



Component Specification

Tractor Operations

Level 5

5N1742

1. Introduction

The Further Education and Training Awards Council is the single national awarding body in further education and training in Ireland. It is responsible for determining the standards for named awards at levels 1 to 6 on the National Framework of Qualifications. All named awards are devised in line with the National Qualifications Authority of Ireland's determinations and guidelines.

2. The National Framework of Qualifications

The National Framework of Qualifications comprises 10 levels ranging from initial learning (level 1) to the most advanced levels of learning (level 10).

At each level there are one or more award types. An award type is a grouping of awards that share similar features. The National Qualifications Authority of Ireland has determined Award Type Descriptors for each award type. See www.nqai.ie. The Award Type Descriptor identifies the key strands and sub-strands of knowledge, skill and competence for that award type.

3. Guide to Level

Learning outcomes at this level include a broad range of skills that require some theoretical understanding. The outcomes may relate to engaging in a specific activity, with the capacity to use the instruments and techniques relating to an occupation. They are associated with work being undertaken independently, subject to general direction.

Strand	Sub-strand	Nature of learning
Knowledge	Breadth	Broad range of knowledge
	Kind	Some theoretical concepts and abstract thinking, with significant depth in some areas. Some underpinning theory
Know How & Skill	Range	Demonstrate a broad range of specialised skills and tools
	Selectivity	Evaluate and use information to plan and develop investigative strategies and to determine solutions to varied unfamiliar problems
Competence	Context	Act in a range of varied and specific contexts, taking responsibility for the nature and quality of outputs; identify and apply skill and knowledge to a wide variety of contexts
	Role	Exercise some initiative and independence in carrying out defined activities; join and function within multiple, complex and heterogeneous groups
	Learning to Learn	Learn to take responsibility for own learning within a managed environment
	Insight	Assume full responsibility for consistency of self- understanding and behaviour

Extract from 'Determinations for the Outline National Framework of Qualifications': NQAI (www.nqai.ie)

4. Award Specifications

FETAC determines the standards for all awards in partnership with relevant stakeholders. This award was developed in line with the Council policy on Standards Development published in September 2005.

Standards are published in the form of Award Specifications. A Specification is devised in respect of each named award. Each Specification provides a comprehensive description of the features, characteristics and standards of the award.

A **Certificate Specification** is published for each named **major award**.

A **Component Specification** is published for each named **minor award**. Please note that each component (i.e. minor award) is associated with one or more Certificates (i.e. major, special purpose or supplemental award). See www.fetac.ie.

A **Specific Purpose Specification** is published for each **special purpose award**.

A **Supplemental Specification** is published for each **supplemental award**.

Standards 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 that award.

Learning outcomes for all awards (i.e. major, special purpose, supplemental awards) are contained within the associated Component Specifications.

5. Component Details

Title	Tractor Operations
Teideal as Gaeilge	To be confirmed by FETAC (TBC)
Award Type	Minor
Code	5N1742
Level	5
Credit Value	30
Purpose	The purpose of this award is to equip the learner with the relevant knowledge, skill and competence to operate a tractor in compliance with recommended standards, European Union (EU) and Irish legislation and good farming practice.
Learning Outcomes	Learners will be able to: <ol style="list-style-type: none">1 Interpret legal requirements pertaining to the use of tractors and ancillary equipment on public roads2 Describe procedures for safe and efficient tractor operation to maximise tractor stability on flat, rolling and hilly terrain and surface conditions3 Interpret safety decals, tractor controls and instrument panels appropriate to a range of work situations4 Carry out routine pre-starting checks specified in the operator's manual5 Drive a tractor in a controlled manner in a confined flat terrain evaluating handling to include balance, brake operation, stopping efficiency and handbrake efficiency6 Drive a tractor with a trailed hydraulic coupled implement in a controlled manner appropriate to terrain and surface conditions7 Drive a tractor with a power take-off three-point linkage machine attached, in a controlled manner appropriate to terrain and surface conditions8 Load materials using a tractor front end loader in a controlled manner appropriate to the materials being handled and terrain and surface conditions9 Operate a tractor effectively and in accordance with safety requirements

- 10 Operate tractor effectively for a range of tractor tasks using ancillary equipment including trailed equipment, three-point linkage equipment and front loaders.

Assessment

General Information

Details of FETAC's assessment requirements are set out in [Assessment Guidelines for Providers](#).

All FETAC 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 [FETAC's Provider Guidelines for Programme Validation](#).

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 [FETAC's Provider Guidelines for Programme Validation](#).

All learning outcomes **must** be assessed.

Skills Demonstration 75%

Learner Record 10%

Examination - Theory 15%

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 a skills demonstration based on learning outcomes 3 - 10. The learner must complete the 25 tasks set out in the list below.

Weighting Factor:

Where a critical fault occurs the entire skills demonstration must be terminated.

0 mark for termination of skill demonstration due to a critical fault or failure to complete the task.

1 mark for completing the task with 3 or more minor faults

2 marks for completing the task with less than 3 minor faults

3 marks for exceeding the criteria for the task with no minor faults

Examples of critical faults: compromises safety, animal welfare, the environment

Examples of minor faults: Incorrect sequence, too slow, requires guidance

The learner must achieve at least 50 of the 75 marks available, to pass this assessment. The learner must pass this assessment to achieve the award.

List of tasks:

1. Carries out safety assessment (hazards, risks and controls) associated with tractor operations
2. Checks tractor for compliance with legal requirements for brakes, cab/frame, lighting and guards
3. Carries out routine pre starting checks specified in operators manual
4. Identifies functions and setting of controls
5. Interprets instrument panel readings
6. Interprets gear selection chart
7. Prepares for and starts tractor engine
8. Checks tractor handling for steering response, brake balance and stopping efficiency, handbrake efficiency
9. Parks tractor
10. Refuels tractor and greasing
11. Checks trailer for compliance with legal requirements for soundness, tyres, tyre pressure, hydraulic hosing, brakes and lights
12. Hitches tractor fitted with pick up hitch or clevis hitch drawbar to a trailer/tanker with hydraulic tipping and/or power take-off shaft
13. Manoeuvres tractor and trailer forward and in reverse through a confined course with variable terrain and ground conditions
14. Parks trailer/tanker safely
15. Parks tractor in accordance with recommended good practice
16. Dismantles, checks and re-fits PTO cover to PTO shaft
17. Attaches implement to the 3 point linkage of tractor in the correct sequence, including connecting power take off shaft
18. Detaches implement from 3 point linkage
19. Carries out safety assessment for loader operation
20. Checks loader for soundness and drivability
21. Changes loader attachments
22. Positions trailer to be loaded to allow minimum loader travel
23. Loads loader attachment and moves loader to trailer
24. Places material on trailer in the correct sequence
25. Parks loader in accordance with recommended good practice

Overall Marks 75

Learner Record

A learner record is the learner's self-reported and self-reflective record in which he/she describes specific learning experiences, activities, responses and skills acquired.

The internal assessor will devise a brief that requires the learner to maintain a learner record for a minimum period of 220 hours work experience. Learners are required to record their application of all learning outcomes in a farm setting. The learner must pass this assessment to achieve the award.

Overall Marks 10

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 based examination to assess learning outcomes 1 - 2.

Overall Marks 15

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

There are no specific validation requirements for this award

Supporting Documentation

None

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.