

## Higher Certificate in Science in Business Computing

### 1 Panel Report

#### 1.1 Details of Validation Event

PROVIDER	National College of Ireland
DATE OF VISIT	22 <sup>nd</sup> January 2015
PROGRAMME(S) EVALUATED	Higher Certificate in Science in Business Computing
PROGRAMME (S) RECOMMENDED APPROVAL	FOR Higher Certificate in Science in Business Computing
PANEL OF EXPERTS	Mr David Denieffe, Registrar, IT Carlow ( <i>Chair</i> ) Ms Noreen Gubbins, IT Cork Mr Neil Higgins, Limerick IT Mr Brian Watters, IT Blanchardstown Mr Stephen Howell, Microsoft Ireland
	<i>In attendance:</i> Sinéad O’Sullivan, Director of Quality Assurance & Statistical Services, NCI ( <i>Rapporteur</i> ) Ms. Gráinne Power, QQI (Observing) Ms. Angela McDonnell, QQI (Observing)

#### 1.2 Summary

The Expert Panel, having reviewed the documentation presented by NCI and considered the responses of the programme team during the course of the site visit; recommend approval of the following programme

- Higher Certificate in Science in Business Computing

With four (4) recommendations

### 1.3 Examination of Programmes

The panel met with staff of NCI involved in the design of the programme, to examine the programme submission against the criteria for the validation of programmes as stipulated by the QQI board. In this regard, the QQI's *Core Validation Policy and Criteria, 2010, revised 2013* was used by the Panel. The panel heard that this programme was developed arising from the programmatic review of the Higher Certificate in Science in Computing and the BA (Ord) in the Management of Technology in Business and BA(Hons) in Technology Management which have been run at NCI since 2005/6. The panel was presented with comprehensive documentation outlining the new programme proposal. This documentation should be reviewed and fully proofed.

#### 1.3.1 Development and publication of explicit intended learning outcomes

The programme submission documents, together with the outcome of discussions with NCI staff articulated the target learners' prerequisite learning and any other relevant assumptions about programme participants. The panel is satisfied that the programme learning outcomes are appropriate to the level and were designed using QQI's award standards for Computing at level 6 of the National Framework of Qualifications.

#### 1.3.2 Programme content, design and learning environment

The Panel was satisfied that the programme is coherent and fit for their stated purpose.. The panel heard that the programme is designed as a stand alone programme as well as being an exit award for the BSc in Technology Management. This is a new award and complements the provision of the existing Higher Certificate in Science in Computing offered by the School. The programme content and learning environment are appropriate to the programmes intended learning outcomes and that the module learning outcomes are aligned to the programme learning outcomes. The programme team that the panel met is competent to enable learners to achieve the intended programme learning outcomes and to assess their achievements, in accordance with QQI's *Assessment and Standards 2013*. The panel is satisfied that the School of Computing has sufficient resources within its current full-time and associate faculty to appropriately resource the programme as this programme is replacing the programme being retired due to programmatic review.

Members of review panel visited laboratory teaching spaces, hardware labs and is satisfied that these resources are appropriate to these programme and learner population.

#### Comment on Programme Modules

Modules were reviewed and subject to the following commentary in relation to specific modules were found to have appropriate learning outcomes, indicative content and assessment strategies.

**Problem & Puzzle Solving:** The panel commends the presence of this module as a good foundation to programming skills.

**Web Authoring/Introduction to Multimedia:** The panel recommends that the credit volume for both of these modules should be reviewed as the intended outcomes for the programme put less emphasis on development.

**Software Applications for Business:** The panel considers that the credit volume and associated contact hours should be increased in order to reflect the importance of this module.

**Data Communications & Networks:** The panel recommends that content of this module should be reviewed and an opportunity taken to introduce missing aspects of Cloud Computing into the programme in this module.

**Fundamentals of Business Analysis:** The panel recommends that the credit volume and contact time on this module should be increased.

### **1.3.3 Enabling the achievement of the intended programme learning outcomes**

The panel noted that the number of learning outcomes at a programme level should be condensed and is satisfied that learners will be able to meet the programme learning outcomes using the delivery mechanisms and patterns as described by the programme team.

### **1.3.4 Actions and procedures for access, transfer and progression for learners**

The Panel was satisfied that the procedures for access, transfer and progression are consistent with national policy. The panel also heard about the support services in numeracy and computing that are afforded to all learners.

The panel is satisfied that the programme's use of *ECTS* (credit) and provisions for Recognition of Prior Learning (RPL) is consistent with QQI's *Assessment and Standards 2013* and with relevant national policy including:

- i. NQAI's *Principles and Operational Guidelines for the Implementation of a National Approach to Credit in Irish Higher Education and Training 2006*
- ii. NQAI's *Principles and Operational Guidelines for the Recognition of Prior Learning in Further and Higher Education and Training 2005*

### **1.3.5 Education and training needs**

The panel is satisfied that this programme satisfies a current need in the Irish education market. Programme viability

The Panel was satisfied that the programme is consistent with the provider's mission and strategy. The panel heard the projections for student intake over the next 5 year period.

### **1.3.6 Learner Protection**

NCI's policy is that once a programme has commenced, the programme will be completed for all learners enrolled. It is National College of Ireland's policy that, should a programme commence, it will be offered to completion for the specific intake of learners. The College is committed to the provision of this programme. As a member of the Dublin Pillar II Cluster, NCI has agreement from Dublin City University and Maynooth University to provide Learner Protection. Learners may transfer to an appropriate DCU or Maynooth University programme. In the case where the programme does not have an appropriate transfer option DCU or Maynooth University will complete out the QQI award using NCI faculty and premises. NCI has agreement in principle from QQI and is currently working with QQI on finalising the arrangement of these provisions'

### **1.3.7 Assessment of learners**

The panel is satisfied that the learners will be appropriately assessed and underpins the achievement of the relevant standard of knowledge, skill and competence. The programme document should clearly outline any requirements for mandatory submission and/ or passing of assessment components.

### **1.3.8 Quality Assurance Arrangements**

The panel is satisfied that NCI has appropriate quality assurance arrangements in place and that no new quality assurance arrangements are required for these programmes. The documentation submitted demonstrated that the programme development followed rigorous institutional quality assurance to ensure that it conforms with strategy, stakeholders had been consulted with, had clearly identified resource requirements, and had undergone internal review prior to submission.

### **1.3.9 Ethics**

It is expected that providers will have procedures in place to ensure that any teaching and learning or research activity at any level shall be conducted in a manner that is morally and professionally ethical. The panel was satisfied that this requirement has been met in respect of the proposed programmes.

### **1.3.10 Programme Titles and Award Titles**

The Panel heard the rationale for the programme title is satisfied that the programme title and award as proposed as being appropriate and consistent with QQI policy for the naming of awards.

## 1.4 RECOMMENDATION/COMMENT

### FOR THE ATTENTION OF THE ACADEMIC COMMITTEE

The panel of experts recommend the validation of the following programme:

NFQ Level	<i>Level 6</i>
Programme Title	<b><i>Higher Certificate in Science in Business Computing</i></b>
ECTS	<i>120 ECTS</i>
Award Type	<i>Major Award</i>

Subject to:

Council's general conditions of approval

#### 1.4.1 Commendations

- Inclusion of Problem & Puzzle Solving module

#### 1.4.2 Conditions

none

#### 1.4.3 Recommendations

- R1. The credit volume and associated contact hours for Software Applications for Business should be increased to 10 ECTS
- R2. The credit volume and associated contact hours for Fundamentals of Business Analysis should be increased to 10 ECTS
- R3. The content for Data Communications & Networks should be reviewed and an opportunity taken to focus on aspects of Cloud computing
- R4. Programme documentation should be fully proofed.

**Appendix: Staff Met**

Prof. Jimmy Hill, Vice President Academic Affairs & Research

Mr John McGarrigle, Registrar

Dr Pramod Pathak, Dean of School of Computing

Mr Paul Stynes, Vice Dean, School of Computing

Dr Eugene O'Loughlin, Programme Director BSc Hons Technology Management

Ms Lisa Murphy, Programme Director Higher Certificate in Science in Business Computing

Ms Michael Bradford, School of Computing

Mr Sam Cogan, School of Computing

Mr Eugene McLaughlin, School of Computing

Ms Michele Kehoe, School of Business

Dr Laura Costelloe, Learning & Teaching

Ms Bronwyn McFarlane, School of Business

Dr Orla Lahart, School of Computing

Mr Michael Bane, School of Business

Mr Jonathan Brittain, School of Business

Dr Paul Hayes, School of Computing

Mr Desmond Gibney, School of Business

## 2 Programme Team Response

### Validation of Higher Certificate in Science in Business Computing

#### Programme Team Response

The programme team for the proposed Level 6 Higher Certificate in Science in Business Computing (HCBC) programme would like to express their appreciation of the Expert's Panel deliberations and feedback.

The level 6 HCBC programme presented to the External Panel has undergone a set of considered amendments based on the panel's feedback and the conditions and recommendations relating to the proposed programme.

Responses to each of the recommendations made by the panel follow:

#### 2.1 Recommendations

##### **R1. The credit volume and associated contact hours for Software Applications for Business should be increased to 10 ECTS**

##### **Response:**

The SAB module has been taught over a number of years in the programme. The programme team has discussed the panel feedback. The feedback from faculty delivering the module was taken into account while redefining the module content and contact time. It is the view of the programme team that in the overall scheme of the programme it is appropriate to have this module at 5 credits with 3 hours of contact time. The main content areas are: ERP, CRM, LMS and Accounting software. The time will allow students to work with sample applications, integrate different scenarios and above all interact with software. The students will receive a real insight to what the systems are used for and how to navigate around them. The overall aim of the module is for students to gain a real experience working with Business Applications. The time allocated to the module will allow for this.

##### **R2: The credit volume and associated contact hours for Fundamentals of Business Analysis should be increased to 10 ECTS**

##### **Response:**

It has been decided by the programme team to retain these modules at five credits as it is deemed to be sufficient to cover the two central topics of this module (Requirements Elicitation, and Requirements Analysis). These topics are based on two of the six knowledge areas from the Business Analysis Body of Knowledge. The remaining four knowledge areas are covered in the fourth year on the Business Analysis specialization.

##### **R3: The content for Data Communications & Networks should be reviewed and an opportunity taken to focus on aspects of Cloud computing**



**Response:**

The Data Communications and Networking module was fully reviewed bearing in mind the importance of Cloud Computing. Data networks are an enabling technology of Cloud Computing, delivering the high bandwidth requirements for the Cloud services including SaaS, PaaS and IaaS. Cloud Computing is viewed as an evolution of centralised, client-server and distributed processing and is an important overall theme in the module. The importance and relevance of each of the module topics to Cloud Computing is also highlighted. The use of cryptography has also been included.

**R4: Programme documentation should be fully proofed.**

**Response:**

The document has been fully reviewed.

### 3 Confirmation of Acceptance by Expert Panel Reaction of the Panel to the Programme Team Response

I have read the amended submission document for the Higher Certificate in Science in Business Computing and have received feedback from the members of the other external review panel who have also received and reviewed the amended documentation.. I can state that it addresses in a satisfactory manner, all the conditions made by the panel.

Therefore we recommend this programme for validation to QQI.

Signed on behalf of the external review panel



Mr David Deniciffe  
Chair

Date: 10<sup>th</sup> March 2015

## 4 Programme Schedule

### 4.1 Programme Schedule for Stage 1

Name of Provider		Programme Codes		HCBC							
Programme Title (i.e. named award)		Higher Certificate in Science in Business Computing									
Award Title (HETAC named award)		Higher Certificate in Science									
Stage Exit Award Title											
Modes of Delivery (FT/PT/ACCS/BLENDED/OC etc)		Full Time/Part Time/Blended/Block/OCS									
Stage		Number of Stages		2							
Award Class		Award NQF Level		6							
Award EQF Level		Stage Credits (ECTS)									
Stage NQF Level		Stage EQF Level									
Date Effective		14/09/15									
Ref	Module Title	Semester	Module Status (M/E)	ECTS		Total Student Effort per Semester		Allocation of Marks		Total %	
				NQF Level	Credit Number	Total Hours	Contact Hours	Independent Learning	Course Work %		End of Module Formal Examination %
1.1	Problem Solving and Programming Concepts	1	M	6	5	125	48	77	100	0	100
1.2	Introduction to Mathematics for Business & Computing	1	M	6	5	12	36	89	50	50	100
1.3	Web Design	1	M	6	10	250	72	178	50	50	100
1.4	The Computing Industry	1	M	6	5	125	36	89	100	0	100
1.5	Managing Your Learning	1	M	6	5	125	36	89	100	0	100
1.6	Software Applications for Business	2	M	6	5	125	36	89	100	0	100
1.7	Introduction to Programming	2	M	6	5	125	48	77	50	50	100
1.8	Digital Multimedia	2	M	6	10	250	72	178	100	0	100
1.9	Introduction to Management	2	M	6	5	125	36	89	40	60	100
1.10	Introduction to Marketing	2	M	6	5	125	36	89	50	50	100

#### 4.2 Programme Schedule for Stage 2

Name of Provider		Programme Codes										HCBC
Programme Title (i.e. named award)		Higher Certificate in Science in Business Computing										
Award Title (HETAC named award)		Higher Certificate in Science										
Stage Exit Award Title												
Modes of Delivery (FT/PT/ACCS/BLENDED/OC etc)		Full Time/Part Time/Blended/Block/OCS										
Stage		2		Number of Stages		2						
Award Class		HCBC		Award NQF Level		6						
Award EQF Level		5		Stage Credits (ECTS)		60						
Stage NQF Level		6		Stage EQF Level		5						
Date Effective		14/09/15										
Ref	Module Title	Semester	Module Status (M/E)	NQF Level	ECTS Credit Number	Total Student Effort Per Semester		Allocation of Marks			Total %	
						Contact Hours	Independent Learning	Course Work %	End of Module Formal Examination %	Total %		
2.1	Introduction to Databases	1	M	6	5	36	89	50	50		100	
2.2	Fundamentals of Business Analysis	1	M	7	5	36	89	50	50		100	
2.3	Organisational Behaviour	1	M	6	5	36	89	30	70		100	
2.4	IT Project Management	1	M	6	5	36	89	40	60			
2.5	Web Authoring	1	M	8	10	48	178	100	0		100	
2.6	Data Communications and Networking	2	M	6	5	36	89	40	60		100	
2.7	Interdisciplinary Team Project	2	M	7	10	96	178	100	0		100	
2.8	Business Entrepreneurship	2	M	8	5	36	89	30	70		100	
2.9	Principles of Accounting/Financial Accounting	2	M	6	5	36	89	30	70		100	
2.10	Introduction to HRM	2	M	6	5	36	89	30	70		100	

## 5 Context of Validation

### National College of Ireland

#### Validation of :

#### Higher Certificate in Science in Business Computing

These programmes were evaluated using QQI's policy for devolution of validation sub-processes. The programmes were submitted to QQI in January 2015 .

Membership of the Expert Panel was agreed with QQI's Programme Accreditation Unit. No member of the panel has indicated a conflict of interest and has signed a declaration to that effect.

The panel considered the programmes' submission documents, self-evaluation report. The final report was agreed by the panel. The programme team's response to the Expert Panel's agreed report has been considered by the panel and the Chair has indicated in the final report that the panel is happy that the conditions of the report have been fulfilled and that the programmes should be recommended to QQI for approval.



-----  
John McGarrigle

Registrar & Company Secretary

12<sup>th</sup> March 2015



