

Component Specification

Quantitative Problem Solving

NFQ Level 2

M2N09

1. Component Details

Title	Quantitative Problem Solving
Teideal as Gaeilge	TBA
Award Class	Minor
Code	M2N09
Level	2
Credit Value	5
Purpose	This award recognises basic knowledge, skill and competence in basic quantitative problem solving. It provides recognition for appropriate use of language and concept within a variety of familiar and well supported contexts. It provides credit towards the Level 2 Certificate in General Learning.
Learning Outcomes	<p>Learners will be able to:</p> <ol style="list-style-type: none"> 1 Identify quantitative elements in a range of everyday circumstances, e.g. daily budget, planning an outing-including distances, dates, times and costs 2 Be aware of approaches that can be used to solve quantitative problems, e.g. estimation, modelling and flow charts 3 Use mathematical terms and symbols to represent problems 4 Find a solution to a real life quantitative problem 5 Evaluate the solution obtained for the problem

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

Description

Final Exam

100%

Final Exam

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	'Successful' indicates that the learner has achieved all of the learning outcomes for the award with some supervision and direction. The learner has demonstrated autonomy of action and has taken responsibility for generating appropriate evidence for all learning outcomes.
Specific Validation Requirements	There are no specific validation requirements for this award
Supporting Documentation	1.
Access	A Level 1 Certificate or equivalent qualifications and/or relevant life and work experiences.
Transfer	Learners who successfully complete this component are eligible to transfer to programmes leading to other awards at Level 2 as appropriate to the requirements for the specific named award.

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

An award at Level 2 reflects basic learning with well supported direction. The range is narrow. Learning is developmental but may include knowledge, skill and competence related to particular fields of learning, e.g. aspects of literacy and numeracy, within familiar contexts, including with reference to the workplace.

The award provides for building skills in relation to process and task completion under direction, and for enhanced recognition of the learners own skills, abilities and talents, and of a capacity to deal with choice and decision making.

Strand	Sub-strand	Nature of learning
Knowledge	Breadth	Knowledge that is narrow in range

	Kind	
Know How & Skill	Range	Demonstrate limited range of basic practical skills, including the use of relevant tools
	Selectivity	Perform a sequence of routine tasks given clear direction
Competence	Context	Act in a limited range of predictable and structured contexts
	Role	Act in a range of roles under direction
	Learning to Learn	Learn to learn in a disciplined manner in a well-structured and supervised environment
	Insight	Demonstrate awareness of independent role for self

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