

**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(s) submitted for approval:	Leading to the award of:
1. MSc in Cybersecurity	Master of Science
2. Postgraduate Diploma in Science in Cybersecurity	Postgraduate Diploma in Science
Date submitted to QQI:	11 th April 2016
Date of Evaluation:	10 th May 2016
Date of Report:	11 th May 2016

Membership of the Programme Evaluation Panel:

Role	Name	Area of Expertise	QQI Peer Review Reference Listing
Chairperson	Dr Joseph Ryan	QA/Learning & Teaching	
External Specialist	Dr Fredrick Mtenzi	Cybersecurity	
External Specialist	Mr Stephen Sheridan	Cybersecurity	
Industry/Employer Perspective	Mr Chris Patterson*	Cybersecurity	
Rapporteur	Sinéad O'Sullivan		

Mr Patterson was unavoidably detained on the morning of the panel due to a family emergency.



QQI

Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

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 centred 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-centred 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 Planning:

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

The aim of this programme is to provide learners with essential research and expert technical knowledge and competence of the most important technical concepts of security applied in emerging technologies such as cloud, mobile, Internet of Things and big data storage systems.

The course is practical in nature and develops in-depth expertise of core technical topics such as cryptography, forensic investigation, network security, development of secure application, malware



analysis, and technologies and tools that support application and service vulnerability detection, incident detection, data and log retrieval and analysis. Supplementary to the core technical competencies, learners will have exposure to IT law and ethics associated with the security domain.

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

Was the level of stakeholder engagement satisfactory? Yes✓ No
See below

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

There has been significant industry consultation and support throughout the development and validation process of this programme.

2.4 Efficient and effective use of resources

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

Comment: None Yes✓ No

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

Specific Comments:

Staff:

The panel notes that the College has indicated that it is currently recruiting full-time faculty. Whilst recognising the advantages of having industry based teaching staff on the programme, the panel conditions that at least one of the faculty being recruited in the current cycle holds a specialism in Cybersecurity in order to support the programme as committed to by management during the meeting.

Accommodation: The panel is satisfied that the accommodation required to deliver the programme is available to the programme.

Information technology: The panel is satisfied that the ICT required to deliver the programme is available to the programme

Library: The panel is satisfied that the library & information service required to deliver the programme is available to the programme

Administration: The panel is satisfied that the administration and programme organisation structures required to deliver the programme are available to the programme



QQI

Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

Publicity/public information: The panel is satisfied that the appropriate information will be made available to learners in relation to entry requirements, award and regulations of the programme.

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?

Comment: None Yes No✓

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 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?

Yes✓ No

The panel notes that the entry requirements for the programme are outlined. However, the expectation of the abilities of learners with respect to programming and mathematical abilities should be clearly articulated.

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

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

Yes✓ No

The Domain Context and Internship modules bring particular challenges to the quality assurance of the programme. The panel is satisfied that the College and Programme Team are aware of and have the processes in place to ensure consistency in the treatment of learners and that there is clarity regarding the role of the College and potential employer or host company with respect to assessment and intellectual property.



QQI

Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

The panel recommends the explicit inclusion of an employer/host induction briefing day which outlines the roles and responsibilities of each stakeholder in the process.

Are programme management arrangements adequate and coherent?

Yes ✓

No

A programme director (Academic) and programme co-ordinator (administrative) will be assigned to the programme.

DRAFT



4 Programme structure and content

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

Yes No✓

The panel notes the number of iterations that the programme has undergone during its development cycle and in particular the degree to which it has been influenced by industry consultation. Whilst these links with industry are to be commended, in this case, the panel is of the view that the influence of current industry requirements may have been overemphasised and a balance should be struck in ensuring that the programme maintains a distinct focus and academic integrity at level 9. More emphasis should be made on security at the design stage of an application rather than its remedy after a breach.

4.1 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 mapped to the level 9 Science standards, the panel conditions the programme team to clearly state the programme learning outcomes in a single list and to ensure that they reflect a level 9 set of outcomes in all cases.

Are module descriptions adequate and relevant?

Yes No✓

The indicative curriculum of each of the modules is well defined, however, more detail and more articulation of teaching and assessment strategies is required for all modules. Care should be taken to ensure that there is a consistency of curriculum outlined, in particular for 5 credit modules.

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

As noted above, the panel is of the view that the structure should be reviewed to ensure that it is focussed and integrated. The team should review again, the balance of 5 and 10 credit modules and ensure any unessential overlap is minimised.

4.2 Learning Modes ✓

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

Yes✓ No

Whilst the document outlined various methods by which modules could be taught, the panel conditions that these are more specific both at a programme and modular level with differentiated approaches taken as appropriate to the modules.



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

Comment: None

Yes✓

No

4.3 Assessment strategies

Are assessment processes and methods adequately described?

Yes

No✓

The assessment regulations for the programme are clearly outlined in the programme documentation and these follow QQI guidelines for Assessment & Standards.

As with the teaching and learning strategies, more detail is required 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.

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

Yes

No✓

Is assessment explicitly linked with intended learning outcomes?

Yes✓

No

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

Yes

No✓

In relation to the above questions, the lack of specificity of assessment approach to be used has made it difficult for the panel to be definitive in its response. The panel is satisfied that the intent is in place, however, some of the sample assessments indicated did not demonstrate an expectation of level 9 standards.



4.4 Duration

What is the intended duration of the Programme?

MSc in Cybersecurity: 1 calendar year full-time, 2 calendar years part-time.

The panel recommends consideration of extending the write up component of the internship beyond the completion of the internship which will extend the full-time duration.

Postgraduate Diploma in Science in Cybersecurity: 1 academic year full-time, 2 academic years part-time

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.?)

The programme team has outlined an intake per academic year over the next 5 years.

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

The panel advises caution in terms of the scalability of the programme to ensure that elements of the programme such as the internship and domain context modules are sufficiently bedded down

Are there flexible modes of participation? Yes✓ No

4.5 Credits

Is credit allocation in accordance with national and international guidelines?

Comment: None Yes✓ No

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

Yes✓ No

The team should review again, the splitting of modules into 5 credit modules and ensure any unessential overlap is minimised and the balance of content is consistent across modules

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

Comment: None

4.7 Programme titles and award

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

Yes✓ No



QQI

Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

Comment: None

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

The panel notes the inclusion of documentation for a Postgraduate Diploma in Science in Cybersecurity which is proposed as both an ab initio award and a transfer mechanism for learners who do not or cannot complete the Internship and Domain Context modules. This needs to be described clearly and as an independent award.

DRAFT



5 Module Titles, Content and Assessment Strategy

Modules 5.1 – 5.10 are offered on the Postgraduate Diploma in Science in Cybersecurity only.
Modules 5.1 – 5.14 are offered on the MSc in Cybersecurity.

5.1 Security Fundamentals

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 learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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 module teaching, learning and assessment strategies should be reviewed to ensure that a specific strategy is chosen, is clear to anyone reading the descriptor and that the assessment instrument is appropriate to the module learning outcomes. The sample assessments provided should be appropriate to the level of the programme.

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

Yes✓ No

5.2 Secure Programming 1

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

The panel recommends consideration of 'Secure Programming for the Web' as this reflects the content

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

Yes✓ No

The learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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

The module content is significantly more detailed in this module than in other 5 credit modules. This should be reviewed to ensure that an appropriate balance is maintained.



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

Yes No✓

The module teaching, learning and assessment strategies should be reviewed to ensure that a specific strategy is chosen, is clear to anyone reading the descriptor and that the assessment instrument is appropriate to the module learning outcomes. The sample assessments provided should be appropriate to the level of the programme.

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

Yes✓ No

Comment: None

5.3 Cryptography

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 learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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 module teaching, learning and assessment strategies should be reviewed to ensure that a specific strategy is chosen, is clear to anyone reading the descriptor and that the assessment instrument is appropriate to the module learning outcomes. The sample assessments provided should be appropriate to the level of the programme.

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

Yes✓ No

Comment: None

5.4 IT Law & Ethics

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 learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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 module teaching, learning and assessment strategies should be reviewed to ensure that a specific strategy is chosen, is clear to anyone reading the descriptor and that the assessment instrument is appropriate to the module learning outcomes. The sample assessments provided should be appropriate to the level of the programme.

The balance of assessment afforded to Learning Outcome 1 should be reviewed. There is an opportunity to consider some integration of assessment with the Forensics & eDiscovery module. Notwithstanding that these are planned to be delivered in a different semester, the same case or context could be used in order to integrate concepts

Is the required reading and supplementary reading appropriate, current and realistic?
Yes✓ No

Comment: None

5.5 Network Security

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 learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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

The description of the content of this module should be expanded so that the intent of coverage and context is clear to any reader e.g. 'footprinting', 'scanning' etc. The objectives of the module should be made more specific.

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

Yes No✓

The module teaching, learning and assessment strategies should be reviewed to ensure that a specific strategy is chosen, is clear to anyone reading the descriptor and that the assessment instrument is appropriate to the module learning outcomes. The sample assessments provided should be appropriate to the level of the programme.



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

Yes✓ No

Comment: None

5.6 Forensics & eDiscovery

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 learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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 module teaching, learning and assessment strategies should be reviewed to ensure that a specific strategy is chosen, is clear to anyone reading the descriptor and that the assessment instrument is appropriate to the module learning outcomes. The sample assessments provided should be appropriate to the level of the programme.

There is an opportunity to consider some integration of assessment with the IT & Ethics module. Notwithstanding that these are planned to be delivered in a different semester, the same case or context could be used in order to integrate concepts.

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

Yes✓ No

Comment: None

5.7 Research in Computing

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?

Comment: None

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

As noted by the programme team, the assessment breakdown should be amended to reflect the actuality of delivery which is 20% for the research question and 80% for the Literature/Proposal.

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

Yes✓ No

Comment: None

5.8 Secure Programming 2

Is the title informative and is it fit for purpose?

Yes✓ No

As with Secure Programming 1, the panel recommends consideration of *Secure Programming for Application Development*.

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

Yes✓ No

The learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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 module teaching, learning and assessment strategies should be reviewed to ensure that a specific strategy is chosen, is clear to anyone reading the descriptor and that the assessment instrument is appropriate to the module learning outcomes. The sample assessments provided should be appropriate to the level of the programme.

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

Yes✓ No

Comment: None

5.9 Web Application Security

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 learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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

This content should be reviewed to ensure that any overlap with Secure Programming 1& 2 is removed. The inclusion of security of the browser in use should be explicitly included.

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

Yes No✓

The module teaching, learning and assessment strategies should be reviewed to ensure that a specific strategy is chosen, is clear to anyone reading the descriptor and that the assessment instrument is appropriate to the module learning outcomes. The sample assessments provided should be appropriate to the level of the programme.

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

Yes✓ No

Comment: None

5.10 Incident Response & Analytics

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 learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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

The security context of the module should be explicitly referenced in the curriculum outline and the curriculum should be expanded beyond the current high level outline.

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

Yes No✓

The module teaching, learning and assessment strategies should be reviewed to ensure that a specific strategy is chosen, is clear to anyone reading the descriptor and that the assessment instrument is appropriate to the module learning outcomes. The sample assessments provided should be appropriate to the level of the programme.

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

Yes✓ No

Comment: None



5.11 Malware 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

The learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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

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

Yes No✓

The module teaching, learning and assessment strategies should be reviewed to ensure that a specific strategy is chosen, is clear to anyone reading the descriptor and that the assessment instrument is appropriate to the module learning outcomes. The sample assessments provided should be appropriate to the level of the programme.

Is the required reading and supplementary reading appropriate, current and realistic?
Yes✓ No

Comment: None

5.12 Domain Context

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

The aim of this module is to equip students with the knowledge, skills and understanding necessary to perform effectively within a specific organisation and/or industry context. Typically this will involve a company delivering content related to domain specific tools, methodologies and best practices and may involve preparing the student for a particular industry certification. As such this module brings with it specific challenges for quality assurance and stakeholder expectation management.

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

Yes✓ No

The learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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

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

Comment: None

Yes✓ No

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



Yes✓ No

Comment: None

5.13 Research Methods

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?

Comment: None

Yes✓ No

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

Yes✓ No

Comment: None

5.14 Internship

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 learning outcomes should be reviewed to ensure that the taxonomy used is consistently at level 9.

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

The description of the contract paragraph should be extended to include information on how intellectual property and data privacy issues will be handled.

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

Yes✓ No

The panel is of the view that the write up period for the internship should be consecutive rather than concurrent with the internship and thus making the internship process last over a longer period.

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

Yes✓ No



Comment: None

6 Specific Issues to be addressed by the provider

The panel requires resubmission of documentation for both awards addressing the following:

6.1 Conditions of Approval:

- C1. The College must follow through on its commitment to recruit a specialist in Cybersecurity
- C2. The programme learning outcomes should be listed separately to the mapping provided in section 6 of the documentation
- C3. The programme content should be reviewed to ensure that academic priorities take precedence over industry led priorities and a narrower focus should be taken. The creation of a graduate profile may assist in creating that focus.
- C4. Programme and module learning outcomes should be reviewed to ensure that the taxonomy used consistently represents level 9 on the National Framework of Qualifications
- C5. The entry requirements of the programme should clearly set expectations with respect to mathematical and programming ability
- C6. The module learning, teaching and assessment strategies should be specific to each module
- C7. The write up period from the Internship module should be made consecutive to the internship period itself
- C8. In order to ensure consistency and continuity, a 'company preparation' day should be set up to brief companies on their role and responsibilities with regard to the Domain Context and Internship modules

6.2 Recommendations:

- R1. Consider changing the titles of Secure Programming 1 & 2 to Secure Programming for the Web and Secure Programming for application development
- R2. Include the security of the browser within the Web Application Security module
- R3. The concept of 'Security in Design' should be brought more to the fore
- R4. The language used in the module curricula should be made specific to the security context for the avoidance of doubt and expanded where outlined in section 5 above.
- R5. The intake of the programme should be closely monitored particularly in the early years in order to ensure its scalability



QQI

Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

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.

Panel Chairperson: Dr Joseph Ryan

Date: 25th May 2016

Signed _

Date _

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.



QQI

Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

Appendix 1: Staff

Staff Name	Role
Dr Phillip Matthews	President
Prof Jimmy Hill	Vice President Academic & Admin
Mr John McGarrigle	Registrar
Dr Pramod Pathak	Dean School of Business
Dr Cristina Hava Muntean	Programme Director
Dr Paul Stynes	Vice Dean, School of Computing
Dr Simon Caton	School of Computing
Mr Michael Bradford	School of Computing
Mr Vikas Sahni	School of Computing
Mr Fabio Cerullo	School of Computing
Dr Arlene Egan	NCI Learning & Teaching
Ms Frances Sheridan	School of Computing
Dr Maria Moloney	School of Computing
Mr Owen Pendlebury	School of Computing
Ms Karen Murray	Lecturer, Law, School of Business
Ms Caroline Kennedy	Careers & Employability Office
Ms Sinéad O'Sullivan	Director of Quality Assurance & Statistical Services