plans, design, solutions, and outputs.	1.1	Review technical plans to assess suitability for intended tasks.
		1.2	Evaluate completeness and accuracy of design solutions against requirements.
		1.3	Identify risks or discrepancies in technical documentation and purpose improvements.
		1.4	Present review findings in clear, evidence-based reports.
2	Understand how to evaluate compliance with standards, specifications, and documentation protocols.	2.1	Interpret applicable standards, codes of practice, and tolerances in relation to design tasks.
		2.2	Assess compliance of drawings, designs, and outputs with relevant standards and conventions.
		2.3	Evaluate data management practices for compliance with organisational, legislative, and regulatory requirements.
3	Review risk, health, and safety arrangements.	3.1	Evaluate task risk assessments for completeness and accuracy.
		3.2	Assess health and safety compliance in task environments, including PPE and equipment requirements.

3	*Continued*	3.3	Evaluate adequacy of emergency and first aid procedures for design-related tasks.
		3.4	Recommend improvements to enhance safety, compliance, and preparedness.
4	Evaluate adequacy of resources and team capacity.	4.1	Assess task resources for suitability and sufficiency.
		4.2	Evaluate team capability to meet technical and operational requirements.
		4.3	Analyse the impact of qualifications, skills gaps, or limitations on task effectiveness.
		4.4	Recommend evidence-based solutions to improve resources and capability.

Additional Assessment Information

This unit focuses on developing the knowledge and skills required to conduct and evaluate draughting activities within a technical draughting or engineering environment. Learners will review and assess draughting plans, documentation, and outputs for accuracy, suitability, and compliance with relevant standards, specifications, and organisational requirements. The unit emphasises the application of professional judgement to identify risks, discrepancies, and opportunities for improvement in draughting documentation and processes.

Learners will evaluate health and safety arrangements, assess the adequacy of resources and team capacity, and make evidence-based recommendations to enhance quality, safety, and performance. Completion of this unit supports progression into senior or supervisory technical roles where analytical review, assurance, and compliance oversight are key elements of professional practice.

Learning Outcome 2 is **knowledge based**. This means that evidence is expected to take the form of candidate's written work and/or records of appropriate professional discussions.

Learning Outcomes 1, 3 and 4 are **competency based**. This means that the candidate is expected to perform the tasks, and demonstrate the level of competence, outlined in the assessment criteria.

Title:	Plan and Analyse Requirements for Technical Tasks			Level:	5
Unit Number:	L/651/9156	TQT:	80	GLH:	50

Learning Outcomes *The learner will be able to:*		Assessment Criteria *The learner can:*	
1	Understand how to analyse task requirements from project briefings.	1.1	Interpret task briefing information to identify unit output requirements.
		1.2	Identify task parameters including reference points, POC, and unit roles.
		1.3	Determine the financial and contextual elements impacting task delivery.
		1.4	Evaluate the completeness and clarity of task briefing.
2	Plan the use of project management tools and stages.	2.1	Select and identify appropriate project management tools for effective task planning.
		2.2	Evaluate how project stages inform the task planning process.
		2.3	Apply project management terminology and principles accurately when planning technical tasks.
		2.4	Critically evaluate the roles and responsibilities of key personnel in task planning.
3	Understand contractual and commercial considerations for task planning.	3.1	Define key contractual and commercial terminology relevant to task planning.
		3.2	Identify and interpret contract documentation applicable to task planning.

3	*Continued*	3.3	Evaluate the commercial impact on contractual obligations in a task context.
		3.4	Review quality control measures related to planning and contractual performance.
4	Evaluate cost factors affecting task planning.	4.1	Identify key cost components related to task execution.
		4.2	Evaluate the influence of labour, materials, and equipment on task costs.
		4.3	Apply appropriate methods to calculate and compare cost requirements for technical tasks.
		4.4	Interpret cost data to inform task budget planning decisions.

Additional Assessment Information

This unit focuses on developing the learner's ability to plan and analyse the requirements for complex technical tasks within a project environment. Learners will interpret and evaluate project briefings to identify task parameters, contextual factors, and roles, while applying structured project management tools and principles to plan task delivery. The unit also explores the interpretation of contractual and commercial documentation, examining how such considerations influence planning and performance. Additionally, learners will evaluate cost factors, applying analytical methods to assess and manage labour, materials, and equipment costs to support informed budgeting and decision-making in technical project contexts.

Learning Outcomes 1 and 3 are **knowledge based**. This means that evidence is expected to take the form of candidate's written work and/or records of appropriate professional discussions.

Learning Outcomes 2 and 4 are **competency based**. This means that the candidate is expected to perform the tasks, and demonstrate the level of competence, outlined in the assessment criteria.

Title:	Parametric Modelling Principles and Techniques			Level:	5
Unit Number:	M/651/9157	TQT:	90	GLH:	60

Learning Outcomes *The learner will be able to:*		Assessment Criteria *The learner can:*	
1	Demonstrate a critical understanding of parametric modelling.	1.1	Identify the role of parametric modelling in supporting and project lifestyle.
		1.2	Evaluate how parametric modelling integrates with project information management processes, including Common Date Environment (CDE).
		1.3	Evaluate the significance of project information requirements for modelling outputs (e.g., standards, protocols, and delivery milestones).
		1.4	Review the types of documentation and standards required to support effective modelling practice.
		1.5	Evaluate individual and team responsibilities that influence the quality of parametric models.
2	Understand project information and processes and modelling protocols.	2.1	Critically review the structure, purpose, and application of project modelling protocols.
		2.2	Analyse how modelling requirements and protocols influence task planning and delivery.
		2.3	Evaluate authoring processes and key components required to ensure accurate modelling outputs.
3	Understand date security and information exchange in modelling environments.	3.1	Explain the principles of secure information handling within modelling environments.
		3.2	Evaluate strategies for protecting modelling data, including sensitivity assessments and breach management.

3	*Continued*	3.3	Review the requirements for responding to modelling-related data breaches or errors.
		3.4	Critically review approaches for approving and exchanging model information securely.
4	Examine and apply collaboration and coordination methods within parametric modelling projects.	4.1	Apply methods of file sharing, element borrowing, and coordination in modelling environments.
		4.2	Evaluate approaches for synchronising models across multiple users or teams.
		4.3	Analyse how collaborative tools support project efficiency, accuracy and decision-making.
5	Critically evaluate and apply parametric modelling approaches to resolve design and project issues.	5.1	Apply the principles of parametric modelling and their application to project problem-solving.
		5.2	Evaluate the implications of model warnings for design accuracy and project outcomes.
		5.3	Apply interface checking tools to identify and resolve model conflicts.
		5.4	Analyse how modelling phases (e.g., existing, proposed, demolition) can be managed to reflect project requirements.
		5.5	Evaluate techniques for generating, interpreting, and applying schedules derived from parametric models.
6	Apply parametric modelling techniques to create, manage, and produce coordinated building design information within a digital modelling environment.	6.1	Create parametric model elements that reflect defined design intent and project constraints.
		6.2	Configure model relationships and parameters to control layout, spacing, and behaviour.
		6.3	Integrate multiple building systems or model elements within a coordinated digital model.
		6.4	Manage model data to support analysis, visibility control, and design development.
		6.5	Produce structure design outputs appropriate to the stage of development.

Additional Assessment Information

This unit focuses on developing a critical understanding of parametric modelling and its role within project environments. Learners will explore how modelling supports the project life cycle, integrates with information management processes, and aligns with standards and protocols. The unit also examines data security, collaboration, and coordination in shared modelling environments, as well as how parametric modelling techniques are applied to resolve design and project issues.

Learning Outcome 1, 2 and 3 are **knowledge based**. This means that evidence is expected to take the form of candidate's written work and/or records of appropriate professional discussions.

Learning Outcome 4, 5 and 6 are **competency based**. This means that the candidate is expected to perform the tasks, and demonstrate the level of competence, outlined in the assessment criteria.

Title:	Design and Technical Drawing in Electrical and Mechanical Building Services Engineering			Level:	5
Unit Number:	R/651/9158	TQT:	220	GLH:	150

Learning Outcomes *The learner will be able to:*		Assessment Criteria *The learner can:*	
1	Understand how to interpret design requirements for electrical and mechanical building services.	1.1	Analyse design briefs and project data to determine electrical and mechanical design requirements.
		1.2	Evaluate applicable standards, regulations, and performance criteria that influence system designs.
		1.3	Identify key parameters that affect system sizing, safety, and integration across building services.
2	Apply analytical methods to develop electrical services design solutions.	2.1	Determine calculation requirements for electrical power, lighting, and alarm systems based on project criteria.
		2.2	Carry out analytical assessments to inform electrical system sizing, distribution, protection, and performance.
		2.3	Evaluate alternative electrical system configurations to meet functional, safety, and operational requirements.
		2.4	Interpret calculation outputs to justify selected design solutions.
3	Produce electrical engineering design outputs and technical drawings.	3.1	Develop electrical system schematics, layouts, and documentation that reflect calculated design requirements.
		3.2	Produce coordinated drawings and schedules using recognised conventions and industry practices.

3	*Continued*	3.3	Review electrical design outputs to confirm accuracy, compliance, and suitability for integration with other systems.
		3.4	Prepare design information in formats suitable for project review, coordination, or approval.
4	Apply analytical methods to develop mechanical building services design solutions.	4.1	Determine calculation requirements for water, heating, ventilation, and air-conditioning systems in line with project performance needs.
		4.2	Apply analytical methods to evaluate flow characteristics, heat transfer, thermal performance, air volume requirements.
		4.3	Assess mechanical system sizing requirements, including equipment, distribution, and control components.
		4.4	Compare mechanical system options to establish appropriate solutions for project constraints and operational criteria.
		4.5	Interpret calculation outputs to justify mechanical design decisions.
5	Produce mechanical building services design outputs and technical drawings.	5.1	Create mechanical system drawings, diagrams, and specifications that reflect calculated design outcomes.
		5.2	Produce coordinated layouts that support installation planning and integration with other building systems.
		5.3	Review mechanical design outputs to confirm technical accuracy, compliance with standards, and design intent.
		5.4	Develop structured documentation that communicates assumptions, design methods, and system characteristics.
		5.5	Present mechanical design information suitable for project coordination, submission, or review.

6	Coordinate multi-disciplinary electrical and mechanical designs.	6.1	Integrate electrical and mechanical design outputs to support multi-disciplinary project coordination.
		6.2	Analyse potential conflicts, inconsistencies, or alignment issues within combined building services information.
		6.3	Recommend modifications to enhance system compatibility, safety, or overall project performance.
7	Produce design documentation and reports for electrical and mechanical systems.	7.1	Prepare structured design reports that summarise assumptions, analytical methods, and key outcomes.
		7.2	Compile coordinated drawing packages and supporting information suitable for submission or approval.
		7.3	Evaluate documentation for completeness, coherence, and alignment with project and regulatory requirements.

Additional Assessment Information

The unit develops the learner's ability to interpret design requirements and produce coordinated technical drawings for building services engineering systems. Learners analyse design briefs, project data, and applicable standards to develop and justify design solutions across electrical, mechanical, and associated engineering disciplines.

Across these areas, learners apply analytical methods to produce calculations, schematics, layouts, and coordinated drawing packages that support system integration, regulatory compliance, and installation planning. The unit also requires the preparation of structured design documentation and technical reports to support manufacture, installation, and repair, ensuring accuracy, coordination, and alignment with project and technical requirements as set out in the supporting documentation.

Learning Outcome 1 is **knowledge based**. This means that evidence is expected to take the form of candidate's written work and/or records of appropriate professional discussions.

Learning Outcome 2, 3, 4, 5, 6 and 7 are **competency based**. This means that the candidate is expected to perform the tasks, and demonstrate the level of competence, outlined in the assessment criteria.

Title:	Design and Technical Drawing in Construction and Civil Engineering			Level:	5
Unit Number:	T/651/9159	TQT:	210	GLH:	140

Learning Outcomes *The learner will be able to:*		Assessment Criteria *The learner can:*	
1	Understand how to analyse construction design requirements for construction and civil engineering systems.	1.1	Analyse design briefs, contextual information, and project conditions to establish design requirements.
		1.2	Identify performance, safety, and regulatory factors that influence design decisions for building and civil systems.
		1.3	Determine key design parameters relevant to a range of construction elements and drainage systems.
2	Apply analytical methods to develop design solutions.	2.1	Carry out analytical assessments and calculations to support the development of design solutions.
		2.2	Interpret analytical outputs to inform and justify design decisions.
		2.3	Compare alternative design approaches in response to performance requirements and site constraints.
		2.4	Evaluate the implications of selected design solutions on constructability, compliance, and coordination with other systems.
3	Produce technical drawings and details for construction and civil engineering systems.	3.1	Create design drawings and technical details that communicate intent using recognised draughting methods.
		3.2	Develop coordinated drawing packages to support construction, civil, or project delivery requirements.

3	*Continued*	3.3	Review design outputs to confirm accuracy, clarity, and alignment with project and technical standards.
		3.4	Present drawing and design information in formats suitable for review, coordination, or submission.
4	Apply building technologies and construction methods within design solutions.	4.1	Select appropriate building technologies and construction methods to support design development.
		4.2	Evaluate how chosen technologies and methods contribute to the performance and suitability of design solutions.
		4.3	Integrate building technologies into designs to ensure compatibility with project requirements and constraints.
5	Coordinate design information and produce structured design documentation.	5.1	Integrate design information from multiple building and civil engineering systems to ensure coordination.
		5.2	Prepare structured design documentation that summarises design assumptions, methods, and outputs.
		5.3	Compile drawing packages and supporting materials suitable for contractual, tender, or construction purposes.
		5.4	Evaluate design documentation and coordinated outputs for completeness, coherence, and compliance with project requirements.

Additional Assessment Information

This unit develops the learner's ability to analyse construction design requirements and produce coordinated technical drawings for a range of building and civil engineering systems and elements. Learners interpret design briefs, contextual information, and regulatory requirements, and apply analytical methods and calculations to develop and justify appropriate design solutions.

Learners produce accurate technical drawings and coordinated drawing packages for structural and access elements, building fabric, and envelope systems, infrastructure, and temporary works and construction support systems associated with construction and civil engineering projects. The unit also requires the selection and integration of appropriate building technologies and construction methods, coordination of design information across multiple systems, and the preparation of structured design documentation suitable for review, tender, and construction purposes, ensuring compliance, constructability, and technical clarity.

Learning Outcome 1 is **knowledge based**. This means that evidence is expected to take the form of candidate's written work and/or records of appropriate professional discussions.

Learning Outcome 2, 3, 4 and 5 are **competency based**. This means that the candidate is expected to perform the tasks, and demonstrate the level of competence, outlined in the assessment criteria.

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

Apply	Use existing knowledge or skills in a new or different context.
Analyse	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.
Classify	Organise information according to specific criteria.
Compare	Examine subjects in detail, giving the similarities and differences.
Critically Compare	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.
Describe	Provide detailed, factual information about a subject.
Discuss	Give a detailed account of a subject, including a range of contrasting views and opinions.
Explain	As with describe, but extended to include causation and reasoning.
Identify	Select or ascertain appropriate information and details from a broader range of information or data.
Interpret	Use information or data to clarify or explain something.
Produce	Make or create something.
State	Give short, factual information about something.
Specify	State a fact or requirement clearly and in precise detail.

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