

Qualification Manual

EAL Level 3 Diplomas in Gas Utilisation:
ISSUE: 4

This Qualification Manual relates to the following:

- EAL Level 3 Diploma in Gas Utilisation: Core Skills and Knowledge (QCF) (EUSGU001) Qualification number: 600/0577/4
- EAL Level 3 Diploma in Gas Utilisation Metering 2.5 – 16cu/m (QCF) (EUSGU002) Qualification number: 600/0582/8
- EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers and Leisure (QCF) (EUSGU005) Qualification number: 600/0574/9
- EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Domestic Space Heating (QCF) (EUSGU006) Qualification number: 600/0579/8
- EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Domestic Warm Air (QCF) (EUSGU007) Qualification number: 600/0578/6
- EAL Level 3 Diploma in Gas Utilisation Installation: Water Heating and Wet Central Heating (QCF) (EUSGU008) Qualification number: 600/1034/4
- EAL Level 3 Diploma in Gas Utilisation Maintenance: Water Heating and Wet Central Heating (QCF) (EUSGU009) Qualification number: 600/1660/7
- EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Water Heating and Wet Central Heating (QCF) (EUSGU010) Qualification number: 600/1661/9
- EAL Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF) (EUSGU011) Qualification number: 600/0580/4
- EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF) (EUSGU012) Qualification number: 600/0581/6
- EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF) (EUSGU013) Qualification number: 600/0576/2
- EAL Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF) (EUSGU014) Qualification number: 600/1042/3
- EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF) (EUSGU015) Qualification number: 600/1653/X
- EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF) (EUSGU016) Qualification number: 600/1041/1
- EAL Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF) (EUSGU017) Qualification number: 600/1040/X

- EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF) (EUSGU018) Qualification number: 600/1038/1
- EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating and Domestic Warm Air (QCF) (EUSGU019) Qualification number: 600/1039/3
- EAL Level 3 Diploma for Gas Emergency First Call Operative (QCF) (EUSGU020) Qualification number: 600/0575/0
- EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Limited Wet Central Heating and Domestic Warm Air (QCF) (EUSGU0024) Qualification number: 600/2684/4

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1.0 About EAL

Since 1964, **EAL (Excellence, Achievement and Learning Limited)** has been awarding superior vocational qualifications and apprenticeship components for engineering, building services and related sectors.

Developed to the highest technical standard, our qualifications are regularly updated to reflect regulatory and technical changes. We support the providers of our qualifications with an unparalleled level of service to ensure that learners are well prepared for the roles they plan to take on.

EAL recognise the value of skills in the work environment as one of the 5 key drivers of productivity; essential for economic growth and bringing a number of wider social benefits. Through its programme of continuous improvement EAL strives to meet the demand from employers for high performing, high quality products.

For further information please contact EAL Customer Services +44(0)1932 652 400 or visit www.eal.org.uk.

1.1 Equal opportunities and diversity

EAL expects learners to have equal access to qualifications irrespective of their sex, marital status, age, religion, colour, race, nationality or ethnic origin or disability. It is the Project Specialist and consultants (if appropriate) shared responsibility with EAL to ensure that there are no barriers to entry for disabled people, for women or men, or people from different racial groups, other than those directly related to the integrity of units or qualifications.

2.0 Introduction to the Qualifications

What are these qualifications?

These qualifications in gas utilisation cover the knowledge and the skills necessary to carry out a variety of applicable job roles within the downstream gas sector. The qualifications are based on National Occupational Standards (NOS) which describe the skills, knowledge and understanding to undertake a particular job or task to a nationally recognised level of competence.

Who are these qualifications for?

- Individuals who are employed in the gas industry, or wish to learn about the gas industry,
- Learners undertaking EU Skills apprenticeship frameworks.

What do these qualifications cover?

The qualifications cover a wide range of skills, knowledge and competencies including: Core skills and knowledge, gas utilisation metering; installation and maintenance of cookers, tumble dryers, leisure, domestic space heating, water heating, wet central heating and domestic warm air. The structure of each of the qualifications is listed in Section 3.

2.1 Accreditation & Industry Support for this Qualification

The qualifications:

- Are Qualification Credit framework (QCF) qualifications accredited by Ofqual at level three,
- Are supported by Energy & Utility Skills,
- Are recognised and supported by the industry and will facilitate Gas Safe Registration in the categories appropriate to the specific qualification achieved.
- Has been developed in conjunction with industry.

2.2 Achievement of the Qualification & ‘Stand Alone Units’

The qualification is gained when all the necessary units have been achieved. The centre will then be able to apply for the learner's Diploma. The learner will also receive a Certificate of Unit Credit, listing all the units they have achieved. However if they don't manage to complete the full qualification learners can still claim a Certificate of Unit Credit for the units achieved therefore, they still have proof of their ability and could complete the qualification at a later date.

Units can also be taken individually (stand alone). This manual *must be* used in conjunction with the delivery and assessment of any individual units to ensure that assessment requirements and methodologies are consistently applied.

2.3 Relation to Other Qualifications

The qualifications relates to:

- EAL Qualifications in Key Skills, Functional Skills and Essential Skills Wales,
- EAL L2 Diploma in Domestic Heating,
- EAL L2 Diploma in Plumbing and Heating,
- EAL Level 3 NVQ Diploma in Building Services Engineering and Technology and Project Management (QCF).

Details on these can be obtained from the EAL Website or alternatively contact:

- EAL Customer Services
- Tel: +44(0)1932 652 400
- Email: customercare@eal.org.uk.

2.4 Qualification Support Materials

The following materials are available for this qualification:

- **Performance Units:**
These are nationally recognised units. They contain the performance to be assessed, and the evidence required from the learner to demonstrate their competence.
- **Knowledge Units/Knowledge and Simulated Practical Units:**
Also nationally recognised, these contain the learning outcomes and assessment criteria.
- **Simulated practical assessment record:**
Contain the simulated practical assessments to be undertaken.
- **Delivery Advice Documents:**
Where applicable the delivery advice is tailored specifically for the knowledge unit. This guidance can be used to support and inform the in-centre schemes of work and lesson plans.
- **PowerPoint Slides:**
Where applicable the knowledge unit has a tailored set of referenced slides which can be used in presentations and handouts.
- **Learner Book:**
This book explains to the learner how they will be assessed in the performance units, and also gives ideas for evidence. It can be given to the learner during induction to ensure they understand the assessment requirements.

All these materials can be accessed from the EAL Website www.eal.org.uk.

3.0 Rule of Combination (Qualification Structure)

EAL Level 3 Diploma in Gas Utilisation: Core Skills and Knowledge (QCF) (EUSGU001)

This is a knowledge only qualification designed to provide underpinning knowledge for the gas industry. These units may be completed as a stand alone qualification; or may be completed as an introductory part of a larger qualification. However, taken as a stand alone qualification, will not be sufficient for eligibility for entry to the Gas Safe Register, via any assessment only route (eg. ACS).

All units below are mandatory and must be completed:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

EAL Level 3 Diploma in Gas Utilisation Metering 2.5 – 16cu/m (QCF) (EUSGU002)

**Completion of this Qualification Combination will enable Gas Registration in the following categories:
CMA 1, MET 1 & 2, MET 4, REGT 1**

Performance Units should be undertaken after the relevant knowledge units.

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.1	Specific Core Metering	3	23	60	D/502/8486
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	3	16	K/502/8376
QDSG2/3.12	Install Gas Meters and Regulators 2.5 to 16.0m ³ /hr	2	12	50	A/502/8303

EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers and Leisure (QCF) (EUSGU005)

Completion of this Qualification Combination will enable Gas Registration in the following categories:
CCN 1, CKR 1, LAU 1, LEI 1, CPA 1, MET1/2, CoNGLP1 PD

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.1	Install domestic gas cookers, tumble dryers and leisure appliances	3	10	54	Y/502/8292
QDSG3/3.2	Maintain domestic gas cookers, tumble dryers and leisure appliances	3	13	54	L/502/8452
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	3	16	K/502/8376

EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Domestic Space Heating (QCF) (EUSGU006)

The qualification will be obtained by the learner once they have completed the mandatory units.

**Completion of this Qualification Combination will enable Gas Registration in the following categories:
CCN 1, HTR 1, CPA 1, MET1/2, CoNGLP1 PD**

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	3	16	K/502/8376
QDSG3/3.7	Install domestic gas space heating appliances	3	15	88	D/502/8374
QDSG3/3.8	Maintain domestic gas space heating appliances	3	15	88	R/502/8372

EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Domestic Warm Air (QCF) (EUSGU007)

The qualification will be obtained by the learner once they have completed the mandatory units.

**Completion of this Qualification Combination will enable Gas Registration in the following categories:
CCN 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD**

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	3	16	K/502/8376
QDSG3/3.10	Install domestic gas warm air central heating appliances	3	12	54	F/502/8299
QDSG3/3.11	Maintain gas warm air central heating systems and appliances	3	11	54	T/502/8302
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

EAL Level 3 Diploma in Gas Utilisation Installation: Water Heating and Wet Central Heating (QCF) (EUSGU008)

The qualification will be obtained by the learner once they have completed the mandatory units.

Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.3	Install domestic gas water heaters and wet central heating appliances	3	18	134	Y/502/8454
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	3	16	K/502/8376
QDSG3/3.21	Water compulsory core unit	3	13	90	J/502/8465
QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	2	8	62	H/602/2697
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	2	8	62	F/602/2884
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	2	10	82	Y/602/2888

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EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	3	12	98	M/502/9156
QDHTG2/02	Install and maintain domestic heating systems	2	4	4	R/602/2971
QDHTG3/04	Install, commission, service and maintain domestic heating systems	3	3	4	A/502/8933
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

EAL Level 3 Diploma in Gas Utilisation Maintenance: Water Heating and Wet Central Heating (QCF) (EUSGU009)

The qualification will be obtained by the learner once they have completed the mandatory units.

Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.4	Maintain gas water heating and wet central heating appliances	3	16	75	T/502/8459
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	3	16	K/502/8376
QDSG3/3.21	Water compulsory core unit	3	13	90	J/502/8465
QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	2	8	62	H/602/2697
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	2	8	62	F/602/2884
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	2	10	82	Y/602/2888

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EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	3	12	98	M/502/9156
QDHTG2/02	Install and Maintain domestic heating systems	2	4	4	R/602/2971
QDHTG3/04	Install, commission, service and maintain domestic heating systems	3	3	4	A/502/8933
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Water Heating and Wet Central Heating (QCF) (EUSGU010)

The qualification will be obtained by the learner once they have completed the mandatory units.

**Completion of this Qualification Combination will enable Gas Registration in the following categories:
CCN 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD**

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.3	Install domestic gas water heaters and wet central heating appliances	3	18	134	Y/502/8454
QDSG3/3.4	Maintain gas water heating and wet central heating appliances	3	16	75	T/502/8459
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	16	3	K/502/8376
QDSG3/3.21	Water compulsory core unit	3	13	90	J/502/8465
QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	2	8	62	H/602/2697
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	2	8	62	F/602/2884

Continued

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	2	10	82	Y/602/2888
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	3	12	98	M/502/9156
QDHTG2/02	Install and maintain domestic heating systems	2	4	4	R/602/2971
QDHTG3/04	Install, commission, service and maintain domestic heating systems	3	3	4	A/502/8933
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

EAL Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF) (EUSGU011)

The qualification will be obtained by the learner once they have completed the mandatory units.

Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CPA 1, MET1/2, CoNGLP1 PD

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.1	Install domestic gas cookers, tumble dryers and leisure appliances	3	10	54	Y/502/8292
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	3	16	K/502/8376
QDSG3/3.7	Install domestic gas space heating appliances	3	15	88	D/502/8374

EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF) (EUSGU012)

The qualification will be obtained by the learner once they have completed the mandatory units.

Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CPA 1, MET1/2, CoNGLP1 PD

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.2	Maintain domestic gas cookers, tumble dryers and leisure appliances	3	13	54	L/502/8452
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	3	16	K/502/8376
QDSG3/3.8	Maintain domestic gas space heating appliances	3	15	88	R/502/8372

EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF) (EUSGU013)

The qualification will be obtained by the learner once they have completed the mandatory units.

**Completion of this Qualification Combination will enable Gas Registration in the following categories:
CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CPA 1, MET1/2, CoNGLP1 PD**

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.1	Install domestic gas cookers, tumble dryers and leisure appliances	3	10	54	Y/502/8292
QDSG3/3.2	Maintain domestic gas cookers, tumble dryers and leisure appliances	3	13	54	L/502/8452
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	16	3	K/502/8376
QDSG3/3.7	Install domestic gas space heating appliances	3	15	88	D/502/8374
QDSG3/3.8	Maintain domestic gas space heating appliances	3	15	88	R/502/8372

EAL Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF) (EUSGU014)

The qualification will be obtained by the learner once they have completed the mandatory units.

Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.1	Install domestic gas cookers, tumble dryers and leisure appliances	3	10	54	Y/502/8292
QDSG3/3.3	Install domestic gas water heaters and wet central heating appliances	3	18	134	Y/502/8454
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	16	3	K/502/8376
QDSG3/3.7	Install domestic gas space heating appliances	3	15	88	D/502/8374
QDSG3/3.21	Water compulsory core unit	3	13	90	J/502/8465
QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	2	8	62	H/602/2697

Continued

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	2	8	62	F/602/2884
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	2	10	82	Y/602/2888
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	3	12	98	M/502/9156
QDHTG2/02	Install and maintain domestic heating systems	2	4	4	R/602/2971
QDHTG3/04	Install, commission, service and maintain domestic heating systems	3	3	4	A/502/8933
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF) (EUSGU015)

The qualification will be obtained by the learner once they have completed the mandatory units.

Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, CPA MET1/2, CoNGLP1 PD

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.2	Maintain domestic gas cookers, tumble dryers and leisure appliances	3	13	54	L/502/8452
QDSG3/3.4	Maintain gas water heating and wet central heating appliances	3	16	75	T/502/8459
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	16	3	K/502/8376
QDSG3/3.8	Maintain domestic gas space heating appliances	3	15	88	R/502/8372
QDSG3/3.21	Water compulsory core unit	3	13	90	J/502/8465

Continued

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	2	8	62	H/602/2697
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	2	8	62	F/602/2884
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	2	10	82	Y/602/2888
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	3	12	98	M/502/9156
QDHTG2/02	Install and maintain domestic heating systems	2	4	4	R/602/2971
QDHTG3/04	Install, commission, service and maintain domestic heating systems	3	3	4	A/502/8933
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF) (EUSGU016)

The qualification will be obtained by the learner once they have completed the mandatory units.

**Completion of this Qualification Combination will enable Gas Registration in the following categories:
CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD**

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.1	Install domestic gas cookers, tumble dryers and leisure appliances	3	10	54	Y/502/8292
QDSG3/3.2	Maintain domestic gas cookers, tumble dryers and leisure appliances	3	13	54	L/502/8452
QDSG3/3.3	Install domestic gas water heaters and wet central heating appliances	3	18	134	Y/502/8454
QDSG3/3.4	Maintain gas water heating and wet central heating appliances	3	16	75	T/502/8459
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	16	3	K/502/8376
QDSG3/3.7	Install domestic gas space heating appliances	3	15	88	D/502/8374
QDSG3/3.8	Maintain domestic gas space heating appliances	3	15	88	R/502/8372

Continued

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/3.21	Water compulsory core unit	3	13	90	J/502/8465
QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	2	8	62	H/602/2697
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	2	8	62	F/602/2884
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	2	10	82	Y/602/2888
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	3	12	98	M/502/9156
QDHTG2/02	Install and maintain domestic heating systems	2	4	4	R/602/2971
QDHTG3/04	Install, commission, service and maintain domestic heating systems	3	3	4	A/502/8933
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

EAL Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF) (EUSGU017)

The qualification will be obtained by the learner once they have completed the mandatory units.

Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.1	Install domestic gas cookers, tumble dryers and leisure appliances	3	10	54	Y/502/8292
QDSG3/3.3	Install domestic gas water heaters and wet central heating appliances	3	18	134	Y/502/8454
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	16	3	K/502/8376
QDSG3/3.7	Install domestic gas space heating appliances	3	15	88	D/502/8374
QDSG3/3.10	Install domestic gas warm air central heating appliances	3	12	54	F/502/8299
QDSG3/3.21	Water compulsory core unit	3	13	90	J/502/8465

Continued

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	2	8	62	H/602/2697
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	2	8	62	F/602/2884
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	2	10	82	Y/602/2888
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	3	12	98	M/502/9156
QDHTG2/02	Install and maintain domestic heating systems	2	4	4	R/602/2971
QDHTG3/04	Install, commission, service and maintain domestic heating systems	3	3	4	A/502/8933
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF) (EUSGU018)

The qualification will be obtained by the learner once they have completed the mandatory units.

Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.2	Maintain domestic gas cookers, tumble dryers and leisure appliances	3	13	54	L/502/8452
QDSG3/3.4	Maintain gas water heating and wet central heating appliances	3	16	75	T/502/8459
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	16	3	K/502/8376
QDSG3/3.8	Maintain domestic gas space heating appliances	3	15	88	R/502/8372
QDSG3/3.11	Maintain gas warm air central heating systems and appliances	3	11	54	T/502/8302
QDSG3/3.21	Water compulsory core unit	3	13	90	J/502/8465

Continued

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	2	8	62	H/602/2697
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	2	8	62	F/602/2884
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	2	10	82	Y/602/2888
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	3	12	98	M/502/9156
QDHTG2/02	Install and maintain domestic heating systems	2	4	4	R/602/2971
QDHTG3/04	Install, commission, service and maintain domestic heating systems	3	3	4	A/502/8933
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating and Domestic Warm Air (QCF) (EUSGU019)

The qualification will be obtained by the learner once they have completed the mandatory units.

**Completion of this Qualification Combination will enable Gas Registration in the following categories:
CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD**

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.1	Install domestic gas cookers, tumble dryers and leisure appliances	3	10	54	Y/502/8292
QDSG3/3.2	Maintain domestic gas cookers, tumble dryers and leisure appliances	3	13	54	L/502/8452
QDSG3/3.3	Install domestic gas water heaters and wet central heating appliances	3	18	134	Y/502/8454
QDSG3/3.4	Maintain gas water heating and wet central heating appliances	3	16	75	T/502/8459
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	16	3	K/502/8376
QDSG3/3.7	Install domestic gas space heating appliances	3	15	88	D/502/8374
QDSG3/3.8	Maintain domestic gas space heating appliances	3	15	88	R/502/8372

Continued

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/3.10	Install domestic gas warm air central heating appliances	3	12	54	F/502/8299
QDSG3/3.11	Maintain gas warm air central heating systems and appliances	3	11	54	T/502/8302
QDSG3/3.21	Water compulsory core unit	3	13	90	J/502/8465
QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	2	8	62	H/602/2697
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	2	8	62	F/602/2884
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	2	10	82	Y/602/2888
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	3	12	98	M/502/9156
QDHTG2/02	Install and maintain domestic heating systems	2	4	4	R/602/2971
QDHTG3/04	Install, commission, service and maintain domestic heating systems	3	3	4	A/502/8933
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

EAL Level 3 Diploma for Gas Emergency First Call Operative (QCF) (EUSGU020)

The qualification will be obtained by the learner once they have completed the mandatory units.

**Completion of this Qualification Combination will enable Gas Registration in the following categories:
CESP 1, MET 1/2, MET4, TPCP1A, REGT1, REGT2, CoNGLP1 PD**

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.1	Specific core metering	3	23	60	D/502/8486
QDSG3/2.2	Specific core emergency	3	45	200	K/502/8488
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	16	3	K/502/8376
QDSG2/3.12	Install Gas Meters and Regulators 2.5 to 16.0m ³ /hr	2	12	50	A/502/8303
QDSG3/3.13	Install gas meters and regulators 2.5 to 1076m ³ /hr	3	25	108	L/502/8371
QDSG3/3.15	Dealing with reported upstream gas emergencies	3	32	149	Y/502/8373
QDSG3/3.16	Dealing with reported downstream gas emergencies	3	32	150	T/502/8378
QDSG3/3.17	Strength Testing, gas tightness testing and direct purging -IGE/UP/1A	3	12	58	M/502/8380

EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Limited Wet Central Heating and Domestic Warm Air (QCF) (EUSGU0024)

The qualification will be obtained by the learner once they have completed the mandatory units.

Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD

Learners **MUST** undertake the gas core skills and knowledge units (Q DSG 1.1 – 1.5) prior to any other gas units.

Performance Units should be undertaken after the relevant knowledge units

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/1.1	Understanding health and safety in gas utilisation	3	11	70	M/502/8461
QDSG3/1.2	Understanding scientific principles in gas utilisation	3	4	30	A/502/8463
QDSG3/1.3	Understanding combustion and properties of gas	3	15	110	M/502/8475
QDSG3/1.4	Understanding buildings, services and structures	3	12	90	A/502/8480
QDSG3/1.5	Understanding gas safety	3	15	110	Y/502/8485

To be undertaken after units above:

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDSG3/2.3	Specific core installation & maintenance	3	21	120	H/502/8487
QDSG3/3.2	Maintain domestic gas cookers, tumble dryers and leisure appliances	3	13	54	L/502/8452
QDSG3/3.4	Maintain gas water heating and wet central heating appliances	3	16	75	T/502/8459
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	3	19	115	T/502/8381
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	2	3	16	K/502/8376
QDSG3/3.8	Maintain domestic gas space heating appliances	3	15	88	R/502/8372
QDSG3.11	Maintain gas warm air central heating systems and appliances	3	11	54	T/502/8302
QDSG3/3.21	Water compulsory core unit	3	13	90	J/502/8465

Continued

EAL Code	Unit Title	Level	Credit	GLH	Ofqual Code
QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	2	8	62	H/602/2697
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	2	8	62	F/602/2884
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	2	10	82	Y/602/2888
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	3	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	3	12	98	M/502/9156
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	3	12	102	T/502/9157

4.0 Centre & Qualification Approval

Centres wishing to run the qualification will need to comply with the Qualification Manual and EAL's centre recognition criteria for this qualification upon accreditation and launch. Centres must also put in place the appropriate physical and human resources and administration systems to effectively run the qualification.

For *existing* EAL Centres to put the qualification on your centre remit:

- To add this Qualification to your Centre Qualification remit create and complete a Qualification Approval Application form in Smarter Touch and submit to EAL.

For *non* EAL Centres to gain centre approval to run the qualification:

- Please contact the EAL Customer Services Department who will be delighted to hear from you:
Tel: +44 (0)1923 652400
Fax: +44 (0)1923 652401
Email: customercare@eal.org.uk

5.0 Profiles & Requirements

The centre personnel involved in this qualification must meet the requirements in this section.

5.1 Assessors Requirements for EU Skill's Gas Units (QDSG/QDNG)

The centre MUST nominate all Assessors to the Awarding Organisation for approval prior to them conducting any assessments. Assessors may be employed by the Centre (Centre Based Assessors) or be work based (Workplace Assessors) who may or may not be from the same organisation as the Learners.

Assessors MUST be vocationally and occupationally competent in the areas they are assessing and have a thorough knowledge of the qualification units being assessed.

In addition to the qualifications listed below, the Assessor must be able to provide appropriate documented evidence that demonstrates they have a minimum of 5 years proven occupational experience in the activities they will be assessing. Particular attention should be paid to providing evidence of occupational experience in the gas safety critical areas being assessed.

Where Assessors undertake assessments in the workplace, and are not supported by a suitable gas operative, then they or their employer must be a member of an appropriate Gas Registration Body in accordance with the Gas Safety (Installation and Use) Regulations. In these circumstances they should also hold suitable insurance for this activity.

Assessors Qualifications for EU Skill's Gas Units (QDSG/QDNG)

Assessors must be technically qualified in domestic gas installation / maintenance and hold one of the following qualifications (**see note below for special arrangements for Gas Smart Metering**):

- C&G / SQA - S/NVQ in Domestic Natural Gas (Level 3);
or
- C&G - 662 Certificate for Service Engineers (Gas);
or
- C&G - 598-2 Certificate in Gas Installation Studies;
or
- C&G - 660 Certificate in Gas Fitting - Final

This list is not considered exhaustive and other 'Mechanical Engineering Services' (MES) or 'Building Engineering Services' (BES) qualifications at Level 3/SCQF Level 6 or equivalent may be considered acceptable. Centres must submit requests to confirm the acceptability of other qualifications to their External Verifier for a decision regarding the acceptability of other qualifications. The External Verifier must keep a record of any such decisions.

In addition to the above qualifications, all Assessors must hold a current certificate of gas safety competence in the areas of gas work they will be assessing that is not more than 5 years old (**either current ACS Certificates of Gas Safety Competence or a 6012/S/NVQ are acceptable**).

Continued

Centre Based Assessors

For EU Skill's Gas Units (QDSG/QDNG) Assessors must hold:

- QCF Level Three Award “Assessing Vocationally Related Achievement”
or
- QCF Level Three Certificate “Assessing Vocationally Related Achievement”
or
- A1* or D32 /D33 with an Upgrade to A1 as a minimum
or
- SQA Accredited Learning and Development Unit L&D 9DI – Assess workplace competence using direct and indirect methods (replaces Units A1)*

Workplace Assessors

For EU Skill's Gas Units (QDSG/QDNG) Assessors must hold:

- QCF Level Three Award “Assessing Competence in the Work Environment”
or
- QCF Level Three Certificate “Assessing Vocationally Related Achievement”
or
- SQA Accredited Learning and Development Unit L&D 9D Assess workplace competence using direct methods
or
- A2 or D32 with an upgrade to A2 as a minimum *

* The Teaching Qualification for Secondary Education (TQSE) or the Teaching Qualification for Further Education (TQFE) (which is recognised in Scotland) these awards are acceptable providing they are the versions that are recognised as equivalents to the A1 award plus appropriate CPD.

Assessors holding D units must have evidence of Continuing Professional Development (CPD) to demonstrate compliance with the A units.

Note: A qualified Assessor shall supervise ‘Candidate Assessors’ who are working towards their Assessor qualifications. They should have a clear action plan for achieving the Assessor qualification(s).

Assessor approval will be withdrawn if the qualification / units have not been attained within 18 months. Evidence of CPD will be sought by the External Verifier for all Assessors approved to assess for the centre.

Note:

Special arrangements for assessments carried out in EUSGU023: Diploma in Gas Smart Metering 2.5 - 6m³/hr (QCF Level 2; SCQF Level 6) only

While holding one of the previously listed industry qualifications is not a mandatory requirement in this case, Assessors must be technically qualified in domestic gas installation / maintenance and hold a current certificate of gas safety competence that includes Gas Metering and is not more than 5 years old (**either current ACS Certificates of Gas Safety Competence or a 6012 S/NVQ are acceptable**).

Workplace evidence may be gathered by a trained but not necessarily qualified assessor to form a portfolio that is then assessed as diverse evidence, by a qualified assessor, in line with the general requirements set out in the Assessment Strategy, Appendix F.

5.2 Assessors Requirements for Summit Skill Units

Assessors of any of the following Summit Skill Units (as applicable):

- QDHTG2/02
- QDHTG3/04
- QDMES2/02
- QDMES2/03
- QDMES2/04
- QDMES3/05
- QDMES3/06
- QDMES3/07
- QMES3/02

Must have verifiable relevant industry experience and current knowledge of industry working practices and techniques **relevant to the occupational working area**. This verifiable evidence must be at or above the level being assessed and include one or more of the following:

- A relevant qualification ([See Appendix 1](#))
- Registration with the appropriate industry registration body at the relevant occupational level and grade.

For particular units the verifiable evidence may need to be above the level of the unit being assessed. Where this is the case the requirement will be detailed within the unit.

This occupational competence must include up-to-date knowledge of each industry (for which the assessment is taking place), its settings, legislative and regulatory requirements, codes of practice and guidance.

The occupational competence of assessors must be updated on a regular basis and will be periodically reconfirmed by EAL as part of the quality assurance arrangements.

Assessors of these Summit Skill Units Must:

- Be working towards or have achieved A1 or A2 standards and continue to practice to those standards
- **or**
- Will have achieved D32 or D33 or TQFE/TQSE and possess CPD evidence of practicing to A1 or A2 standards
- **or**
- Will have other suitable “equivalent assessor qualifications” endorsed by the sector skills council Summit Skills, which apply the principles of the A1/A2 Standards.
- Will hold the Level 3 NVQ Certificate in Assessing Vocational Achievement

Assessor Continuing Professional Development (for Summit Skill Units)

The occupational competence of assessors must be updated on a regular basis and be periodically reconfirmed via continuing professional development (CPD) via the assessment centre. This will be quality assured by EAL.

It is the responsibility of each assessor to identify and make use of opportunities for CPD, such as industry conferences, access to trade journals, and SSC and Professional Body/Trade Association events, at least on an annual basis to enhance and upgrade their professional development and technical knowledge. It is imperative that records are kept of all such CPD opportunities/occasions and that they provide evidence of cascading such technical knowledge and industry intelligence to all relevant colleagues.

Further Requirement for Assessors of QMES3/02: ‘Understand and carry out electrical work on domestic plumbing and heating systems and components’

Assessors of this unit **must** have auditable evidence of CPD to the learning outcomes of the unit.

A suitable form of CPD will be for the assessors to undertake the unit themselves, **and** be subject to assessment as required by the unit.

Where the centre assessors do not have the necessary access to CPD, please contact the EAL External Verifier, who will be able to guide you.

The EAL L2 Certificate for Domestic Electrical Installers will not be considered an automatic proxy against this unit (QMES3/02) due to the difference in the unit level and assessment requirements. The qualification can however provide some of the necessary training.

1. A learner who completes this unit is not competent to inspect and test a complete electrical installation. The competencies identified in the unit and demonstrated by the learner are only applicable to electrically operated mechanical services components and controls up to 230V single phase supply.
2. Individuals responsible for the delivery and/or assessment of this unit must provide auditable evidence that, as a minimum, they have the competencies that equate with the Learning Outcomes and Assessment Criteria of the unit.

These requirements **MUST** be followed due to the safety critical nature of the unit.

5.3 Internal Verifier Requirements for [EU Skill's Gas Units](#)

The centre MUST nominate all Internal Verifiers to the Awarding Organisation/Awarding Body for approval prior to them conducting any verification activities. Internal Verifiers can be employed by the centre or be work based who may or may not be from the same organisation as the learners.

Internal Verifiers MUST be vocationally and occupationally competent in the areas they are verifying and have a thorough knowledge of the qualification units being assessed.

In addition to the qualifications listed below, the Internal Verifiers must be able to provide appropriate documented evidence that demonstrates they have a minimum of 5 years proven occupational experience in the activities they will be verifying. Particular attention should be paid to providing evidence of occupational experience in the gas safety critical areas being verified.

Internal Verifier Qualifications for [EU Skill's Gas Units](#)

Internal Verifiers shall be technically qualified in domestic gas installation / maintenance and hold one of the following qualifications:

- C&G / SQA - S/NVQ in Domestic Natural Gas (Level 3);
or
- C&G - 662 Certificate for Service Engineers (Gas);
or
- C&G - 598-2 Certificate in Gas Installation Studies;
or
- C&G - 660 Certificate in Gas Fitting - Final

This list is not considered exhaustive and other 'Mechanical Engineering Services' (MES) or 'Building Engineering Services' (BES) qualifications at Level 3 or equivalent may be considered acceptable. Centres must submit requests to confirm the acceptability of other qualifications to their External Verifier for a decision regarding the acceptability of other qualifications. The External Verifier must keep a record of any such decisions.

In addition to the above the Internal Verifier must hold a current certificate of gas safety competence in the areas of gas work they will be internally verifying that is not more than 5 years old (either current ACS Certificates of Gas Safety Competence or a 6012 Domestic Natural Gas S/NVQ are acceptable).

Where the Internal Verifiers themselves do not hold a suitable technical qualifications they must have access to technical expertise from qualified personnel, who hold the relevant qualifications, to support them where the verification requires technical support and interpretation.

Internal Verifiers

For EU Skill's [Gas Units](#) Internal Verifiers must hold:

- QCF Level Three Certificate “Assessing Vocationally Related Achievement”
or
- A1 or D32/D33 with an upgrade to A1 as a minimum
or
- Learning and Development Unit L&D 9DI – Assess workplace competence using direct and indirect methods

And

- QCF Level Four Award “ Internal Quality assurance of assessment processes and practice”
or
- QCF Level Four Certificate “leading the Internal Quality assurance of assessment processes and practice”
or
- V1 or D34 with an upgrade to V1 as a minimum*
 - * The Teaching Qualification for Secondary Education (TQSE) or the Teaching Qualification for Further Education (TQFE) (which is recognised in Scotland) these awards are acceptable providing they are the versions that are recognised as equivalents to the A1 award plus appropriate CPD.
Internal Verifiers holding D units must have evidence of CPD to demonstrate compliance with the A and V units
- or
- SQA Accredited Learning and Development Unit L&D 11 “Internally monitor and maintain the quality of workplace assessment”

It is recommended that ‘Candidate Internal Verifiers’ have a clear action plan for achieving the Internal Verifier qualification(s).

Internal Verifier approval will be withdrawn if the qualification / units have not been attained within 18 months.

5.4 Internal Verifiers for Summit Skills Units

In addition to the requirements previously listed; Internal Verifiers of any of the following Summit Skill Units (as applicable):

- QDHTG2/02
- QDHTG 3/ 04
- QDMES2/02
- QDMES2/03
- QDMES2/04
- QDMES3/05
- QDMES3/06
- QDMES3/07
- QMES3/02

Must have a minimum of occupational experience evidenced by having a building services engineering sector related qualification or proven sector competence/experience plus access to relevant “occupational expertise” to enable them to conduct their role as internal verifier appropriately. This evidence and access to “occupational expertise” is quality assured by EAL.

Internal Verifiers of these Summit Skills Units Must:

- Be working towards or have achieved the V1 Standard and continue to practice to that standard; or have achieved D34 and possess CPD evidence of practicing to the V1 Standard.
- Demonstrate an understanding of the assessment process.

Internal Verifier Continuing Professional Development (for Summit Skills Units)

The occupational experience of internal verifiers must be updated on a regular basis and be periodically reconfirmed with continuing professional development (CPD) via the assessment centre. This will be quality assured by EAL.

It is the responsibility of each internal verifier to identify and make use of opportunities for CPD, such as industry conferences, access to trade journals, and SSC and Professional Body/Trade Association events, at least on an annual basis to enhance and upgrade their professional development and technical knowledge. It is imperative that records are kept of all such CPD opportunities/occasions.

5.5 Expert Witnesses

Witness Testimony can NOT be accepted as a primary source of evidence for all work activities. It may be used as supporting evidence to cover the range of activities not covered by Workplace Assessment or RWE Assessment.

Witness Testimony evidence can only be accepted if the testimony is completed by a technically and occupationally competent witness and will normally be in the form of a completed and signed SoE with other supporting evidence (e.g. company or employer job sheets, photographic evidence).

The evidence provided by Witness Testimony" and other non-observed sources must be substantiated by an Assessor (e.g. by confirming the suitability of the witness and by professional discussion). Once the evidence has been substantiated and suitably documented, then it can be referenced to the appropriate RoA by the Assessor.

Where "Expert Witnesses" are used in the assessment process they must be:

- Sector competent individuals who can attest to the learner's performance in the workplace.
- It is not necessary for expert witnesses to hold an assessor qualification, as a qualified assessor must assess the performance evidence provided by an expert witness.
- Evidence from expert witnesses must meet the tests of validity, reliability, authenticity and sufficiency.
- Expert witnesses will need to demonstrate:
 - they have relevant current knowledge of industry working practices and techniques,
 - that they have no conflict of interest in the outcome of their evidence.

The EAL External Verifier will be able to give further advice on the use of witness testimony.

5.6 Staff conducting tuition/instruction

This relates to staff that are teaching/training only; assessor requirements are given in 5.1.

Tuition/instruction staff must:

- Have 2 years experience in teaching/training.
or
- Are working towards an appropriate teaching/training qualification (e.g. Cert Ed or Learning & Development trainer units).
or
- Hold an appropriate teaching/training qualification (e.g. Cert Ed or Learning & Development trainer units).

Must also have:

- Knowledge and understanding of the occupation covered by this qualification.
- Knowledge and understanding of the structure and content of this qualification.

Individuals responsible for the delivery and/or assessment of unit Q MES 3 / 02 must provide auditable evidence that, as a minimum, they have the competencies that equate with the **Learning Outcomes and Assessment Criteria** of the unit.

5.7 Staff invigilating external assessments

This relates to staff that are conducting and controlling exam sessions only; assessor requirements are given in 5.1.

These personnel must:

- Have experience in conducting and controlling exam sessions
or
- Be supervised, conducting this function, by an individual experienced in conducting and controlling exam sessions
- Have knowledge, understanding and compliance to EAL examination procedures '[Procedures for Conducting the Exam Component within EAL Qualifications](#)' (EAF 1), see website.

Note; A tutor/assessor who has prepared the learners for the subject of the exam must not be the *sole* Supervisor at any time during an exam of that subject(s).

5.8 Learners

EAL expects its centres to enable individuals to have equal access to training and assessment for qualifications irrespective of their sex, marital status, age, religion, colour, race, nationality, ethnic origin or disability. In essence centres must deliver our qualifications and units in accordance with relevant Equalities Legislation.

Centres are required to have in place a policy to ensure that such discrimination does not occur either directly, indirectly or as a result of pressure from other bodies. This policy should apply to all satellites and there should be arrangements in place to monitor its application and effectiveness.

Centres should ensure that the learners have the potential to achieve the units selected within this qualification. Learners must have the minimum levels of literacy and numeracy to comply with the health and safety aspects of the scheme, the completion of the learning outcomes and the assessments.

Centres should make candidates with particular requirements aware of the practical and theory content of the qualification and they should be given every opportunity to complete all or some of the units. EAL will consider any reasonable suggestions for and from, those with disabilities that would help them to achieve the learning outcomes without compromising the standards required. Aids or appliances, which are designed to alleviate disability, may be used during assessment, providing they do not compromise the standard required.

Age Restrictions

Learners must be at least 16 years of age.

5.9 Physical Resources

Safe working is a key issue and all practical activities conducted within the centre must be subject to up to date risk assessments. All learners must be properly supervised and wear the correct personal protective equipment. Arrangements for first aid and emergency action in case of accident must be in place.

Where practical based assignments are used within knowledge units, the required resources will be clearly detailed within the documentation.

Revisions or amendments to EAL drawings are permissible subject to the written agreement of the EAL external verifier.

6.0 Assessment

The assessment of this qualification involves the following aspects:

- On-screen exams,
- Centre based assessment, (Revisions or amendments to EAL drawings are permissible subject to the written agreement of the EAL external verifier).
- Learner demonstration of competent performance (through occupational evidence).

The following sub-sections will give an overview of the internal and external assessments. All assessment material can be downloaded from the centre area of the [EAL Website](#) **except for the Matters of Gas Safety Workbooks which must be requested from your EV and these will be sent out electronically.**

Learners must pass all the assessments to achieve the qualification. The learner should complete the relevant knowledge units prior to the performance units.

EAL will monitor and externally verify the internal and external assessments conducted at the centre.

General Gas Guidance

The Domestic Natural Gas qualifications are assessed through a combination of workplace assessment, simulation assessment and knowledge assessment.

The Diploma in Gas Utilisation: Core Skills and Knowledge (EUSGU001) (**QCF Level 3; SCQF Level 6**) is now an integral part, and a prerequisite of, all the Gas Utilisation qualifications. As such the following options are available to Learners:

- EUSGU001 may be completed as a stand-alone qualification* (see note 3 below)
- EUSGU001 may be completed as an introductory part of a larger qualification

* **Important Notes**

- 1. The assessment requirements set out in this document must be met in full.**
- 2. In accordance with good practice and Ofqual requirements regarding Conflict of Interest in Assessment (Condition A4 in General Conditions of Regulation – Ofqual 2011) Assessors involved in providing direct training to a Learner, either as part of a group or on a ‘one to one’ basis should not carry out assessments for any of those trained aspects. Alternatively Awarding Organisations may put in place effective quality control measures to ensure that any potential conflicts of interest do not have an adverse effect on assessment outcomes.**
- 3. The EUSGU001 Diploma, taken as a stand-alone qualification is not sufficient for eligibility for entry to the Gas Safe Register, via any assessment only route (eg. ACS). Candidates must complete a minimum of one of the range of Diplomas (EUSGU002-EUSGU024) to meet the requirements for Gas Safe Registration.**
- 4. Gas Safe Register competence criteria are incorporated in all assessments. It is essential that the Awarding Organisations/Awarding Bodies update their Assessors and Assessment Materials to ensure that any changes to these criteria are reflected in the performance of the candidate from the date they become effective. (for example: if the IGE/UP/1B Testing procedure changed six months prior to the candidate completing the qualification, all assessments including testing from the change date, must be completed against the changed procedure standard).**

Important requirements for practical assessments of gas units

Practical Assessments: Candidates undertaking assessment which involves a gas aspect must achieve a 100% pass rate. In the case of failure, it is appropriate for the candidate to undertake re-training prior to re-assessment. The candidate attempt of the practical should be recorded on the EAL documentation.

6.1 Assessment Overview

EU Skills Gas Units:

EAL Code	Unit Title	On Screen Exam	Centre Marked Assessment/s
QDSG3/1.1	Understanding health and safety in gas utilisation	Yes	Yes MOGs workbooks
QDSG3/1.2	Understanding scientific principles in gas utilisation	Yes	No
QDSG3/1.3	Understanding combustion and properties of gas	Yes	Yes MOGs workbooks
QDSG3/1.4	Understanding buildings, services and structures	Yes	Yes MOGs workbooks
QDSG3/1.5	Understanding gas safety	Yes	Yes MOGs workbooks
QDSG3/2.1	Specific core metering	Yes	Learner's Simulated Practical Record MOGs workbooks
QDSG3/2.2	Specific core emergency	Yes	Learner's Simulated Practical Record MOGs workbooks
QDSG3/2.3	Specific core installation & maintenance	Yes	Learner's Simulated Practical Record MOGs workbooks
QDSG3/3.2	Maintain domestic gas cookers, tumble dryers and leisure appliances	No	Yes MOGs workbooks
QDSG3/3.3	Install domestic gas water heaters and wet central heating appliances	No	Yes MOGs workbooks
QDSG3/3.4	Maintain gas water heating and wet central heating appliances	No	Yes MOGs workbooks
QDSG3/3.5	Install, commission and de-commission gas pipework up to 35mm 1¼ diameter in domestic and small commercial premises	No	Yes MOGs workbooks
QDSG2/3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm 1¼ diameter in small natural gas installations	No	Yes MOGs workbooks
QDSG3/3.7	Install domestic gas space heating appliances	No	Yes MOGs workbooks
QDSG3/3.8	Maintain domestic gas space heating appliances	No	Yes MOGs workbooks
QDSG3/3.10	Install domestic gas warm air central heating appliances	No	Yes MOGs workbooks
QDSG3/3.11	Maintain gas warm air central heating systems and appliances	No	Yes MOGs workbooks
QDSG2/3.12	Install Gas Meters and Regulators 2.5 to 16.0m ³ /hr	No	Yes MOGs workbooks
QDSG3/3.13	Install gas meters and regulators 2.5 to 1076m ³ /hr	No	Yes MOGs workbooks

Continued

QDSG3/3.15	Dealing with reported upstream gas emergencies	No	Yes MOGs workbooks
QDSG3/3.16	Dealing with reported downstream gas emergencies	No	Yes MOGs workbooks
QDSG3/3.17	Strength Testing, gas tightness testing and direct purging -IGE/UP/1A	No	Yes MOGs workbooks
QDSG3/3.21	Water compulsory core unit	Yes	No

Important note

These Matters of Gas Safety (MOGs) workbooks are kept in line with the current requirements issued by EU Skills, allowing these qualifications to remain ACS aligned, and the requirements are updated every 6 months to reflect any changes within industry, these changes do not always impact on the requirements for these qualifications staying ACS aligned, therefore we will only issue new workbooks with the changes affecting alignment with ACS and any changes will be communicated to centres allowing for them to be incorporated in current and future delivery

Centres **must** ensure they are using the current Matters of Gas Safety Workbooks.

These documents are not available from our on line services portal and must be requested from your current EV and these will be sent out electronically, this is to ensure centres are registered and future updates can be sent out to the correct individuals at a centre.

Summit Skills Units:

QDMES2/02	Understand and apply domestic cold water system installation and maintenance techniques	Yes	Learner's Simulated Practical Record
QDMES2/03	Understand and apply domestic hot water system installation and maintenance techniques	Yes	Learner's Simulated Practical Record
QDMES2/04	Understand and apply domestic central heating system installation and maintenance techniques	Yes	Learner's Simulated Practical Record
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	Yes	Learner's Simulated Practical Record
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	Yes	Learner's Simulated Practical Record
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	Yes	Learner's Simulated Practical Record
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	Yes	Learner's Simulated Practical Record

Summit Skills Performance Units:

QDHTG2/02	Install and maintain domestic heating systems	Performance evidence required for this unit.
QDHTG3/04	Install, commission, service and maintain domestic heating systems	Performance evidence required for this unit.

6.2 Assessment of Performance Units for EU Skill's [Gas Units](#)

Learners must be able to practice on all specified unit components within the tables listed

Realistic Working Environment (RWE) assessments must be included in the portfolio of evidence leading to completion of the units in line with the requirements set out for each unit. This must be supplemented by evidence gathered directly from the workplace as required for each unit and a work experience portfolio, signed off as accurate and authentic by a suitably qualified and Gas Safe Registered engineer.

Learners **MUST** demonstrate competence in the workplace during the performance of genuine work activities, by carrying out the tasks and duties that would be reasonably expected of them as a competent operative. Learners will be expected to have demonstrated competence in the assessed tasks over a period of time under normal working conditions to generate a sufficiency of evidence.

The gas industry is highly regulated regarding safety requirements and this is reflected in these qualifications. Certain Gas Safety related assessments must only be carried out under simulated conditions. Gas Safety critical activities within the Units will normally be assessed in a simulated RWE and where necessary these requirements are shown in the units.

6.3 Realistic Working Environment (RWE) Assessment (Simulation) for EU Skill's [Gas Units](#)

RWE simulated assessment may only be used as specified and, if necessary, with the prior approval of the External Verifier. Any approval given by the External Verifier **MUST** be in writing and be kept at the centre and in the learner's portfolio for audit purposes. These assessments will normally utilise installation and maintenance bays in a workshop area.

These areas are considered to be a managed environment because there is a degree of control over the conditions under which the activity is undertaken. The simulation activities and bays will normally contain:

- real time pressures;
- a range of appliances, applicable to the assessment types,
- a variety of flue types, e.g. Type 'B', Type 'C', natural & fanned draught with a range of construction methods;
- a range of potential hazards that could realistically be found in a domestic dwelling, e.g. combustible surfaces, openable windows, doors, fans, curtains etc. (*Note: these hazards may be simulated*);
- a range of installation conditions, e.g. surface installation, under floor installation, through wall installation etc;
- a range of building material types, e.g. brick walls, block walls, plaster board and timber walls.

The RWE must take account of health and safety requirements for risk assessments, gas safety related issues and against other activities where generating evidence is limited.

6.4 Recognition of Prior Learning (RPL) for EU Skill's [Gas Units](#)

Recognition of Prior Learning (RPL) evidence is an acceptable source of evidence for these qualifications. For evidence of gas safety competence the following constraints shall apply:

Current (issued within last 3 years) ACoPS/ACS Certificates of competence in matters of gas safety are acceptable as RPL evidence. However, as these do not attest to competence in the other essential aspects of gas installation and maintenance, all unit requirements must be satisfied in full to achieve the qualification. All evidence of current gas safety competence MUST be demonstrated throughout the qualification being undertaken.

All RPL evidence must be approved by the centre's RPL Advisor. The RPL Advisor shall hold D36 or equivalent. All evidence shall be sufficient, valid, reliable, authentic and current.

6.5 Gathering Evidence for EU Skill's [Gas Units](#)

In order to achieve a qualification, Learners MUST produce sufficient evidence of competence. Documentation must be provided to ensure that evidence of competence is gathered, organised and recorded in a uniform manner across all centres.

Where appropriate, learners may provide evidence of prior learning.

Witness testimony may be used as supporting evidence to cover the range of activities not covered naturally by workplace assessment. This evidence will normally be via a completed document signed by a technically and occupationally competent witness (the centres External Verifier will be able to give further advice on the use of witness testimony).

Note: Witness testimony is not acceptable as evidence to meet the 'Matters of Gas Safety' criteria, incorporated into each qualification.

6.6 Requirements for Summit Skills Units

Summit Skill Units:

- QDHTG2/02
- QDHTG3/04

Have the following requirements:

The environment, in which the evidence and the quantity of evidence for **Performance Units** must be assessed, is detailed in each EAL Performance Unit. This can be applicable to all or some of the learning outcomes.

Evidence that is sourced from the real working environment for **Performance Units** must be naturally occurring and can be generated by:

- Direct observation of performance in the workplace by a qualified assessor and/or testimony from an expert witness subject to the activity being assessed. (This will be the primary source of evidence).
- Candidate's reflective account of performance.
- Work plans and work based products e.g. diagrams, drawings, specifications, customer testimony, authorised and authenticated photographs/images and audiovisual records of work completed.
- Evidence from prior achievements that demonstrably match the requirements of the Performance Unit.
- Witness testimony

Meeting the assessment requirements of **Performance Units** will need initial discussions and assessment planning between the learner and assessor, as an essential activity to identify opportunities to assess real working environment evidence, gaps that need to be filled or opportunities to recognise the prior achievement of the learner.

Competence must be demonstrated **consistently over a period of time**. However Summit Skills the sector skills council, does not wish to stipulate what that period of time might be as this is a decision for the Assessor. Based on their own professional judgement Assessors must be capable of identifying when competence has been demonstrated by the learner.

Simulation and Simulated Conditions for Summit Skill Units

Where simulation is permissible:

Simulation can take place in those rare circumstances where the opportunities to collect naturally occurring evidence are limited or absent and the learner lacks evidence for completion of the unit. However, this scenario is anticipated to be rare in relation to the qualifications and the units to which this strategy applies given the inherent flexibility of the evidence-gathering process. Where simulation does take place it must be in a realistic working environment.

Simulation and simulated conditions is defined as an environment in which simulated activities take place involving the replication of a real working environment. The criteria for which must be to supply fit-for-purpose tools, equipment, full-size components, realistic deadlines and other commercial requirements.

A real working environment is defined as an environment in which real work activities take place under real working conditions in keeping with real commercial situations.

The performance units are designed to allow the assessment centre the opportunity to assess the candidate in either the workplace or in simulated conditions. Where simulated conditions are used a practical assignment is detailed within the performance unit.

6.7 Quality Control of Assessment

General

There are two major points where EAL interacts with the Centre in relation to the External Quality Control of Assessment for a qualification and these are:

- Approval: When a Centre take on new qualifications, the EAL External Verifier (EV) ensures that the Centre is suitably equipped and prepared to deliver the new qualification.
- Monitoring: Throughout the ongoing delivery of the qualification EAL, through EV monitoring and other mechanisms will maintain the quality and consistency of the assessment of the qualification.

Approval

In granting approval, EAL, normally through its External Verifiers (EVs) will ensure that the prospective Centre:

- meets any procedural requirements specified by the Awarding Organisation,
- has sufficient and appropriate physical and staff resources,
- meets relevant health and safety and/or equality and access requirements,
- has a robust plan for the delivery, assessment and QA for the qualifications.

EAL may decide to visit the Centre to view the evidence provided. The Awarding Organisation must have a clear rationale for the method(s) deployed.

Monitoring

EAL, through EV monitoring and other mechanisms will ensure:

- that a strategy is developed and deployed for the ongoing monitoring of the Centre. This strategy is based on an active risk assessment of the Centre. In particular the strategy will identify the learner, assessor and IV sampling strategy to be deployed and the rationale behind this,
- that the Centre's internal quality assurance processes are effective in learner assessment,
- that sanctions are applied to a Centre where necessary and that corrective actions are taken by the Centre and monitored by the EV,
- that reviews of EAL's external auditing arrangements are undertaken.

7.0 About the Qualification Units

The units within this qualification give the learner the opportunity to demonstrate their knowledge and understanding of identified topics and subject areas. They also provide the learners the opportunity to demonstrate they have the practical skills that are in keeping with the relevant National Occupational Standards for identified activities.

All units contain the following information:

- Qualification and unit title
- QCF Level
- [Credit value](#)
- [Guided learning hours \(GLH\)](#)
- Unit aims
- Unit and assessment information
- How the unit reflects the National Occupation Standards
- Learning outcomes
- Assessment criteria

7.1 Learner's Portfolio Building and Referencing

The learner's portfolio records their assessment achievement, development and work experience leading to the attainment of their chosen QCF qualification.

The Learner's Portfolio could be made up of a combination of the following:

- Summary of the results from Assessments (RWE/Workplace)
- Assessment sheets
- Feedback sheets
- Workplace Experience Evidence
- Witness Statements
- Work Method Statements
- Evidence of Prior Learning (RPL Evidence)
- Assessor Assessment Plans - feedback to Learners
- Company or employer job sheets and specifications
- Curriculum Vitae
- Photographic Evidence

Appendix 1: Occupational Competence for Assessors

Assessors must either be able to demonstrate that they are registered and up-to-date with their registration with an appropriate approved industry registration body **or** have one or more of a **relevant** occupational qualification (See example list below) to ensure that they can be regarded as occupationally competent in terms of assessing or verifying this qualification, and units therein.

NVQs/SVQs at the appropriate level or their equivalents in the Qualifications and Credit Framework:

- Plumbing
- Plumbing (Domestic) (SVQ)
- Heating and Ventilating (Rectification of Systems)
- Heating and Ventilating Installation (Domestic, Ductwork or Industrial & Commercial)

Other certificates in competences that have been aligned, and are supplemental, where relevant, to the above:

- A relevant brazing or pipe-fitting qualification
- Accredited Certification Scheme(ACS)
 - CCN1: General Gas Safety
 - CEN1: Installation of central heating boilers
 - HTR1: Installation of gas fired heaters
 - CKR1: Installation of gas cookers
 - WAT1: Installation of gas water heaters
- BRA/CITB Brazing Assessment
- Level 3 NVQ in Gas Emergency Service Operations
- Level 2 NVQ in Domestic Natural Gas Installation and Maintenance
- Level 3 NVQ in Domestic Natural Gas Installation and Maintenance
- Relevant OFTEC and/or HEATAS qualifications
- Qualifications recognised under DCLG Competent Person Schemes
- Unvented Hot Water external assessment to Building Regulations and/or Building Standards requirements
- Water Supply Regulations (1999)
- Water Byelaws (2000)

Assessors and verifiers who have relevant qualifications pre-NVQ and post-NVQ which are not competence-based must provide verifiable evidence that they are occupationally competent. This evidence must demonstrate that the assessor/verifier has up-to-date knowledge of the industry/occupation.

Appendix 2: Centre Setting Specifications for Examinations

<p style="text-align: center;">Level 3 Unit DSG 1.1 - Understanding health and safety in gas utilisation</p>		
<p>Number of questions: 60</p> <p>Closed Book</p> <p>Each test will cover the knowledge learning outcomes of the unit as follows:</p>		
Unit	Knowledge learning outcome	Approximate coverage
1	Know the health and safety legislation Section 1	10%
2	Know the health and safety measures for gas utilisation Section 1	13%
3	Know the regulations covering the use and disposal of hazardous substances Section 2	14%
4	Know manual handling methodology and lifting techniques Section 2	7%
5	Know how to identify and respond to accidents which occur at work Section 3	20%
6	Know the requirements for maintaining electrical safety, earthing protection systems and associated dangers Section 4	15%
7	Know fire safety Section 5	8%
8	Know the safety requirements for working at heights Section 5	8%
9	Know how to work safely in confined spaces Section 5	5%
	Total	100%

Level 3 Unit
DSG 1.2 - Understanding scientific principles in gas utilisation

Number of questions: 20

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the Système Internationale (SI) units and uses within gas utilisation	50%
2	Know the sources of energy and heat transfer	25%
3	Know the combined gas laws	10%
4	Know energy efficiency legislation	15%
	Total	100%

Level 3 Unit
Level 3 Unit DSG 1.3 - Understanding combustion and properties of gas

Number of questions: 30

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the natural gas supply network and LPG supplies	16%
2	Know the operation pressure regulators	10%
3	Know the factors affecting pressure loss and the equipment used to measure gas pressure	10%
4	Understand the combustion of gases, and potential risks	27%
5	Know gas burner operation, design, features and types	20%
6	Know the properties and characteristics of NG and LPG	17%
	Total	100%

Level 3 Unit
Level 3 Unit DSG 1.4 - Understanding buildings, services and structures

Number of questions: 55

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the types and characteristics of construction materials Section 1	15%
2	Know the construction methods of buildings and how to read and interpret plans Section 1	9%
3	Know how to use hand and power tools within gas utilisation Section 2	11%
4	Know the installation requirements, methods and materials for gas pipework (NG and LPG) Section 3	16%
5	Know the ventilation requirements, types and methods Section 4	27%
6	Know the different types and operation of suitable chimney systems for gas appliances Section 5	14%
7	Know the methods for checking and testing chimney performance Section 5	8%
	Total	100%

Level 3 Unit
DSG 1.5 - Understanding gas safety

Number of questions: 60

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know industry specific legislation and standards Section 1	4%
2	Know gas safety legislation Section 1	6%
3	Know the gas emergency actions, responsibilities and procedures relevant to the industry Section 1	5%
4	Know the Gas Industry Unsafe Situations Procedure Section 2	8%
5	Know the gas operative's responsibilities in accurately completing emergency notices, warning labels and forms Section 2	5%
6	Know the correct installation locations and types of Emergency Control and Appliance Isolation Valves Section 2	5%
7	Know and understand the requirements for Natural Gas and LPG meter installations up to .035cu mtrs Section 3	5%
8	Know the types of gas meter housings and compartments and the requirements for installation and labelling Section 3	7%
9	Know the methods and requirements to tightness test and purge small gas installations. (NG and LPG) Section 4	18%
10	Know how to check and set gas installation operating pressures at gas meters and LPG regulators Section 5	3%
11	Know how to safely assess the potential risks, tightness test and re-light temporarily isolated appliances Section 5	3%
12	Know how to check and set appliance burner pressures and compare measured gas rates with published figures Section 5	5%
13	Know the principles of operation and methods of testing gas appliance safety controls Section 5	8%
14	Know how to safely work in customers' premises and liaise with clients regarding the progress of the job Section 6	12%
15	Know where to acquire information and documentation used during their daily work activities Section 6	3%
16	Know the regulations in force to protect the environment and control waste Section 6	3%
	Total	100%

Level 3 Unit
DSG 2.3 – Specific core installation and maintenance

Number of questions: 20

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
3	Know the construction and operation of chimneys used for domestic gas appliances	10%
5	Identify and complete the correct notices, forms and labels used in domestic gas utilisation	25%
6	Demonstrate how to work correctly and safely with electrical systems and components used in domestic gas utilisation	30%
11	Install and commission a small domestic gas installation	10%
12	Calculate the requirements for permanent ventilation in domestic gas utilisation environments	25%
	Total	100%

Level 3 Unit
DSG 2.1 – Specific core emergency

Number of questions: 30

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Identify the gas industry legislation that applies to Emergency First Call Operatives (FCO) Section 1	12%
2	Know the purpose and operation of typical gas controls Section 2	12%
3	Know how the control of pressure and gas flow is achieved Section 3	16%
4	Identify meter housings and compartments for industrial and commercial applications Section 4	12%
5	Know the installation requirements for industrial and commercial natural gas meter installations Section 4	12%
6	Identify industrial and commercial natural gas meter installation Section 5	12%
7	Know pipework materials and types of fittings that may be used for gas installations Section 6	20%
8	Know the construction and operation of chimneys used for domestic gas appliances Section 6	4%
	Total	100%

Level 3 Unit
DSG 2.2 – Specific core metering

Number of questions: 20

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Identify the range and capacities of domestic gas meters	50%
2	Identify the specification for domestic gas meter housings	30%
3	Identify the requirements for emergency control and bypass valves on domestic gas meter installations	10%
4	Know the construction and operation of chimneys used for domestic gas appliances	10%
	Total	100%

Level 3 Unit
DSG 3.21 – Water compulsory core

Number of questions: 60

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the energy conservation legislation that applies to the building services industry – Section 1	7%
2	Know the applications of energy sources used in the building services industry Section 1	16%
3	Know the importance of energy conservation when commissioning building services systems Section 2	6%
4	Know the methods of reducing waste and conserving energy while working in the building services industry Section 2	7%
5	Know how to safely dispose of materials used in the building services industry Section 3	7%
6	Know the methods of conserving and reducing wastage of water within the building services industry Section 4	7%
7	Know the principles of plumbing science and how to apply them in the workplace Section 5	25%
8	Know plumbing processes and how to apply them in the workplace Section 6	25%
	Total	100%

Level 2 Unit DMES 02 Understand and apply domestic cold water system installation and maintenance techniques

Number of questions: 60
Permitted documents
Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the cold water supply route to dwellings Section 1	8%
2	Know the types of cold water system and their layout requirements Section 1	33%
3	Know the site preparation techniques for cold water systems and components Section 2	10%
4	Know the installation requirements of cold water systems and components Section 3	21%
5	Know the service and maintenance requirements of cold water systems and components Section 4	10%
6	Know the decommissioning requirements of cold water systems and components Section 5	9%
7	Know the inspection and soundness testing requirements of cold water systems and components Section 5	9%
	Total	100%

Normative references for use in this open book examination:

- [Water Regulations Guide by Laurie Young & Graham May, published by WRAS, 2000](#)
- [BS EN 806 "Specifications for installations inside buildings concerning water for human consumption" which consists of five parts:](#)
 - Part 1: [General](#)
 - Part 2: [Design](#)
 - Part 3: [Pipe sizing – Simplified method](#)
 - Part 4: [Installation](#)
 - Part 5: [Operation and maintenance](#)
- [BS 8558:2011 Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages. Complementary guidance to BS EN 806](#)
- [BS 8000 part 15 - Workmanship on building sites. Code of practice for hot and cold water services \(domestic scale\)](#)
- [Building Regulations Approved Document A \(D in Northern Ireland\), freely downloaded at \[www.planningportal.gov.uk\]\(http://www.planningportal.gov.uk\) \(\[www.dfpni.gov.uk\]\(http://www.dfpni.gov.uk\) in Northern Ireland\)](#)
- [Building Regulations Approved Document G \(P in Northern Ireland\), freely downloaded at \[www.planningportal.gov.uk\]\(http://www.planningportal.gov.uk\) \(\[www.dfpni.gov.uk\]\(http://www.dfpni.gov.uk\) in Northern Ireland\)](#)

Level 2 Unit DMES 03 Understand and apply domestic hot water system installation and maintenance techniques

Number of questions: 60

Permitted documents

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the types of hot water system and their layout requirements Section 1	43%
2	Know the site preparation techniques for hot water systems and components Section 2	10%
3	Know the installation requirements of hot water systems and components Section 3	20%
4	Know the service and maintenance requirements of hot water systems and components Section 4	10%
5	Know the decommissioning requirements of hot water systems and components Section 5	9%
6	Know the inspection and soundness testing requirements of hot water systems and components Section 6	8%
	Total	100%

Normative references for use in this open book examination:

- [Water Regulations Guide by Laurie Young & Graham May, published by WRAS, 2000](#)
- [BS EN 806 "Specifications for installations inside buildings concerning water for human consumption" which consists of five parts:](#)
 - [Part 1: General](#)
 - [Part 2: Design](#)
 - [Part 3: Pipe sizing – Simplified method](#)
 - [Part 4: Installation](#)
 - [Part 5: Operation and maintenance](#)
- [BS 8558:2011 Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages. Complementary guidance to BS EN 806](#)
- [BS 8000 part 15 - Workmanship on building sites. Code of practice for hot and cold water services \(domestic scale\)](#)
- [Building Regulations Approved Document A \(D in Northern Ireland\), freely downloaded at \[www.planningportal.gov.uk\]\(http://www.planningportal.gov.uk\) \(\[www.dfpni.gov.uk\]\(http://www.dfpni.gov.uk\) in Northern Ireland\)](#)
- [Building Regulations Approved Document G \(P in Northern Ireland\), freely downloaded at \[www.planningportal.gov.uk\]\(http://www.planningportal.gov.uk\) \(\[www.dfpni.gov.uk\]\(http://www.dfpni.gov.uk\) in Northern Ireland\)](#)
- [Domestic Building Services Compliance Guide, freely downloaded at \[www.planningportal.gov.uk\]\(http://www.planningportal.gov.uk\)](#)

Level 2 Unit DMES 04 Understand and apply domestic central heating system installation and maintenance techniques

Number of questions: 60

Permitted documents

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the uses of central heating systems in dwellings Section 1	5%
2	Know the types of central heating system and their layout requirements Section 1	33%
3	Know the site preparation techniques for central heating systems and components Section 2	10%
4	Know the installation requirements of central heating systems and components Section 3	25%
5	Know the service and maintenance requirements of central heating systems and components Section 4	10%
6	Know the decommissioning requirements of central heating systems and components Section 5	10%
7	Know the inspection and soundness testing requirements of central heating systems and components Section 5	7%
	Total	100%

Normative references for use in this open book examination:

- Water Regulations Guide by Laurie Young & Graham May, published by WRAS, 2000
- Building Regulations Approved Document A (D in Northern Ireland), freely downloaded at www.planningportal.gov.uk (www.dfpni.gov.uk in Northern Ireland)
- CIBSE Domestic Heating Design Guide, published by CIBSE, 2007
- Domestic Building Services Compliance Guide, freely downloaded at www.planningportal.gov.uk

Level 3 Unit DMES 05 Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques

Number of questions: 40

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the legislation relating to the installation and maintenance of cold water supplied for domestic purposes Section 1	8%
2	Know the types of cold water system layout used in multi-storey dwellings Section 2	15%
3	Know the types of cold water system layout used with single occupancy dwellings fed by private water supplies Section 3	10%
4	Know the requirements for backflow protection in plumbing systems Section 4	27%
5	Know the uses of specialist components in cold water systems Section 5	12%
6	Know the design techniques for cold water systems	Assignment
7	Know the fault diagnosis and rectification procedures for cold water systems and components	Assignment
8	Know the commissioning requirements of cold water systems and components Section 6	28%
	Total	100%

Level 3 Unit DMES 06 - Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques

Number of questions: 50

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the types of hot water system and their layout requirements Section 1	32%
2	Know the uses of specialist components in hot water systems Section 2	10%
3	Know the design techniques for hot water systems	Assignment
4	Know the installation requirements of hot water systems and components Section 3	16%
5	Know the fault diagnosis and rectification procedures for hot water systems and components Section 4	20%
6	Know the commissioning requirements of hot water systems and components Section 5	22%
	Total	100%

Level 3 Unit DMES 07 - Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques

Number of questions: 30

Closed Book

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the types of central heating system and their layout requirements Section 1	30%
2	Know the design techniques for central heating systems	Assignment
3	Know the installation requirements of central heating systems and components	Assignment
4	Know the fault diagnosis and rectification procedures for central heating systems and components Section 2	30%
5	Know the commissioning requirements of central heating systems and components Section 3	40%
	Total	100%

Unit QMES3/ 02 - Understand and Carry out Electrical Work on Domestic Plumbing and Heating Systems and Components

Number of questions: 55

Permitted Documents

Each test will cover the knowledge learning outcomes of the unit as follows:

Unit	Knowledge learning outcome	Approximate coverage
1	Know the electrical standards that apply to the mechanical services industry	7%
2	Know the principles of electricity supply to buildings	7%
3	Know the layout features of electrical circuits in buildings	25%
4	Know the site preparation techniques for the electrical connection of Mechanical services components	11%
5	Know the inspection and testing requirements of electrically operated mechanical services components	11%
6	Know the procedures for safely diagnosing and rectifying faults in electrically operated mechanical services components	16%
7	Understand the electrical industry safe isolation procedure	7%
8	Understand the installation and connection requirements of electrically operated mechanical services components	16%
	Total	100%

Normative references for use in this open book examination:

[IET On Site Guide](#)

Appendix 3: Learner Registration & Certification

Learners must be registered with EAL on a code which relates to the qualification -this **must be** completed prior to assessment. Both learner registration and certification can be completed on line at the EAL Website www.eal.org.uk. For paper based registration and certification use forms CRF1, and CRF1A. These are located in the centre section of the website.

To Register the Learner on the Chosen Qualification/Pathway:

Qualification/Pathway Title	Code
EAL Level 3 Diploma in Gas Utilisation: Core Skills and Knowledge (QCF) (EUSGU001)	600/0577/4
EAL Level 3 Diploma in Gas Utilisation Metering 2.5 – 16cu/m (QCF) (EUSGU002)	600/0582/8
EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers and Leisure (QCF) (EUSGU005)	600/0574/9
EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Domestic Space Heating (QCF) (EUSGU006)	600/0579/8
EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Domestic Warm Air (QCF) (EUSGU007)	600/0578/6
EAL Level 3 Diploma in Gas Utilisation Installation: Water Heating and Wet Central Heating (QCF) (EUSGU008)	600/1034/4
EAL Level 3 Diploma in Gas Utilisation Maintenance: Water Heating and Wet Central Heating (QCF) (EUSGU009)	600/1660/7
EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Water Heating and Wet Central Heating (QCF) (EUSGU010)	600/1661/9
EAL Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF) (EUSGU011)	600/0580/4
EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF) (EUSGU012)	600/0581/6
EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF) (EUSGU013)	600/0576/2
EAL Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF) (EUSGU014)	600/1042/3
EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF) (EUSGU015)	600/1653/X

Continued

EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF) (EUSGU016)	600/1041/1
EAL Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF) (EUSGU017)	600/1040/X
EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF) (EUSGU018)	600/1038/1
EAL Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating and Domestic Warm Air (QCF) (EUSGU019)	600/1039/3
EAL Level 3 Diploma for Gas Emergency First Call Operative (QCF) (EUSGU020)	600/0575/0
EAL Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Limited Wet Central Heating and Domestic Warm Air (QCF) (EUSGU0024)	600/2684/4

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