

**QQI**Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

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:
1. Higher Diploma in Science in Data Analytics	Higher Diploma in Science
2. Certificate in Data Analytics	Certificate in Data Analytics
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	



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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

National College of Ireland aims to alter the existing programme schedule, introduce some elective modules, and modify some existing modules associated with its validated Higher Diploma in Science in Data Analytics programme. This proposal details the proposed amendments and provides the rationale behind these proposed amendments.

The existing Higher Diploma in Data Analytics has been continuously provided by the National College of Ireland since 2013 and has been extremely successful in preparing learners in the basics of Data Analytics through building a foundation based on strong statistical knowledge, developing problem-solving skills for business analysis, and to be able to understand and use business data to deliver better decision-making. The programme team believes that the proposed amendments will enhance the potential of learners to develop relevant and required skillsets in the area of Data Analytics. The enhancements proposed is the addition of a new module Data Visualisation

In addition, as a result of the most recent Springboard call for tenders, an additional elective module – Domain Skills – has been included in the schedule. This module has been designed to accommodate localised requirements of specific companies or sectors who may wish to offer the programme in-house or to recruit candidates with a specific skillset.

This programme will continue to be delivered using industry relevant practical problems and case-studies. This approach has been successful in naturally fostering a deeper knowledge of subject areas and creating transferable skills for work such as critical thinking, problem solving, creative thinking and communication.

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

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?

Comment: None Yes✓ No

2.3. Stakeholder consultation



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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.



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2.7. Access

Is the expected minimum and maximum number of all learners entering the programme explicitly stated?

Comment: None

Yes✓

No

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

Comment: None

Yes✓

No



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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?

Comment: None	Yes✓	No
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Has the programme team demonstrated how programme delivery will be monitored in accordance with agreed QA procedures?

Comment: None	Yes✓	No
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Are programme management arrangements adequate and coherent?

Comment: None	Yes✓	No
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5 Programme 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.

5.1 Programme learning outcomes

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

Yes✓ No

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✓ No

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.

5.2 Learning Modes

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

5.3 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

5.4 Duration

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

5.5 Credits

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

5.6 NFQ Level

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

Yes✓ No

Comment: None



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5.7 Programme titles and award

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

Comment: None Yes✓ No

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?

Comment: None Yes✓ No



6 Module Titles, Content and Assessment Strategy

6.1 Domain Skills

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

6.2 Programming for Big Data

The panel accepts the amendments made to the indicative content

Is the title informative and is it fit for purpose? Yes✓ No

Comment: None

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

The panel would like to see the indicative curriculum fleshed out further to make the content explicit. .

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

Yes✓ No

Comment: None



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

Comment: None Yes✓ No

6.3 Data Visualisation

The panel accepts the inclusion of this module as an elective module.

Is the title informative and is it fit for purpose? Yes✓ No

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?

Comment: None Yes✓ No

6.4 Data and Web Mining

The panel accepts the amendments made to this module

Is the title informative and is it fit for purpose? Yes✓ No

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

Yes✓ No



Comment: None

6.5 Business Analysis & Communication

The panel accepts the retitling of the module from Business Analysis & Problem Solving Techniques and the inclusion of content related to communications as a result of the removal of the communications module from the original programme.

Is the title informative and is it fit for purpose? Yes✓ No

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

Yes✓ No

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

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.



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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.



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8 Overall Result of Evaluation Panel Review:

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: 1st June 2016

Signed _

Date _

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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