![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:	
QA procedures reviewed on:	
Programme()s submitted for approval:	**Leading to the award of:**
1. **Higher Diploma in Science in FinTech**	Higher Diploma in Science
2.	
Date submitted to QQI:	11th April 2016
Date of Evaluation:	9 May 2016
Date of Report:	11 May 2016

Membership of the Programme Evaluation Panel:

Role	Name	Area of Expertise	QQI Peer Review Reference Listing
Chairperson	Dr Tara Ryan	Registrar, Hibernia College	
External Specialist	Mr Peter Cowap	Governance Risk and Compliance Technology Centre @ UCC	
External Specialist	Dr Aidan Duane	Waterford Institute of Technology	
External Specialist	Prof Paolo Guasoni	Dublin City University	
External Specialist	Mr Jim Sears	University of Surrey	
Industry/Employer Perspective	Dr Amy Neale	Mastercard	
Rapporteur	Dr Maurice FitzGerald	National College of Ireland	

1 Profile of provider:

NCI, through its two schools, the School of Business, School of Computing, offers over 80 full-time and part-time programmes at levels 6-10 of the National Framework of Qualifications.

NCI's programmes are accredited by the QQI, the Chartered Institute of Personal Development (CIPD) and the Institute of Commercial Management (ICM).

Programmes in Accounting and Finance enjoy recognition by such professional bodies as the Chartered Accountants Ireland (ACA)), the Association of Chartered Certified Accountants (ACCA), and the Chartered Institute of Management Accountants (CIMA). National College of Ireland is the largest provider of Chartered Institute of Professional Development (CIPD) accredited programmes in the Human Resource Management area

Although a company limited by guarantee, the College is partially funded through the Department of Education and Skills for 925 undergraduate full-time students. All other funding comes from student fees and commercial income. As part of its internationalisation strategy, the College is active in India, Malaysia, China and more recently Brazil and Africa. Over 50 nationalities are represented within the study body, mainly from communities in the Greater Dublin area.

Enrolment in May 2016 stands at 4,600 students (3,700 Full-time Equivalents) of which 43% are part-time. 70% of learners are enrolled on undergraduate programmes which range from major awards to professionally focussed special purpose awards. The College is currently one of the largest providers of Springboard/ICT programmes in the country rising to over 800 places in 2015/16. .

The Higher Education Authority (HEA) provides additional funding under initiatives such as Funds for Students with Disability and the Student Assistance Funds

In line with its mission of widening access to education, the College places a strong emphasis on the needs of the learner and provides a range of learning options that extend beyond traditional classroom dynamics, including distance learning and internet-based learning programmes.

Programmes are delivered by a combination of full-time and part-time (associate faculty) which bring current experiences and issues from the workplace into the classroom. The College currently has a policy of normally only appointing holders of PhD to full-time faculty and supports any member of staff who is undertaking PhD study both financially and via workload rebalancing. The College currently has 52 full-time academic staff, of which 60% are holders of a PhD.

2 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 in 2010 culminating in 2015 with a complete programmatic review of its portfolio across the Business, Computing and Education subject areas. During the period 2014-2016, 31 programmes have been revalidated and a further 35 programmes (15 in 2015) have been validated or are in the process of being validated.

2.1 Purpose of the award

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

The overall goal of the Higher Diploma in FinTech programme is to provide graduates with essential development skills in Financial Technologies. Upon completion, graduates will be able to demonstrate and execute core skills in the Financial Technologies domain that puts them in a position to make informed decisions regarding requirements, elicitation and analysis, implementation, evaluation and documentation in FinTech. Funding for 100 places has been secured under the Springboard call for 2015/16.

2.2 Avoidance of duplication

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

Yes✓ No

The team identified a number of programmes in various Higher Education Institutions (HEIs) at Level 9. It is the panel's view that whilst this is a specialised programme, there is a sufficient demand in the market place to sustain the variety of programmes on offer.

2.3 Stakeholder consultation

Was the level of stakeholder engagement satisfactory? Yes✓ No

The level of stakeholder engagement was identified in the documentation. Greater insight was provided during the meetings with the panel. It would be important in future programme proposals that the full spectrum of stakeholder engagement be documented. The panel also considers it important to continue with stakeholder engagement on an ongoing basis. Key liaison points include Enterprise Ireland, and the banking sector, as well as those parties identified.

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

Comment: Building on the points made above, it is noted that the various iterations of the programme benefited from the suggestions of stakeholders. There may be scope to utilise guest lecturers from industry or use live projects from companies to enhance the support

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

The College's management articulated a commitment to fully resourcing the programme. It was noted that the programme whilst drawing on other computing and financial programmes was utilising very few modules directly from other programmes, i.e. 90% of modules have been developed for the new programme each module and other modules have been reworked to reflect the Minimum Intended Programme Learning Outcomes of the Higher Diploma.

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

Specific Comments:

Staff: The panel notes that NCI is currently recruiting an additional four full-time, academic staff to supplement the existing complement of sixteen full time faculty in the School of Computing, and that provision is also being made to recruit additional associate faculty as/when required by the teaching needs of these programmes. The NCI policy for recruitment of academic staff is that candidates will be holders of PhD or in an advanced stage of completion.

Accommodation: The programme will be provided at the NCI campus in Dublin and there are adequate facilities in place.

Information technology: Comment: It was noted that NCI has introduced a policy of Bring Your Own Device (BYOD) in respect of all of its postgraduate programmes. The College advised that feedback to date was positive in this regard. The panel noted that it would be important to monitor this approach in the context of Springboard-funded students, who may have less access to appropriate hardware.

Library: The panel noted that it is NCI policy to purchase copies of the recommended texts given in the Reading Lists, with one copy of each of these held on short loan, and that these physical copies are complemented where available by ebooks; copies of the supplementary reading are also held by the Library. Ebooks and electronic journals are accessible 24 hours a day, 365 days a year.

Administration: Comment: None

Publicity/public information: Comment: The panel noted that in supporting this programme and in marketing it, clear information need to be provided to prospective students on both the nature of the programme and the potential employment routes on its completion. The panel advised that clarity between this programme and a similarly titled Level 9 programme needs to be maintained.

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

Comment: None

2.7 Access

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

Yes✓   No

The section on Access, might merit from a retitling – Access and Entry Requirements. The panel notes that entry to this programme is for those with non-cognate degrees.

The panel also advised that there needs to be greater clarity on the English Language entry requirement, e.g. are there specifications around the component elements of the IELTS 6.5 score

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

Yes✓   No

The expectations of mathematical ability required for entrants to participate in the programme should be clearly outlined in the public information for the programme.

It is also important that the nature of the programme and the intended target learners is very clear and distinct from the target learners from the Level 9 programme. Both programmes require a Level 8 degree as an entry requirement, but there are additional requirements for the Level 9 programme. The differences need to be clear.

3 Quality Assurance

3.1 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

    Comment: None

4 Programme structure and content

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

<div align="center">Yes✓   No</div>

Comment: This criterion has somewhat been addressed. Provided the College addresses the conditions and recommendations of this report the panel is of the view that the programme will meet standards of good design and it will be fit for purpose.

4.1 Programme learning outcomes

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

<div align="center">Yes✓   No</div>

The programme does address the NFQ Level 8 standard and the QQI 2014 Award Standard for Science. It is noted that the programme has also been designed to meet the Computing Standard. Given the nature of the programme which straddles Computing and Finance, care needs to be taken to ensure the programme standard and the overarching goal of the programme is not compromised.

Are module descriptions adequate and relevant?   Yes✓   No

Comment: None

Are modules relevant and current?   Yes✓   No

Comment: As indicated below there are some required amendments to the modules to ensure that the programme meets its overall objectives

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

<div align="center">Yes✓   No</div>

Comment: as above

4.2 Learning Modes

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

<div align="center">Yes✓   No</div>

Comment: The College advised that whilst they designed the programme so that it could be provided in a blended mode, it is not their intent to provide it in this context currently. Accordingly this not an area that the panel considered. Should the College wish to do this in the future, a Differential Validation would be required.

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

<div align="center">Yes✓   No</div>

Comment: None

4.3   Assessment strategies

Are assessment processes and methods adequately described?   Yes   No✔

>The reassessment detail needs to be clarified for a number of modules. If students are required to receive an overall mark of 40% to pass a module, then this should be stated more clearly in each of the module descriptors where it applies.

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

Yes   No✔

>The stated volume of coursework has the potential to overwhelm learners. It needs to be remembered that students undertake a programme of study, not a series of modules; thus, the individual assessment components of any individual module need to keep the wider programme fully in mind. Alternative modes of assessment instead of multiple pieces of coursework, including the even wider use of terminal exams, should be employed to help gauge student attainment of learning outcomes.

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

4.4   Duration

What is the intended duration of the Programme?

>Three semesters for full time study, five semesters for part time study.

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.?)

>It is projected that, assuming anticipated demand, this programme will be delivered on an ongoing basis.

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

>Comment: None

Are there flexible modes of participation?   Yes✔   No

>Comment: None

4.5   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

4.6   NFQ Level

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

Yes   No✓

This is a Level 8 award, yet the language employed in much of the presented documentation (e.g. certain module intended learning outcomes) is not necessarily distinguishable from that used for the MSc in FinTech or the PGDip in FinTech at Level 9.

4.7   Programme titles and award

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

Yes✓   No

Consideration should be given to naming the award with its full title i.e.
Higher Diploma in Science in Financial Technologies

4.8   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

Comment: None

5 Module Titles, Content and Assessment Strategy

5.1 e-Finance & Services

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✓

> The module learning outcomes stated here need to differentiate more between this module and the *Financial Markets* module on the MSc in FinTech and the PGDip in FinTech.

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

> The indicative module content suggests that a lot of ground is going to be covered in a relatively short space of time; more synergies with other modules may be possible.

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

                                                                   Yes✓   No

> Comment: None

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

                                                                   Yes   No✓

> John Kay's "Other People's Money" should be added to the recommended reading.

5.2 Business Data Analysis

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

> It could prove to be useful for the learners if appropriate financial data sets are employed on this module.

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

                                                                   Yes✓   No

> Comment: None

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

Yes   No✓

Julie Pallant's "SPSS Survival Manual" should be added to the recommended reading.

5.3   Data Governance and Cybersecurity

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 sub-section on Learning & Teaching Strategy is missing from this module descriptor, while the sub-section Assessment Strategy is not delineated as clearly as it might be.

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

                                        Yes✓   No

    Comment: None

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

                                        Yes✓   No

    Comment: None

5.4   e-Contracts and Payments

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

    Comment: None

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

                                        Yes✓   No

    Comment: None

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

                                        Yes✓   No

    Comment: None

5.5　Financial Data Analysis

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✓

　　More obvious reference to financial analysis would be welcome here.

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

　　　　　　　　　　　　　　　　　　　　　　　　　　　Yes✓　　　　No

　　Comment: None

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

　　　　　　　　　　　　　　　　　　　　　　　　　　　Yes✓　　　　No

　　Comment: None

5.6　Domain Skills

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

　　There may be room for this module to retitled, for instance by adopting the name of the programme as an ancillary title or subtitle, as in *Domain Skills in FinTech* or *Domain Skills – FinTech*.

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 indicative curriculum would be enhanced by a sample case study to exemplify how this module will function in reality.

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

　　　　　　　　　　　　　　　　　　　　　　　　　　　Yes　　　　No✓

　　The Assessment Strategy, as well as the Reassessment Detail, is missing from this module descriptor – these omissions need to be rectified.

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

　　　　　　　　　　　　　　　　　　　　　　　　　　　Yes✓　　　　No

　　Comment: None

5.7   Contemporary Topics Seminar

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

There may be room for this module to retitled, for instance by adopting the name of the programme as an ancillary title or subtitle, as in *Contemporary Topics Seminar in FinTech* or *Contemporary Topics Seminar – FinTech.*

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

Comment: None

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

Yes✓   No

Comment: None

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

Yes✓   No

Comment: None

5.8   An Introduction to Digital Forensics and Auditing

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

Comment: None.

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

Yes✓   No

Comment: None

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

Yes✓   No

Comment: None

5.9   Project

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 Reassessment Detail is missing, as is a statement on the Teaching & Learning Strategy, as well as a statement regarding the Learning Environment; given the nature of this module, these statements should be explicit and detailed.

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

                                                 Yes✓   No

Comment: None

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

                                                 Yes✓   No

Comment: None

6 Specific Issues to be addressed by the provider

6.1 Conditions of Approval:

C1. Greater differentiation is required between this award at Level 8 and the MSc in FinTech and PGDip in FinTech at Level 9. This should be more clearly expressed throughout the documentation, including in terms of programme rationale, target learners, graduate opportunities, etc., as well as learning outcomes, objectives, curriculum content, assessment strategy, etc., in the individual module descriptors.

C2. Each module descriptor must have a clear assessment strategy, including reassessment detail; these parameters are missing from *Domain Skills*, but they are required. Greater clarity is also important in terms of the terminal examination for a number of modules; an assessment description to the effect of 'n/a' is unacceptable, as students should have more guidance regarding the nature of a terminal examination. Where, where past examination papers do not exist for a module, a sample paper should be furnished to, and discussed with, the students. Samples should be included with the programme documentation. Consideration should also be given to the use of more examinations across the programme in lieu of multiple summative assessments, i.e. as an alternative means of ensuring that module learning outcomes are being met, as a means to reduce over-assessment, etc.

C3. There is a lack of clarity regarding the nature of the *Career Development* module (see section 6.6.3); either this module is mandatory (i.e. credit-bearing) or it is an additional module required to fulfil other requirements. Its status should be determined and stated clearly.

C4. The curriculum needs to be rebalanced so that there is more explicit emphasis on FinTech. Each module descriptor, e.g. in terms of indicative content, should be re-evaluated to consider whether this programme is focussed as a whole, as well as in its constituent elements, on FinTech.

C5. Given the nature of this programme, the mathematical capacity of the learner needs to be ascertained and clarified prior to undertaking its study; this could be made clearer in the Programme Outline (see section 5) and in terms of Access Criteria (see section 6.5.1).

C6. The generalised 'Future and emerging technologies' placeholder that is present in most of the module descriptors should be removed. This consideration is already inherent in dynamic programmes of study and standard quality assurance mechanisms.

C7. This documentation would benefit from a thorough re-check in order to eliminate typos (e.g. 'level nice' instead of 'Level 9' on p.5, the unnecessary reference to a sub-section 6.1.2.1.1 on p.21, the lack of sub-sections 7.8.6 or 7.8.9 yet the presence of sub-sections 7.8.7 and 7.8.10, etc.) and, in turn, every effort should be made to differentiate it from the related Level 9 programmes (i.e. the MSc in FinTech and the PGDip in FinTech), so that it constitutes a separate programme in its own right.

6.2 Recommendations:

R1. The title of the programme should be reconsidered to use its full title i.e. Financial Technologies rather than 'FinTech'.

R2. Whilst this is a distinct programme from that of the MSc related Level 9 degree, the reflection on the recommendations for the Level 9 degree may prompt further consideration on how this Higher Diploma should be structured. It is recommended that the suite of programmes be considered together, bearing in mind their distinctiveness and diverse target audiences.

R3. The titling of the Domain Skills and Contemporary Topics modules should be reconsidered to include aspects of the programme or subject area given that these modules may be offered on multiple programmes.

1.   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.

Tara A. Ryan .

Panel Chairperson: Date: 30th May 2016

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Appendix 1: Staff

Staff Name	Role
Mr Michael Bradford	Lecturer
Dr Simon Caton	Programme Leader & Lecturer
Mr Tony Delaney	Associate Lecturer
Mr Victor del Rosal	Associate Lecturer
Dr Horacio González-Vélez	Head of Cloud Competency Centre
Mr John McGarrigle	Registrar
Dr Phillip Matthews	President
Dr Eugene O'Loughlin	Lecturer
Ms Sinéad O'Sullivan	Director of Quality Assurance
Dr Pramod Pathak	Dean of the School of Computing
Mr Vikas Sahni	Associate Lecturer
Ms Frances Sheridan	Lecturer