

# **Component Specification NFQ Level 5**

# Work Boat Handling 5N5088

# 1. Component Details

Title	Work Boat Handling		
Teideal as Gaeilge	Láimhsiú Bád Oibre		
Award Type	Minor		
Code	5N5088		
Level	5		
Credit Value	15		
Purpose	The purpose of this award is to equip the learner with the knowledge, skill and competence to handle and use a workboat safely working independently whilst under supervision.		
Learning Outcomes	Learners will be able to:		
	1 List the safety equipment necessary for a small workboat		
	2 Explain the effects of the distribution of crew and different loads on workboat stability and handling characteristics to include the dangers of capsizing and how they can be minimised and the effect of wash on other water users		
	3 Explain the mooring and anchoring processes to include the effect speed of vessel, tide, wind and type of bottom and the function and choice of gear associated with the anchoring process		
	4 Examine the effect of transverse thrust, planing, trim tabs and power trim		

- 5 Explore the principles and safety procedures involved with inboard and outboard two and four stroke engines
- 6 Identify what precautions should be observed when checking lead acid batteries
- 7 Enumerate the importance of checking for cooling water flow and oil levels with inboard and outboard engines
- 8 List the precautions to be taken to prevent water entering the fuel system
- 9 Explain the actions to be taken if an engine is totally immersed
- 10 Identify the correct method of disposing of waste oil
- 11 Participate in launching and recovering a workboat from a trailer
- 12 Perform pre sea checks and safe embarking and disembarking procedures
- 13 Manoeuvre a vessel away and alongside a quay or platform and let go a workboat from a buoy or platform
- 14 Respond to helm orders and maintain a given heading
- 15 Participate in an anchoring and heaving anchor operation
- 16 Use a workboat for towing
- 17 Ship oars when coming alongside a pier, platform or other Vessels
- 18 Manoeuvre a diesel engine workboat ahead an astern
- 19 Seal rope ends using heat and tape and whippings and servings methods
- 20 Form the most common knots, bends and hitches used in workboat handling
- 21 Construct an eye splice, short splice and back splice in rope

- 22 Locate the main engine parts on an outboard engine and an inboard diesel engine
- 23 Show the correct way to tilt an outboard engine when mounted on the stern of a boat
- 24 Implement the correct sequence for starting/stopping an outboard and an inboard engine
- 25 Pump bilges without causing pollution
- 26 Interpret the terminology and signals used during the mooring and anchoring process
- 27 Moor a workboat and adjust mooring lines and set fenders
- 28 Perform a man overboard recovery
- 29 Perform operations on a tender to include correct seating arrangements, fitting rowlocks and oars, effective use of foot rests, proper use of oars, blades and shaft, correct use of rudder and tiller and coming short round under oars
- 30 Manoeuvre a workboat with an outboard engine at low and high speed, to turn in a confined area and to complete an "S" turn and a "U" turn
- 31 Turn a diesel engine workboat short around and stop a workboat in an emergency
- 32 Carry out the correct procedure for mixing oil and fuel for a two stroke petrol outboard engine.

#### Assessment

**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 <u>www.qqi.ie.</u>

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 a validation which are reliable and validation to their context.	application for programme alid but which are more
	Assessment of a number of compo across programmes for delivery, proutcomes of each minor award are	onents may be integrated rovided that the learning assessed.
	Group or team work may form part each learner's achievement is sepa	t of the assessment, provided arately assessed.
	All providers are required to submi of their application for programme will include information relating to s assessment. See current FET valid www.qqi.ie.	it an assessment plan as part validation. Assessment Plans scheduling and integration of dation guidelines at
Assessment Techniques	In order to demonstrate that they h knowledge, skill and competence is outcomes, learners are required to below.	have reached the standards of dentified in all the learning complete the assessment(s)
	The assessor is responsible for de instruments (e.g. project and assig papers), assessment criteria and n the techniques identified below and requirements.	evising assessment Inment briefs, examination nark sheets, consistent with d QQI's assessment
	Programme validation will require p outcome to its associated assessm outcomes <b>must</b> be assessed and a the <b>minimum intended module le</b> the validated programme.	providers to map each learning nent technique. All learning achieved in accordance with earning outcomes set out in
	Portfolio / Collection of Work 8	30%
	Examination - Theory 2	20%
Description		
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	Portfolio / Collection of Work	

A portfolio or collection of work is a collection and/or selection of pieces of work produced by the learner over a period of time that demonstrates achievement of a range of learning outcomes. The collection may be self-generated or may be generated in response to a particular brief or tasks/activities devised by the assessor.

### **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.

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	There are no s	pecific validation requirements	
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.		

### 2. FET Award Standards

QQI award standards are determined within the National Framework of Qualifications (NFQ), <u>http://www.nfq-qqi.com</u>. 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 <u>www.qqi.ie</u>).

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 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 &	How & Range	Demonstrate a broad range of specialised skills and tools
Skill	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