Component Specification

Milking Process Technique

NFQ Level 6

6N20476

1. Component Details

Title	Milking Process Technique
Teideal as Gaeilge	Teicníc Próiseas Blite
Award Class	Minor
Code	6N20476
Level	6
Credit Value	5
Purpose	The purpose of this award is to equip the learner with the knowledge, skill and competence to autonomously perform and manage the dairy herd milking process integrating key milking techniques with required milk quality, food safety, dairy herd health and dairy cow welfare for commercial Irish dairy herds
Learning Outcomes	Learners will be able to:

	1	Evaluate the factors that affect milk composition in the cow, milk quality and food safety in the context of internationally recognised standards, Irish milk processor quality assurance and milk quality standards required under legislation
	2	Assess best practice for managing sickness and abnormal behaviour in dairy cows in the herd and communications required for third parties
	3	Appraise best practice bio-security measures necessary to maintain a disease free herd

4   Assess situations where disease in milking animals pose risk to milk production, quality, operator and consumer health

5   Assess current legislative and health and safety issues associated with milk production

6   Appraise components, operation, maintenance requirements and new developments of common milking parlour types

7   Report clearly on the implementation of any instruction and communications received in relation to the milking process and specific control measures where necessary

8   Utilise appropriate preparatory and post milking procedures in regard to the environment and equipment for the entire milking process

9   Assess herd for health and heat pre milking and take appropriate action

10   Utilise best practice in regards to operator hygiene

11   Utilise recognised best practice procedures in regard to key cow pre and post milking procedures including teat preparation, hygiene, and disinfection and checking for mastitis

12   Utilise recognised best practice procedures in respect of: cluster attachment, milking of the cow, and cluster removal whilst ensuring safe and efficient operation

13   Monitor the milking process and the operation of the milking machine, bulk tank backing gate and cow flow taking regard of efficiency and cow calmness, taking corrective action as appropriate

14   Sample milk using appropriate techniques including taking a sterile sample for culture

15   Utilise recognised best practice procedures to deal with a cow with mastitis

16   Supervise the manual or automatic milking machine washing and rinsing procedure

17   Demonstrate knowledge of essential milk bulk tank operational checks and maintenance.

18   Manage the implementation of risk assessment and hazard control at each milking process step as appropriate

Assessment

General Information   Details of FET assessment requirements are set out in
Assessment Guidelines for Providers.

All FET assessment is criterion referenced. Successful
achievement of the award is based on learners attaining the
required standards of knowledge, skill or competence.

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 FETAC's assessment
requirements.

Programme validation will require providers to map each learning
outcome to its associated assessment technique. See current
FET validation guidelines at www.qqi.ie.

All learning outcomes **must** be assessed and achieved

Skills Demonstration	60%
Examination - Theory	30%
Examination - Oral	10%

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 learner must achieve 40 out of the 60 skills demonstration marks available to achieve this 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.

Examination - Oral

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.

An oral examination assesses the ability to speak effectively in the vernacular or other languages.

Recognition of Prior Learning (RPL)	Learners may be assessed on the basis of their prior knowledge and experience. Providers must be specifically quality assured to assess learners by this means. To do so they must complete B10, see Provider's Quality Assurance Guidelines and be included on the Register of RPL approved providers. See RPL Guidelines at www.fetac.ie for further information and registration details.

Grading

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

Specific Validation Requirements

The provider must have all of the following in place to offer this award:

1. Access to a farm with appropriate animal and feed stuff housing and handling facilities in compliance with health and safety requirements

2. Access to a farm with appropriate skills demonstration space in compliance with health and safety requirements
3. Access to a farm of sufficient scale to ensure that all learners have access to animals and equipment required to practice and achieve learning outcomes to include a suitable sized dairy herd and complete milking parlour including milk bulk tank
4. Stated policies and procedures by the provider to deal with potential bio security risks
5. Access to a farm in compliance with current dairy hygiene regulations

Supporting Documentation	1. Publications from: Teagasc, The Agriculture and Food Development Authority 2. Publications from: Animal Health Ireland
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	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
	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