

Certificate Specification NFQ Level 6

Maintenance Skills Technology 6M5154

1. Certificate Details

Title	Maintenance Skills Technology
Teideal as Gaeilge	Teicneolaíocht Scileanna Cothabhála
Award Class	Major
Code	6M5154
Level	6
Credit Value	120
Purpose	The purpose of this award is to enable the learner acquire the knowledge, skill and competence to carry out scheduled and unplanned maintenance activities on range of plant and machinery across all sectors autonomously and without supervision.
Statements of Knowledge, Skill and Competence	Learners will be able to:
Knowledge	
<i>Breadth</i>	Demonstrate a broad range of knowledge of industrial plant and equipment and typical maintenance programmes and activities.
<i>Kind</i>	Demonstrate knowledge of technical and practical and conceptual skills pertinent to the implementation of planned maintenance schedules, condition inspection and unplanned maintenance for a variety of plant and equipment.
Know How & Skill	
<i>Range</i>	Demonstrate a broad range of maintenance skills, techniques and practical procedures used in the maintenance of plant and equipment.
<i>Selectivity</i>	Exercise judgment in selecting appropriate equipment and work practices for varied and unfamiliar tasks and problems associated with maintaining a range of plant and machinery.
Competence	

<i>Context</i>	Apply knowledge and skills within a wide range of roles and sectors.
<i>Role</i>	Carry out all aspects of the planned and unplanned maintenance activities for a range of plant and equipment autonomously.
<i>Learning to Learn</i>	Demonstrate an ability to direct and evaluate personal learning initiatives.
<i>Insight</i>	Reflect on personal values and display an insight into the importance of maintenance in promoting health, safety and efficiency.

The learning outcomes associated with this award are outlined in the associated Component Specifications.

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.

Transfer Achievement of this award will enable the learner to transfer to other appropriate programmes leading to awards at the same level of the National Framework of Qualifications.

Progression Achievement of this award will enable the learner to progress to other appropriate programmes leading to awards at the next or higher levels of the National Framework of Qualifications.

Progression Awards Learners who successfully complete this award may progress to a range of different awards.

Grading Pass
Merit
Distinction
The grade achieved will be determined by the grades achieved on the components

2. Certificate Requirements

The total credit value required for this certificate is 120. This will be achieved by completing:

Award Code	Title	Level	Credit Value
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All of the following component(s)

A minimum credit value of 45 from the following components

6N1782	Safety Management	6	15
6N2049	Electrical Principles	6	15
6N5369	Preventive Maintenance	6	15

6N5370	Programmable Logic Controllers	6	15
6N5372	Mechanical Maintenance Skills	6	15
6N5373	Plant Facilities Maintenance	6	15

A minimum credit value of 15 from the following components

6N2191	Leadership	6	15
6N0697	Customer Service	6	15
6N1950	Communications	6	15
6N1948	Team Leadership	6	15

A minimum credit value of 15 from the following components

6N1949	Personal and Professional Development	6	15
6N1946	Work Experience	6	15
6N1947	Work Practice	6	15

A minimum credit value of 30 from the following components

6N4090	Project Management	6	15
6N5374	Electronics	6	15
6N5375	Industrial Pneumatic Systems	6	15
6N5376	Industrial Hydraulic Systems	6	15
6N5377	Industrial Electrical Systems	6	15
6N5378	Refrigeration Principles and Systems	6	15

The remaining credit value of 15 can be obtained by using vocationally relevant component(s) from level 6. A maximum of 15 credits may be used from level 5.

3. Supporting Documentation

None

4. Specific Validation Requirements

There are no specific validation requirements

5. Europass Certificate Supplement

The Europass Certificate Supplement for this award can be accessed at: www.qqi.ie.

6. 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 QQI 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.

7. 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
	Selectivity	Formulate responses to well defined abstract problems
Competence	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