



QQI

Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

Component Specification NFQ Level 6

Using Breathing Apparatus 6N20489

1. Component Details

Title	Using Breathing Apparatus
Teideal as Gaeilge	Úsáid Trealamh Anála
Award Type	Minor
Code	6N20489
Level	6
Credit Value	15
Purpose	The purpose of this award is to equip the learner with the relevant knowledge, skill and competence to effectively and safely deliver the role of firefighting using breathing apparatus as a team leader or as team member, cognisant of one's own safety, the safety of team members and the public.
Learning Outcomes	Learners will be able to: <ol style="list-style-type: none">1 Evaluate the principles for working with breathing apparatus in the fire service.2 Appraise the key principles of combustion and compartment fire behaviour.3 Explain how fire develops and spreads within a compartment and how it can be extinguished.4 Appraise the appropriate extinguishing and cooling techniques in compartment firefighting.5 Explain the operation of a breathing apparatus set and associated ancillary equipment, including thermal imaging camera, guideline and branch line.

- 6 Evaluate the principles of tactical ventilation and the effects on fire development.
- 7 Undertake the user maintenance of the breathing apparatus set and ancillary equipment in use within the Fire Service.
- 8 Don and doff a breathing apparatus set in line with approved procedure.
- 9 Implement entry control procedures in the use of breathing apparatus.
- 10 Complete a pre-entry test and effective buddy check before presenting to the Entry Control Officer.
- 11 Navigate safely within a limited visibility environment, while wearing breathing apparatus.
- 12 Search a hot and humid fire gas filled environment, while wearing breathing apparatus, including the use of thermal imaging camera, guideline and branch line.
- 13 Communicate within a risk area to resolve a simulated operational incident involving the use of breathing apparatus.
- 14 Manage and lead a team of up to four wearers, including team leader, to achieve a given objective in a variety of fire/gas filled buildings and structures.
- 15 Demonstrate the appropriate extinguishing and cooling techniques prior to entry into a risk area.
- 16 Apply appropriate entry techniques, recognise the hazards and risks within a fire environment and apply the appropriate firefighting tactics.
- 17 Demonstrate appropriate entry and air control techniques, recognise the hazards and risks associated with using tactical ventilation, and implement the appropriate emergency procedures.
- 18 Implement best safety and professional practice having regard to the risks and control measures, in responding to a range of operational incidents.
- 19 Develop an understanding of the need to review and reflect on operational practice and use this to inform future performance and professional development.

General Information

All assessment should be planned in accordance with the programme assessment strategy developed as part of the programme submission for validation. See **Policies and Criteria for Validation of Programmes**. Assessment should be undertaken consistently and reflect current assessment guidelines. See www.qqi.ie.

All FET assessment is criterion referenced. Successful achievement of the award is based on learners attaining the required standards of knowledge, skill or competence consistent with the **minimum intended programme learning outcomes**.

The techniques set out below are considered the optimum approach to assessment for this component. In exceptional circumstances providers may identify alternative assessment techniques through the provider's application for programme validation which are reliable and valid but which are more appropriate to their context.

Assessment of a number of components may be integrated across programmes for delivery, provided that the learning outcomes of each minor award are assessed.

Group or team work may form part of the assessment, provided each learner's achievement is separately assessed.

All providers are required to submit an assessment plan as part of their application for programme validation. Assessment Plans will include information relating to scheduling and integration of assessment. See current FET validation guidelines at www.qqi.ie.

Assessment Techniques

In order to demonstrate that they have reached the standards of knowledge, skill and competence identified in all the learning outcomes, learners are required to complete the assessment(s) below.

The assessor is responsible for devising assessment instruments (e.g. project and assignment briefs, examination papers), assessment criteria and mark sheets, consistent with the techniques identified below and QQI's assessment requirements.

Programme validation will require providers to map each learning outcome to its associated assessment technique. All learning outcomes **must** be assessed and achieved in accordance with the **minimum intended module learning outcomes** set out in the validated programme.

Skills Demonstration

80%

Description

Skills Demonstration

A skills demonstration is used to assess a wide range of practical based learning outcomes including practical skills and knowledge. A skills demonstration will require the learner to complete a task or series of tasks that demonstrate a range of skills.

The assessor will devise one or more skills demonstrations covering learning outcomes 7-19 inclusive

Assessing whether a learner does or does not achieve competence is a challenge for training in using breathing apparatus. A learner who does not achieve competence in a task is potentially a danger to themselves, their colleagues and those members of the public they are entrusted to serve. A single serious event such as a panic reaction in the risk area, when performing a task during a skills demonstration assessment, must be carefully considered in light of the potential life safety implications.

This assessment is competency based, and all tasks must be achieved, otherwise the candidate is deemed to have been unsuccessful.

The learner is required to complete a skills demonstration in each of the areas listed below, which will be broken into tasks:

Breathing apparatus set user maintenance – 5%

Donning and doffing of breathing apparatus set – 5%

Entry control procedures & Pre-entry checks – 5%

Navigation – 15%

Searching – 5%

Communication; internal and external – 5%

Team leading – 15%

Effective entry to fire risk area – 5%

Hazard identification and risk assessment in fire risk area – 10%

Firefighting tactics and techniques – 10%

The assessor must provide clear guidelines on the tasks to be completed in each of the areas listed and identify potential faults, including critical faults affecting life safety. Safety critical tasks must be passed.

This assessment must be passed in order to achieve the award.

Examination - Theory

An examination provides a means of assessing a learner's ability to recall and apply knowledge, skills and understanding within a set period of time and under clearly specified conditions.

A theory-based examination assesses the ability to recall, apply and understand specific theory and knowledge.

The assessor will devise a theory examination covering learning outcomes 1-9 inclusive.

This assessment must be passed in order to achieve the award.

Recognition of Prior Learning (RPL)

To support the development and implementation of RPL with regard to access, granting credit/exemptions and achievement of awards/parts of awards, providers should refer to **QQI's Statutory Guidelines for Quality Assurance**, the **Policies and Criteria for Validation of Programmes** and the **Principles and Operational Guidelines for the Recognition of Prior Learning in Further and Higher Education and Training** available at www.qqi.ie

Grading

Pass	50% - 64%
Merit	65% - 79%
Distinction	80% - 100%

Specific Validation Requirements

The provider should have

1. Access to a training facility in compliance with current health and safety regulations
2. Access to fire service facilities of sufficient scale to ensure that all learners have access to the vehicles and equipment required to practice and achieve learning outcomes to include:
 - Suitably sized training rooms to accommodate classroom presentations
 - Suitably sized training space to provide briefs and debriefs in operational gear and storage of breathing apparatus (BA) sets
 - Suitably sized welfare, changing and drying facilities for operational gear
 - Suitably sized training compartment structure to accommodate the various training wears – this must include the ability to provide complete darkness and replicate realistic heat and smoke conditions (carbonaceous and/or gas) for the relevant wears
 - A standard Class B pumping appliance with all associated equipment, including hose, ladders, portable pumps and main pumps
 - All associated BA equipment, including self-contained BA sets, BA cylinders (200 or 300 bar), suitable BA cylinder filling facilities, BA control boards and entry control items

3. The maximum ratio should be 1 trainer to 3 learners.
4. Stated policies and procedures by the provider to deal with potential risks that may be encountered.

Supporting Documentation

1. Current relevant legislation
2. Use of Breathing Apparatus in the Fire Service – Department of the Environment, Heritage and Local Government
3. Standard Operational Guidance Documentation – National Directorate for Fire and Emergency Management
4. National Incident Command System – Department of the Environment, Heritage and Local Government
5. Health and Safety Authority statutory regulations, codes of practice and guidelines
6. Manufacturers’ vehicle and equipment operating instructions

Access

To access programmes leading to this award the learner should have reached the standards of knowledge, skill and competence associated with the preceding level of the National Framework of Qualifications. This may have been achieved through a formal qualification or through relevant life and work experience.

In addition, learners will be required to successfully complete a physical test and medical examination and have achieved the Firefighting Skills award.

Transfer

Successful completion of this component award enables the learner to transfer to programmes leading to other certificates where this component is a mandatory or an elective requirement.

2. FET Award Standards

QQI award standards are determined within the National Framework of Qualifications (NFQ), <http://www.nfq-qqi.com>. QQI determines standards for the education and training awards that it makes itself and that are made by providers to whom it has delegated authority to make an award. Providers offering programmes leading to QQI awards **must** have their programme(s) validated in accordance with current validation policy (see www.qqi.ie).

Award standards are designed to be consistent with the NFQ’s award classes i.e. major, special purpose, supplemental and minor awards. They are expressed in terms of **learning outcomes** i.e. concise statements of what the learner is expected to know or be able to do in order to achieve a particular award. Learning outcomes for FET awards are contained within the associated specifications:

AWARD CLASS	STANDARDS	AWARDS
Major Award	Certificate Specification	Certificate (Levels 1 to 5) Advanced Certificate (Level 6)
Supplemental Award	Supplemental Specification	Supplemental Certificate (Level 3 to 6)

Special Purpose	Specific Purpose Specification	Specific Purpose Certificate (Levels 3 to 6)
Minor Award	Component Specification	Component Certificate (Levels 1 to 6)

Award standards are thresholds, they describe standards of knowledge, skill or competence to be acquired, and where appropriate, demonstrated, by a learner before an award may be made.

Award standards will be reviewed from time to time as necessary. Minor changes may be made by the QQI executive outside the review cycle where necessary. Changes to standards are published on QQI's website. Providers with validated programmes and providers with delegated authority to make awards are responsible for monitoring relevant standards and making necessary responses to changes.

3. FET Credit

Every FET certificate and component specification includes an FET credit value (Table 1). FET credit is quantified in multiples of 5 FET credits (up to 50 hours of learner effort). Learner effort is based on the time taken by typical learners at the level of the award to achieve the learning outcomes for the award. It includes all learning time involved including: guided learning hours, self-directed learning and assessment.

Table 1: FET Credit Values

NFQ Level	Major Awards Credit Values	Default Credit Values Minor Awards	Other Permitted Minor Award Credit Values	Special Purpose and Supplemental Award Credit Value Ranges
1	20	5	10	
2	30	5	10	
3	60	10	5,20	>5 and <60
4	90	10	5,15,20	>5 and <90
5	120	15	5,10,30	>5 and <120
6	120	15	5,10,30	>5 and <120

Guide to Level

Learning outcomes at this level include a comprehensive range of skills which may be vocationally-specific and/or of a general supervisory nature, and require detailed theoretical understanding. The outcomes also provide for a particular focus on learning skills. The outcomes relate to working in a generally autonomous way to assume design and/or management and/or administrative responsibilities. Occupations at this level would include higher craft, junior technician and supervisor.

Strand	Sub-strand	Nature of learning
Knowledge	Breadth	Specialised knowledge of a broad area
	Kind	Some theoretical concepts and abstract thinking, with significant underpinning theory
Know How & Skill	Range	Demonstrate a comprehensive range of specialised skills and tools

Competence	Selectivity	Formulate responses to well defined abstract problems
	Context	Act in a range of varied and specific contexts involving creative and non-routine activities; transfer and apply theoretical concepts and/or technical or creative skills to a range of contexts
	Role	Exercise substantial personal autonomy and often take responsibility for the work of others and/or for the allocation of resources; form and function within, multiple and complex heterogeneous groups.
	Learning to Learn	Learn to evaluate own learning and identify needs within a structured learning environment; assist others in identifying learning needs
	Insight	Express an internalised, personal world view, reflecting engagement with others.

Extract from 'Determinations for the Outline National Framework of Qualifications': NQAI

