

Report of the Programme Evaluation Panel

Provider's Name:	National College of Ireland
Address:	Mayor Square
	IFSC
	Dublin 1
QA procedures agreed on:	2006
QA procedures reviewed on:	2010
Programme submitted for approval*:	Leading to the award of:
Higher Diploma in Science in Web Technologies	Higher Diploma in Science
2.	
3.	
4.	
5.	
Date submitted to QQI:	11 th April 2016
Date of Evaluation:	16 May 2016
Date of Report:	16 May 2016

Membership of the Programme Evaluation Panel:

Role	Name	Area of Expertise	QQI Peer Review Reference Listing
Chairperson	Dr Joseph Ryan	Registrar, Athlone Institute of Technology	
External Specialist	Prof Christian Horn	Dundalk Institute of Technology	
External Specialist	Dr Liam Noonan	Limerick Institute of Technology	
Industry/Employer Perspective	Mr Derek Harnett	Intel	
Rapporteur	Dr Maurice FitzGerald	National College of Ireland	



1 Profile of provider:

The National College of Ireland (NCI) has an immensely proud history as a third level educational institution. Established by the Jesuit order in 1951 as the Catholic Workers College it quickly gained recognition for excellence in its subject fields, particularly human resource management and industrial relations, and for the provision of high quality educational opportunities for employees entering third level education. In the late 1990's the College became the National College of Ireland and entered a new phase of its development expanding its part-time provision to a number of off-campus locations throughout the country and extending its full-time undergraduate programmes to include accountancy, finance and informatics. In 2002 the College moved from its original site in Ranelagh to a new 'State of the Art' purpose built premises in Dublin's International Financial Services Centre.

NCI's educational philosophy and operational structure embody participation, collaboration and applied problem solving strategies. These are enabled by a faculty whose qualifications and professional experience help integrate academic theory with current practical application. The College assesses both the quality of its academic programmes and the academic achievement of its students and utilises the results of these assessments to improve academic and institutional quality.

The primary focus of NCI is on maintaining a centre of excellence that is centered on the changing needs of today's learner. National College of Ireland provides a broad range of high-quality education programmes for today's knowledge-based society.

In line with its mission of widening access to education, the College places a strong emphasis on the needs of the learner, bringing a unique student-centered approach to all aspects of its teaching and research. National College of Ireland provides a range of learning options that extend beyond traditional classroom dynamics, including distance learning and internet-based learning programmes.



2 Context of validation

The Higher Diploma in Science in Web Technologies was revalidated in March 2015 as part of the School of Computing programmatic review. The programme has run consistently since 2010 with many cohorts being offered as part of the labour activation Springboard initiative.

The most recent Springboard call has called for the introduction of a company specific module which would allow individual companies or sectors to inform the subject matter being studied.

To facilitate this augmentation of the programme, modules have been added and others have been moved to the second semester as an elective module against a new Domain skills module. This is done such that should the module not run for whatever reason the learner will still have ample opportunity to grow their skills in a traditional module. The movement of Computer Architecture Operating Systems and Network to the second semester also serves to balance the credit load across the first two semesters.

Computer Architecture Operating Systems and Network was chosen to be made elective, and placed in the second semester, as it was the considered opinion of the programme committee that, as regards the goals of the programme, this module, while valuable, was the most peripheral. In the development of well-rounded full-stack web developers the benefits of providing the new Domain Skills module were found to outweigh the negatives of moving the module to elective status. Those students inclined toward investigating the low level mechanics of computer architecture may still pursue the module in a more balanced second semester.

In accordance with QQI Criteria and Policy for Validation, these amendments have been proposed to be considered under differential validation. The report below therefore reflects the consideration of the panel on those elements of the programme that have been amended.

3 Planning:

Programme development since agreement of QA procedures / the last review

Include narrative here. If no comment/narrative include 'Comment: None' against all questions.

The College has developed a significant number of programmes since its last institutional review culminating in 2015 with a complete programmatic review of its portfolio across the Business, Computing and Education subject areas.

2.1. Purpose of the award

Does the proposed programme address a clear market demand? Yes ✓ No

2.2. Avoidance of duplication

Has the Programme Development Team identified the availability of similar programmes locally, regionally, nationally?

Yes√ No



2.3. Stakeholder consultation

Was the level of stakeholder engagement satisfactory? Yes√ No

Comment: None

Support for the programme (industry/business/community) Yes√ No

The programme is satisfied that the rationale for the amendments made have included appropriate consultation.

2.4. Efficient and effective use of resources

Does the proposed programme represent both efficient and effective use of the provider's resources?

Yes√ No

Comment: None

2.5. Resource development over last 5 years (or in direct support of this programme)

Specific Comments:

Staff: The panel is satisfied that there are appropriate staff employed to deliver this programme.

Accommodation: The panel is satisfied that the College's accommodation is appropriate to this programme.

Information technology: The panel is satisfied that the College's ICT infrastructure is appropriate to this programme.

Library: The panel is satisfied that the College's Library & Information Service is appropriate to this programme.

Administration: The panel is satisfied that there are appropriate administrative and programme administration structures appropriate to this programme.

Publicity/public information: The panel is satisfied that appropriate marketing and public information materials are available

2.6. Planned development over the coming 5 years?

Have the QQI award standards been explicitly referred to in the programme and does the programme meet those standards at the specified level?

Yes√ No

Comment: None

Has the Provider complied with Protection for Enrolled Learner requirements?

Yes√ No

The panel understands that PEL requirements for any learners recruited under HEA labour activation schemes will be provided by the HEA. Otherwise PEL will be provided under an arrangement with HECA which is currently being finalised and will be made available to QQI prior to the enrolment of any learner.



2.7. Access

Is the expected	minimum and	maximum	number o	f all	learners	entering	the pro	ogramme	explicit.	ly
stated?										

Yes√ No

Comment: None

Have any/all prerequisite knowledge, skills or competence or any other specific entry requirement been articulated?

Yes√ No



4 Quality Assurance

4.1 Application of agreed quality assurance procedures for development of programmes

Were the agreed quality assurance procedures for programme development followed?

Yes**√** No

Comment: None

Has the programme team demonstrated how programme delivery will be monitored in accordance with agreed QA procedures?

Yes**√** No

Comment: None

Are programme management arrangements adequate and coherent?

Yes√ No



② ②rogramme structure and content

Is the programme structure well designed, coherent and fit for its stated purpose?

Yes√ No

The panel is satisfied that the programme structure has not been affected by the amendments proposed for the programme.

2.1 2rogramme learning outcomes

Do the programme learning outcomes comply with national standards for the level of award proposed?

Yes√ No

Nο

While the programme learning outcomes have been previously reviewed, the panel requires that the programme learning outcomes are extracted from the mapping table. An exercise should be undertaken to ensure that the taxonomy used is consistently appropriate to the level of the programme and that they can be appropriately assessed at a modular level

Are module descriptions adequate and relevant? Yes√

Comment: None

Are modules relevant and current? Yes ✓ No

Comment: None

Does the combination of modules chosen have the coherence to support the proposed award?

Yes√ No

The panel is satisfied that the coherence of the programme has not been affected by the amendments proposed.

2.2 2earning 2 odes

Can the teaching and learning strategies proposed support achievement of the required learning outcomes?

Yes√ No

Comment: None

Are the delivery mechanisms proposed adequate to the needs of the programme and the proposed learner cohorts?

Yes√ No

Comment: None

2.2 Assessment strategies

Are assessment processes and methods adequately described? Yes✓ No

Are these strategies appropriate to this type of award, in terms of type, frequency and volume?

Yes√ No



The panel would like to see more detail at a modular level to ensure that it is clear what is expected of the learner and that the assessment is at the appropriate level.

Is assessment explicitly linked with intended learning outcomes? Yes√ No

Comment: None

Does the assessment strategy underpin the achievement of the relevant standard of knowledge, skill and competence?

Yes√ No

Comment: None

2.4 2 uration

What is the intended duration of the Programme?

One calendar year

What is the lifespan of the programme (e.g. single cohort intake to satisfy limited local demand; multiple intakes over the following 5 years etc.?)

This programme has consistently recruited since 2010.

Does the Panel believe this to be realistic? Yes√ No

Comment: None

Are there flexible modes of participation? Yes ✓ No

Comment: None

2.2 2redits

Is credit allocation in accordance with national and international guidelines?

Yes√ No

Comment: None

Considering the level, outcomes and volume of each module, is the number of credits attached to each appropriate?

Yes√ No

Comment: None

Considering the stated objective of the programme is the number of credits attached to the award appropriate?

Yes√ No

Comment: None

2.2 222 2evel

Is the proposed level of the programme in accordance with institutional policy/national norms?

Yes√ No



5.7 Programme titles and award

Is the title consistent with national policy, is it informative and is it fit for purpose?

Yes√ No

Comment: None

5.8 Transfer and Progression

Has the Programme Development Team identified realistic transfer and progression opportunities/possibilities that learners may avail of following achievement of this award?

Yes√ No



2 od2le Titles22ontent and 2ssessment 2trateg2

2.2 2omain 22ills

Is the title informative and is it fit for purpose?

Yes√

No

The panel recommends that as this concept is being introduced across a number of programmes, the title of the module should related at minimum to the subject area e.g. Domain Skills for Web Technologies.

Are the specific learning outcomes a) properly stated, b) sufficient and c) achievable?

Yes√

No

The taxonomy used for the module learning outcomes should be reviewed to ensure that they are appropriate to the level and can be appropriately assessed

Is the content sufficiently informative and is it fit for purpose?

Yes√

No

Comment: None

Does the Assessment Strategy align sufficiently with the intended learning outcomes?

Yes√

No

The parameters for the assessment of this module should be reviewed to ensure that it is scalable and that consistency can be achieved.

Is the required reading and supplementary reading appropriate, current and realistic?

Yes√

No

Comment: None

2.2 2om22ter 2r22ite2t2re2222erating 22stems and 2etwor2s

The panel accepts the amendment of this module from mandatory to elective status

Is the title informative and is it fit for purpose?

Yes√

No

Comment: None

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Are the specific learning outcomes a) properly stated, b) sufficient and c) achievable?

Yes√

No

Comment: None

Is the content sufficiently informative and is it fit for purpose?

Yes√

No

References to Windows NT should be removed. Content should be reviewed to ensure that it reflects the current environment, cloud etc.

The theory of source control should be strengthened.

Does the Assessment Strategy align sufficiently with the intended learning outcomes?

Yes√

No



Is the required reading and supplementary reading appropriate, current and realistic?

Yes√ No

Comment: None

7 Specific Issues to be addressed by the provider

7.1 Conditions of Approval:

- C1. Programme learning outcomes should be separately listed in the documentation. An exercise should be undertaken to ensure that the taxonomy used for these outcomes is consistently appropriate to the level of the programme and their articulation allows the module to be appropriately assessed.
- C2. Module learning outcomes need to be written using a suitable taxonomy (i.e. the verbs employed must be appropriate to their level)
- C3. In turn, there needs to be real alignment and clarity on the one hand regarding how module learning outcomes are assessed and, on the other, that there is appropriately detailed and varied assessment (and reassessment) strategies at module level (as well as across programmes as a whole).
- C4. The assessment approach for the Domain Skills module should be reviewed to ensure that it is scalable and standards are consistent.

7.2 Recommendations:

- R1. Various typos occur throughout the paperwork but, given the fact that these documents constitute a public record, the many uses to which this paperwork can be used beyond this evaluation panel, etc., these should be eliminated as a matter of course.
- R2. Consider the titling of the Domain Skills module so that it accurately reflects its intent when applied across multiple programmes and/or subject domains.



2 2verall Result of 2val2ation 2anel Revie2:

Signed _

Date

The Programme is recommended to the Programmes and Awards Executive Committee for approval subject to the provision to QQI of a revised submission document including programme schedule(s), which addresses the conditions and recommendations required in the report and which has been signed off by the Panel Chair if necessary.

This report has been agreed by the Evaluation Panel and is signed on their behalf by the Chair.				
Panel Chairperson:	Dr Joseph Ryan	Date: 1 st June 2016		

The Report of the External Review Panel contains no assurances, warranties or representations express or implied, regarding the aforesaid issues, or any other issues outside the Terms of Reference.

While QQI has endeavoured to ensure that the information contained in the Report is correct, complete and up-to-date, any reliance placed on such information is strictly at the reader's own risk, and in no event will QQI be liable for any loss or damage (including without limitation, indirect or consequential loss or damage) arising from, or in connection with, the use of the information contained in the Report of the External Evaluation Panel.



Appendix 1: Staff

Staff Name	Role
Mr Michael Bradford	Lecturer
Dr Dominic Carr	Programme Director & Lecturer
Ms Adrianna Chis	Lecturer
Mr Sam Cogan	Computing Support Tutor
Mr Oisin Creanor	Associate Lecturer
Mr Ron Elliott	Associate Lecturer
Dr Mike Goldrick	Learning Support & Development Officer
Dr Paul Hayes	Lecturer
Dr Arghir Moldovan	Associate Lecturer
Ms Lisa Murphy	Lecturer
Mr Eugene McLaughlin	Associate Lecturer
Dr Eugene O'Loughlin	Lecturer
Ms Sinéad O'Sullivan	Director of Quality Assurance
Dr Pramod Pathak	Dean of the School of Computing
Dr Anu Sahni	Lecturer
Frances Sheridan	Lecturer
Dr Paul Stynes	Vice Dean, Academic Programmes and Research



Higher Diploma in Science in Web Technologies Differential Validation

QQI Programme Code: PG21869 Programme Team Response

The programme team for the Higher Diploma in Science in Web Technologies programme would like to express their appreciation of the Expert Panel's deliberations and feedback.

The 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 as outlined below.

Condition	Response
Programme learning outcomes should be separately listed in the documentation. An exercise should be undertaken to ensure that the taxonomy used for these outcomes is consistently appropriate to the level of the programme and their articulation allows the module to be appropriately assessed.	 The programme learning outcomes have been separately listed in the documentation. (See 4.2.1) The learning outcomes for the programme were re-written and aligned with Blooms' taxonomy. (See 4.2.2) These revised set of learning outcomes allow for the appropriate assessment at a module level.
Module learning outcomes need to be written using a suitable taxonomy (i.e. the verbs employed must be appropriate to their level)	 The module learning outcomes of the modules evaluated were reviewed by the programme committee and revised to align them appropriately to Level 8 on the NFQ.
In turn, there needs to be real alignment and clarity on the one hand regarding how module learning outcomes are assessed and, on the other, that there is appropriately detailed and varied assessment (and reassessment) strategies at module level (as well as across programmes as a whole).	 The assessment strategy for the domain skills module has been modified to address these concerns. Computer Architecture, Operating Systems and Networks has a varied set of assessments including in-class quizzes and laboratory exercises.
The assessment approach for the Domain Skills module should be reviewed to ensure that it is scalable and standards are consistent.	The assessment of this module has been amended to incorporate significant feedback from all facilitators to insure consistency across all deliveries.

Condition	Response
	NCI faculty are cognizant of issues of scalability around the delivery of this module. The module is elective and will not be offered if scalability issues cannot be addressed.

Recommendation	Response
Various typos occur throughout the paperwork but, given the fact that these documents constitute a public record, the many uses to which this paperwork can be used beyond this evaluation panel, etc., these should be eliminated as a matter of course.	The programme director has taken steps to remove typos in the document.
Consider the titling of the Domain Skills module so that it accurately reflects its intent when applied across multiple programmes and/or subject domains.	The module has been re-titled to <i>Domain Skills for Web Technologies</i> as per the recommendation of the panel to reflect its intent within the context of this programme.

Walter Balfe Programme Validation Unit QQI Denzille Lane Dublin 2

7 July 2016

Dear Walter,

This is to confirm that I have received and reviewed the amended documentation from National College of Ireland submitted in response to a recent panel for the programmes

HDip in Web Technologies HDip in Data Analytics HDip in Computing Cert in Computing Cert in Digital Multimedia BSc (Hons) in Computing

I confirm that in my opinion the amendments made address all the conditions set by the panel and would recommend these programmes to QQI for validation.

The panel report for the BSc (Hons) in Computing contained an error in that Condition 4 and Recommendation 2 did not apply to the programme. The Programme Team has noted this in their response.

Please note that this is reflects my personal opinion, the ultimate decision rests with the chair of the panel.

Best regards

Christian

Christian Horn
Head of Department of Computing Science & Mathematics
Dundalk Institute of Technology

direct: +353 42 9270283 office: +353 42 9370280 email: <u>Christian.Horn@dkit.ie</u>

Skype: Christian.Horn

Walter. Apologies for missing your call.

As you probably gather, I'm away at the moment and without access to these papers. From what I can read, I am satisfied that the college both understands and has set out the intention to meet the significant conditions attaching to this recommendation.

In the absence of any ability to attach an electronic signature to the cover, I trust you can utilise this to affirm my support.

Regards,

Dr Joseph Ryan Academic Registrar

CERTIFICATE OF VALIDATION

Provider name	National College of Ireland
Date of validation	20 July 2016

	First Intake	Last Intake
Enrolment interval	September 2016	September 2020

	Code	Title	Award
Principal programme		Higher Diploma in Science in Web	Higher Diploma
		Technologies	
Embedded			
programme			
Embedded			
programme			

	Name	Maximum number of learners	Minimum number of learners
Approved centre	National College of	As per the validated	As per the validated
	Ireland	programmes	programmes

Target learner groups	As per the validated programmes
Approved countries for provision	Ireland
The teaching and learning modalities	As per the validated programmes
Brief synopsis of the programme (e.g. who it is for, what is it for, what is involved for learners, what it leads to.)	As per the validated programmes
Specifications for teaching staff	As per the validated programmes
Specifications for the ratio of learners to teaching-staff	As per the validated programmes

Programm	nes being replaced	
Code	Title	Comment
		N/A



Conditions of validation

The statutory (section 45(3) of the 2012 Act) conditions of validation are that the provider of the programme shall:

- a) co-operate with and assist QQI in the performance of QQI's functions in so far as those functions relate to the functions of the provider,
- b) establish procedures which are fair and consistent for the assessment of enrolled learners to ensure the standards of knowledge, skill or competence determined by QQI under section 49 (1) are acquired, and where appropriate, demonstrated, by enrolled learners,
- c) continue to comply with <u>section 65 of the 2012 Act</u> in respect of arrangements for the protection of enrolled learners, if applicable, and
- d) provide to QQI such information as QQI may from time to time require for the purposes of the performance of its functions, including information in respect of completion rates.

Conditions from HET Core Validation Policy and Criteria 2010, Revised 2013

The provider of the programme shall (for each programme):

- 1. Maintain the status of the programme(s) recognition;
- 2. Establish, having regard to existing quality assurance procedures, procedures for quality assurance for the purpose of further improving and maintaining the quality of education and training which is provided, organised or procured by that provider as part of the programme(s) concerned, and agree those procedures with QQI;
- 3. Operate quality assurance procedures agreed with QQI;
- 4. Implement procedures for the assessment of learners which are consistent with Assessment and Standards, Revised 2013;
- 5. Implement the procedures described in the document Policies, Actions and Procedures for Access, Transfer and Progression for Learners;
- 6. Implement any special conditions of validation attached to the relevant awards standards.

Other conditions from HET Core Validation Policy and Criteria 2010, Revised 2013

- 7. Notify QQI of any change in circumstances affecting the provider which could affect or be perceived to affect the provision of the programme(s). This includes significant changes in corporate or academic governance, ownership, legal status, profile of teaching staff, profile of learners, numbers enrolled, facilities, or resources;
- 8. Maintain learner data records (personal identification, progression, module marks, stage classification etc.) in order to assist QQI in the performance of its functions;
- 9. Provide the information required by QQI's award making and monitoring functions, including information in respect of completion rates;
- 10. Implement the programme in accordance with the **approved programme schedule(s)** (appended) and current assessment strategies;
- 11. Subject to Section 4.6.1 of *HET Core Validation Policy and Criteria 2010*, Revised 2013, obtain QQI's approval prior to substantially amending the programme's minimum intended learning outcomes, save in the case of incremental enhancements arising from the implementation of findings of the provider's agreed quality assurance procedures;
- 12. Notify QQI of any information concerning the programme(s), or circumstances that may reasonably be expected to give QQI cause to consider reviewing the programme. Explicitly this includes where another awarding body withdraws or seeks to withdraw validation from the programme(s) and /or any alterations to accreditations (additions or withdrawals) by a professional or regulatory body;
- 13. Implement the programme(s) as agreed with the resources indicated;
- 14. Adhere to, and implement the Provider Lifecycle of Engagements.



QQI Quality and Qualifications Ireland Dearbhú Cáilíochta agus Cáilíochtaí Éireann

Approved Programme Schedule(s)

Nam	Name of Provider			National	National College of Ireland		Programme Codes	Codes		HDSWTECH/ PG21869	
Prog	Programme Title (i.e. named award)			Higher Di	Higher Diploma in Science in Web Technologies	in Web Tec	nologies				
Awa	Award Title (QQI named award)			Higher Di	Higher Diploma in Science						
Stage	Stage Exit Award Title										
Mod	Modes of Delivery (FT/PT/ACCS/BLENDED/OC etc)	C etc)		FT/PT/AC	FT/PT/ACCS/BLENDED/OC						
Stage	е			1			Number of Stages	tages		1	
Awai	Award Class			Major				Award NQF Level			8
Awai	Award EQF Level							Stage Credits (ECTS)	(9		09
Stage	Stage NQF Level			8				Stage EQF Level			
Date	Date Effective			14/09/15				ISCED Subject Code	a		
Ref	Module Title	Semester	Module		ECTS Credit	Total Student Effort	ent Effort		Allocation of Marks	f Marks	
			Status	NQF	Number	Total	Contact	Independent	Course	End of Module Formal	Total
			(M/E)	Level		Hours	Hours	Learning	Work %	Examination %	%
1.1	Object Oriented Software Engineering	⊣	Σ	8	5	125	36	68	09	40	100.00
1.2	Server Side Web Technologies	1	Σ	8	10	250	48	202	70	30	100.00
1.4	Introduction to Databases	1	Δ	8	5	125	36	77	20	20	100.00
1.5	Web Design	1	Μ	8	5	125	36	68	100	0	100.00
1.6	Digital Multimedia	2	Σ	8	10	250	48	202	70	30	100.00
1.8	Web Application Development	2	Σ	8	10	250	48	202	100	0	100.00
1.9	Domain Skills for Web Technolgies	2	Е	8	5	125	36	100	100	0	100
1.3	Computer Architecture Operating Systems and Networks	2	Е	8	5	125	98	68	20	50	100.00
1.7	Project	3	Σ	8	10	250	48	202	100	0	100.00
Specia None	Special Regulations: None										

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