

## Component Specification

### Information and Communication Systems

#### NFQ Level 5

#### 5N1952

##### 1. Component Details

<b>Title</b>	Information and Communication Systems
<b>Teideal as Gaeilge</b>	Córais Fáisnéise agus Cumarsáide
<b>Award Class</b>	Minor
<b>Code</b>	5N1952
<b>Level</b>	5
<b>Credit Value</b>	15
<b>Purpose</b>	The purpose of this award is to equip the learner with the knowledge, skill and competence in a range of information and communication systems to enable the learner to use information and communications systems, effectively within a range of contexts.
<b>Learning Outcomes</b>	<p>Learners will be able to:</p> <ol style="list-style-type: none"><li>1 Summarise the relationship between data and information to include both, the attributes of information and the methods and stages of information processing</li><li>2 Evaluate the role of comparison, exception reporting and feedback in information flows, distinguishing between operational, tactical and strategic information</li><li>3 Examine a range of commonly used information systems to include personal systems (PS), transaction processing systems (TPS), management information systems (MIS), decision support systems (DSS) and expert systems (ES)</li></ol>

- 4 Comment on the difference between hard and soft information
- 5 Evaluate the functions of the main components of a computer processing system to include input and output devices, processing and memory, the operating system, application software and the appropriate input/output device for specific applications
- 6 Examine file organization structures, static and dynamic data, data collection methods, data validation and verification, single and multi-user environments and data security and integrity
- 7 Explore the legal responsibilities of data controllers in relation to software copyright, public and private databases and data protection legislation and EU directives
- 8 Identify the ergonomic factors affecting the design and use of computer facilities
- 9 Analyse the impact of Information Technology developments on employment patterns and practices
- 10 Use a range of commonly used ICT terminology to include server, dumb terminal, wide area network, local area network, world wide web, browser and search engine
- 11 Evaluate the role, function, advantages and dangers of the use of the internet, email and intranets in business
- 12 Analyse the stages in a range of data processing activities to include sales, recruitment and wage payments
- 13 Calculate the cost-benefit analysis of acquiring information
- 14 Recommend an appropriate data processing method based on specific task requirements
- 15 Use a range of ICT to send, receive and forward data
- 16 Apply information and communication systems processes to a range of organisations and tasks
- 17 Employ information databases effectively, safely and in compliance with privacy legislation
- 18 Research information effectively and safely using I.C.T.

## 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](http://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](http://www.qqi.ie).

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

Assignment	30%
Skills Demonstration	30%
Examination - Theory	40%

## Description

### Assignment

*An assignment is an exercise carried out in response to a brief with specific guidelines as to what should be included. An assignment is usually of short duration and may be carried out over a specified period of time.*

### 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.*

### 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)

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](http://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

### 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), <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](http://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 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.
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*