



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

Independent Panel Report on a Provider's Programme Review

Provider	CCT College Dublin
Programme(s) Reviewed	Bachelor of Science (Honours) in Computing & Information Technology (PG24244) Bachelor of Science in Computing & Information Technology (PG24245) Higher Certificate in Science in Computing & Information Technology (PG24246)

Independent Panel Members

Name	Role on Panel	Affiliation
Professor Martin McKinney	Chair	Emeritus Professor of Computing, Ulster University
Dr Joseph Fitzgerald	Report Writer	TU Dublin
Anastasia Potyagalova	Learner Rep	PhD student at DCU, Student Representative (NSTEP trained)
Dr. Yulia Chertandseva	Subject Matter Expert	Cardiff University
Dr. Glenn Strong	Subject Matter Expert	Assistant Professor Computer Science, Trinity College Dublin
Dr. Barbara Brum	Industry Rep	AI Annotator at Meta

All members of the independent panel declared their independence of CCT College and that they have no conflict of interest.

Part 1. Introduction

This programme review will be undertaken in accordance with CCT's internal quality assurance processes, which are informed by QQI's Core Statutory Quality Assurance (QA) Guidelines (pp 11-12) and Programme Review Manual 2022.

This review of this programme was undertaken by the CCT's School of Computing. Many of the current teaching staff have been involved in the delivery of the programme for a number of years, so they had the benefit of clear understanding of the programme description, learning outcomes and understanding of the benefits for students of the programme structure.

Part 2. Evaluation Process

2.1 Documents Supplied to the Panel

	Document Type	Document Name
1.	Programme Review Report	BSCH Programme Review Report (March 2025)
2.	Programme Document	BSCH Programme Descriptor (March 25)
3.	Programme Modules	BSCH All Modules (March 2025)
4.	Sample Assessments	BSCH Sample Assessments from Validation Period
5.	Programme Annual Reports	BSCH Annual Programme Reports
6.	External Examiner Reports (2019-24)	BSCH External Examiner Reports

2.2 Provider's Representatives Met

•	Person	Role / Job Title
1.	Neil Gallagher	President
2.	Denis Cummins	Dean of Faculty
3.	Karl Gallagher	Dean for Administration & Finance
4.	Ruth Ni Bheolain	Dean of Academic Affairs
5.	Dr Fiona O'Riordan	Dean of Teaching & Learning
6.	Ken Healy	Programme Leader & Ed. Tech Manager
7.	Deirdre Nugent	QA Lead
8.	Kathleen Embleton	Head of Student Services
9.	Maria McTigue	Head of Marketing
10.	Ger O'Callaghan	Head of Admissions
11.	Zulaine Cardozo	Senior Faculty Coordinator
12.	Anne Hannan	EDI & Careers Officer
13.	Jason Pollard	Admin & Ops Lead
14.	Debora Zorzi	Librarian
15.	Numerous members of Faculty	Lecturer

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2.3 Description of evaluation process

The review has been conducted in accordance with the CCT Policy - CCTP402 Programme Review and Revalidation. This policy details the review and revalidation process as comprising three stages, in alignment with the 10 objectives set out by QQI. These stages are:

- Stage 1: Self-evaluation,
- Stage 2: Independent evaluation, and
- Stage 3: Revalidation.

The policy outlines that the programme review progresses to revalidation except where it is determined there is no longer an ongoing demand for the programme or where a new programme is required. In the first instance the Executive Leadership Team (ELT), considering data provided by the Admissions Team and the Marketing Department, consulted the CCT College's Industry Engagement Forum and CCT College's Strategic Partner – Microsoft Ireland, to ascertain the potential continued demand for the programme. Having done so, it was recommended that the programme self-evaluation process should commence.

A Review and Revalidation Roadmap was developed setting out a timeline, key work stages and milestones for review and revalidation of programmes in the academic year 2024/25. This was approved by the ELT in June 2024 and the College's Academic Council in September 2024, subsequently underpinning the remainder of the programme review and revalidation process.

Table 1 summarises the core stages of work, descriptions of work stages, tasks per stage, and owner of each work stage. These are subsequently presented in visual format in Figure 1.

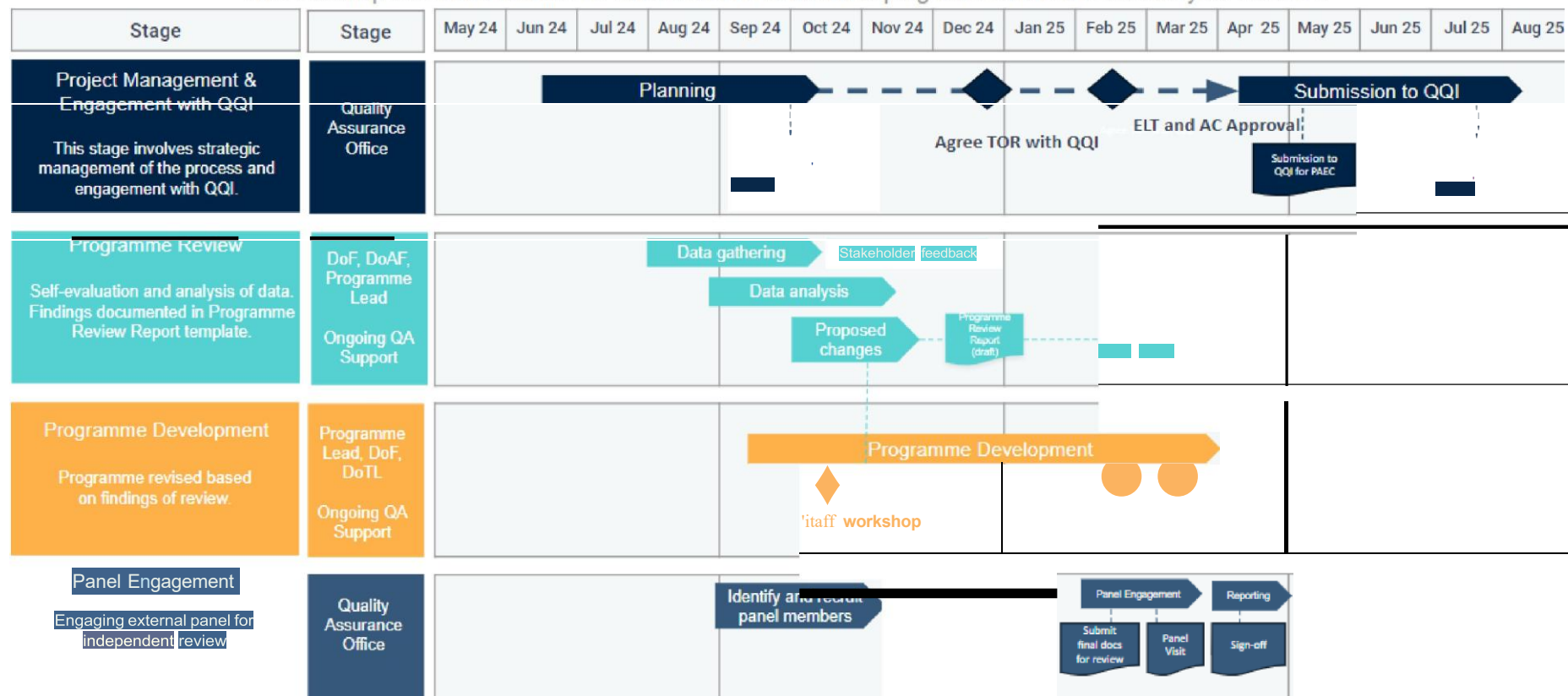
Table 1. CCT College Review and Revalidation Roadmap 2024/25

Stage of Work	Description of Work Strand	Tasks in Strand	Owner of Work Strand
Project Management & Engagement with QQI	This stage involves strategic management of the process and engagement with QQI, and final submission of documentation to QQI for consideration at PAEC.	• Planning • Ongoing Project Management • Notification to QQI of intent to revalidate • Agree TOR with QQI • Staff workshops • ELT and Academic Council (AC) Approval • Application to QQI for Revalidation (Submission to QQI for PAEC/ receipt of Outcome of PAEC)	Quality Assurance Office
Programme Review	Self-evaluation and analysis of data. Findings documented in Programme Review Report template.	• Data gathering • Stakeholder feedback • Data analysis • Proposed changes identified and agreed • Development of Programme Review Reports	Programme Lead Dean of Faculty Dean of Academic Affairs Dean of Teaching & Learning Ongoing QA Support
Programme Development	Programme revised based on findings of review.	• Programme Development (completion of programme descriptor) • Draft documents developed • Final documents developed	Programme Lead Dean of Faculty Dean of Academic Dean of Teaching & Learning Ongoing QA Support
Panel Engagement	Engaging external panel for independent review.	• Identify and recruit panel members • Panel Engagement • Submit final docs for review • Panel Visit • Completion and sign off of reports	Quality Assurance Office

Figure 1. CCT College Review and Revalidation Roadmap 2024/25

BAHB Review and Revalidation Roadmap 202,4/25

This roadmap sets out a timeline for review and revalidation of programmes in the academic year 2023/24.



Part 3. Panel Findings on Provider Programme Review Report

The following is the panel's commentary and recommendations on the provider's programme review report. It follows the section structure of the report in headings and in sequence. References to specific parts of the provider report will use the relevant report reference.

Section A. Context and Terms of Reference for the Programme Review

Commentary:

The Independent Evaluation Panel has been convened to evaluate the programmatic review conducted by CCT in respect of the **Bachelor of Science (Honours) in Computing & Information Technology (PG24244)** and to make a recommendation on the suitability of the revised programmes for revalidation.

The revised programmes will continue to lead to a Bachelor of Science (Honours) in Computing & Information Technology (PG24244) at level 8 on the National Framework of Qualification (NFQ). In addition, the revised programme will include two embedded awards - a Bachelor of Science in Computing & Information Technology (PG24245) at level 7 on the NFQ, and a Higher Certificate in Computing & Information Technology (PG24246) at level 6 on the NFQ. These embedded awards will be a new feature of the programme. All programmes will be offered on a full-time basis only.

The provider's own programmatic review found some proposed modifications, which the panel was generally satisfied were appropriate.

Recommendations:

N/A

Section B. Provider Information and Programme Context

Commentary:

Comprehensive information provided on the provider and where these programmes reside within the provider's operations, specifically its Computing Faculty. CCT was also very clear as to how the programmes are situated within its organisational and governance structures.

CCT detailed the programme objectives and MIPLOs, which the panel agreed was appropriate for the programmes.

Recommendations:

N/A

Section C. **Baseline qualitative and quantitative information**



Programme Data Overview

This section will include the panel's views on any or all of the following topics covered in the provider's review report: Applications, Enrolment, Attrition Transfer and Progression, Award Classification and Graduate Destinations

Commentary:

The Programme Overview provides comprehensive and detailed data on applications, enrolments, attrition, progression, completion, grades, and graduate destinations over the programme's validation period. There was an observed increase in applications from 223 applicants in 2020 to 510 applicants in 2024. This clearly demonstrates a growing demand for the programme, which is driven almost exclusively by international learners.

The profile of enrolled learners, predominantly international students aged in their 20s to early 30s and skews towards male students (approximately 75:25 in favour of male students). The panel notes that this gender imbalance is not unusual for such programmes.

The completion rate for the existing programmes (detailed in Table 11 and 12) are above the national average for programmes within this ISCED code (Information and Communication Technologies), which is 62% overall, and 66% for level 8 programmes.

Recommendations:

N/a

Programme Delivery and Teaching & Learning Strategies

This section will include the panel's views on any or all of the following topics covered in the provider's review report: Physical Facilities and Resources, Timetabling, Learner Workload, Attendance, Teacher Learner Ratios, Community of Practice Learning, Teaching and Learning Strategies, Learning Outcomes achieved, Assessment Strategies.

Commentary:

This section outlines the college's facilities and resources, highlighting the considerable investments made in physical and digital learning infrastructure to enhance student experience and support teaching excellence. Facilities such as interactive classrooms, advanced recording studios, well-equipped library spaces, dedicated student lounges, and the newly developed Student Hub collectively demonstrate a strong institutional commitment to providing a robust learning environment.

While the panel was satisfied that the estate provided a most suitable environment for the learners, the panel had some concerns over the timetabling arrangements for the programme. Specifically, the condensed nature of the timetable which appeared to offer minimal breaks between classes. While intensive scheduling might initially appear efficient, it could negatively impact learner engagement

and academic performance over time. Students, particularly those balancing academic demands with part-time employment or other responsibilities, require adequate breaks within the timetable to assimilate information effectively and maintain concentration and engagement throughout the academic day.

It should be noted that the panel does not have any issue with the number of days that students are scheduled for class. Rather it is the days when learners have scheduled classes, and the panel believes that there is a need for more sympathetic scheduling to allow for some additional time between classes. Some minor adjustments to timetabling, ensuring sufficient intervals between classes, could potentially significantly enhance the student learning experience. This would provide learners with essential downtime, reducing fatigue and potentially contributing positively to overall retention, academic success and the general learner experience.

The panel also notes the issue that prevents an overall view of the attendance and engagement monitoring data. Going forward, it would be useful to have such data available for monitoring to further inform the review process.

Recommendations:

It is recommended that CCT College Dublin reviews the timetable structure to try to incorporate more breaks within and between classes.

It is recommended that CCT College Dublin should consider the provision of a means for acquiring data for the monitoring of student attendance and engagement.

Section D. **Evaluation of the programme by stakeholders**



Evaluation by current learners and graduates of the programme

Commentary:

Feedback from learners and graduates was evident throughout the programme review and not just confined to section 4 of the report. The evaluation presented high level evaluation of the programme. In general, this was positive in nature and focused on areas of assessment strategy and the provision of streams on the programme. There is clear evidence in the report of learner feedback being incorporated into the review process.

Recommendations:

N/A

Evaluation of the programme by Staff

Commentary:

Programme staff provide regular feedback through the formal mechanisms in place (programme boards, exam boards etc.). Though the discussion in section 4.2 is limited, the report in general shows the active contribution of the programme staff. This was reinforced during the panel's meetings, during which it became clear that the staff had been engaged in the design of the programme. The teaching team demonstrated a high level of knowledge and understanding of the programme and were aware of the relevance of their own particular modules. When asked they were able to explain how their interrelated to other modules in the programmes, and how they contributed to the attainment of the Minimum Intended Programme Learning Outcomes (MIPLOs).

Recommendations:

N/A

External Examiner Feedback

Commentary:

The panel noted that the External Examiner feedback has been broadly positive. It was noted that External Examiners review assessments before they are released to students and moderate the grades. They also attend Examination Boards and provide end of year reports.

External Examiners have reported their satisfaction with the standards and grades as well as the overall processes around Exam Processing and Exam Boards. They have also indicated that the standards achieved are comparable to other institutions.

However, the panel also noted that the level of detail provided by the External Examiners in their reports provided was often limited. It was felt that there was an opportunity for the team to extract more information from the External Examiners e.g. good practices identified, enhancements etc. Such commentary would not only be of immediate benefit to the teaching team, but also for the development of the programme in future programme reviews.

Recommendations:

It is recommended that CCT review and enhance the External Examiner form to ensure that the College fully benefits from the External Examiner function.

Section E. **Programme Quality Assurance**

Complaints, appeals and commendations

Commentary:

The panel noted that CCT has robust QA policies in place at institutional level and that these are operational at programme level. These policies are clear, fair and transparent. The report details these and provides links to CCT's QA policies in these areas. There are no specific QA procedures for the programme.

Recommendations:

N/A

Quality Assurance Systems and Processes

Commentary:

The panel found that the report is clear in how this programme fits within CCT's overarching QA system, but also the programme specific QA. The key policies relevant for this programme are clearly outlined.

Recommendations:

N/A

Additional Quality Assurance Systems and Processes required (e.g. online delivery / assessment)

Commentary:

The panel noted the effectiveness of CCT's Programme Boards which meet at least once per term. These meetings are chaired by the Programme Leader and include all faculty teaching on the programme, student representatives (in line with CCT policy), QA and support staff.

In 2022 the Programme Board undertook an audit of the assessment workload which confirmed that there was no issue of over-assessment on the programme and encouraged the strategy of identifying opportunities for integrated assessment. Programme Board meetings also review and respond to External Examiners reports.

The board is informed of developments at College level developments e.g. new policies (Academic Integrity policy published in 2022) and the process for escalating academic misconduct.

An Annual Programme Monitoring Report is prepared each year by the Programme Leader and agreed by the Programme Board. This report includes progression and completion statistics at modular and programme level, input from the External Examiners, Programme Team, input from students and graduates. The Annual Monitoring Report is approved by the Academic Council, including any recommended actions.

Recommendations:

N/A

Section F. Summary Analysis of the programme

Commentary:

The programme review summary analysis is coherent with the analysis undertaken as part of the programme review and other sections presented in the report. In particular:

Existing strengths:

- Experienced and Committed Faculty
- Offering of Pathways onto the programme
- Module and Programme currency
- Employability and Industry Relevance

Areas for Improvement & Enhancements

The panel noted the team's desire to:

- Review and enhance TLA strategy and programme approach including updated programme content as needed.
- Review programme structure and allocation of hours per topic.
- Ensure appropriate time is allocated to practical skills development.
- A range of module updates and changes.

Recommendations:

N/A

Section G. **Revision of the programme**

In this section the panel will respond to any proposals made by the provider in respect of changes to the programme arising from the review. The revised programme's readiness for validation will be reported on in more detail in the Independent Evaluation Report for Validation.

Commentary:

Section 7 outlines the main changes suggested for the programme. The panel was broadly supportive of these proposals and was able to use this section as a basis for discussion at the formal revalidation event. In summary, these changes are as follows:

Change Category	Summary of Change
Programme Title	No change
Award – Class, Type, Standard	No change
Additional / Modified MIPLOs	MIPLOs to be refined to more clearly reflect the programme context of the award standards to which they are mapped.
Duration – FT and / or PT	The programme is proposed for validation in FT mode only.
Intakes – size, frequency	The frequency of intakes is reduced between validation periods, with one proposed intake accommodating two cohorts in September only. If 180 maximum students is reached, it would be two groups of 90 each. The proposed delivery mode is now changed to seek FT mode only, having previously been validated for PT delivery.
Modules added/removed	See 'Module Summary Table'

Module content / MIMLOs reviewed	Existing MIMLOs reviewed for fitness of purpose, to reflect new industry practice and alignment with Computing Award Standards.
Teaching and Learning Strategy	Teaching, learning (and assessment) designed in line with best practice, informed by learning design models such as ABC Learning Design and Universal Design for Learning. Increased focus on practical TLA approaches and assessment.
Assessment Strategy	Assessment strategies reviewed and updated considering feedback from stakeholders, the potential for over-assessment, and the employment of assessment tools that are best placed to measure attainment of learning outcomes while also promoting inclusion and accessibility for students.
QA Procedures.	N/A
Staffing	No changes in requirements.
Physical and other Resources	No changes in requirements.
Other	Although the programme was originally validated for fully in-person delivery, it was ultimately delivered in online or blended format under approved Covid-19 contingency arrangements for a large proportion of the validation period

The panel notes that under “**Intakes – size, frequency**” (above) it is stated that:

“The frequency of intakes is reduced between validation periods, with one proposed intake accommodating two cohorts in September only”.

Based on discussions with the panel, the observation is that the annual proposed intake in September will accommodate two cohorts i.e. one intake in September and if the maximum of 180 is reached it would be two groups of 90 students.

Recommendations:

N/A

Part 4. Overall Findings

In this section the panel will give its overall feedback on the conduct of the review and the findings therein. This feedback will inform future provider review processes and will also contribute to the refinement of any programmes being proposed for revalidation following this review process.

Section A. **Commentary on review process:**

The review process undertaken by the provider was extensive, robust, comprehensive and completed with the clear goal of improving the programme.

Section B. **Recommendations on review process:**

The volume of material produced by the provider is commendable, and clearly indicative of the thoroughness of the review process undertaken. However, the scale of the material provided might have been structured to differentiate between core material and supplemental evidence to enable the panel's effective engagement within the short time timeframe of the review/revalidation event.

Though the process is clearly robust and inclusive, the workload it presents to panels is significant. The focus should be on retaining the robustness of the system but reducing the administrative burden on both the provider and panels.

A number of recommendations were made in the commentary above and some of these are repeated as recommendations at the end of this document.

Section C. **Commentary on programme revisions:**

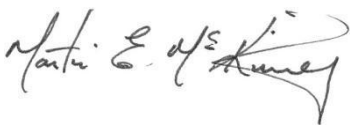
The panel is satisfied with the programme review has been conducted in a thoroughly professional manner. It has taken into account the views of all relevant stakeholders. The panel is satisfied that the proposed revisions put forward have been carefully considered and is supportive of all of the proposed changes to the programme.

Section D. **Recommendations on programme revisions:**

The panel is satisfied the programme review has been conducted in a thoroughly professional manner.

Signed: Professor Martin McKinney

(Panel Chairperson)



Date: 09/04/2025



**Dearbhú Cáilíochta
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Quality and
Qualifications Ireland

Independent Evaluation Report on an Application for Validation of a Programme of Education and Training

Part 1. Provider details

Provider name	CCT College Dublin
Date of site visit	20 March 2025
Date of report	07/05/2025

Section A. **Overall recommendations**

Principal programme¹	Title	Bachelor of Science (Honours) in Computing & Information Technology (PG24244)
	Award	Major
	Credit	240 ECTS
	Recommendation <i>Satisfactory OR Satisfactory subject to proposed conditions OR Not Satisfactory</i>	Satisfactory subject to proposed conditions

¹ Replace throughout with actual programme title.

Embedded programme²	Title	Bachelor of Science in Computing & Information Technology (PG24245)
	Award	Major
	Credit	180 ECTS
	Recommendation <i>Satisfactory OR Satisfactory subject to proposed conditions OR Not Satisfactory</i>	Satisfactory subject to proposed conditions

Embedded programme³	Title	Higher Certificate in Science in Computing & Information Technology (PG24246)
	Award	Major
	Credit	120 ECTS
	Recommendation <i>Satisfactory OR Satisfactory subject to proposed conditions OR Not Satisfactory</i>	Satisfactory subject to proposed conditions

Section B. Expert Panel

Name	Role	Affiliation
Professor Martin McKinney	Chair	Emeritus Professor of Computing, Ulster University
Dr Joseph Fitzgerald	Report Writer	TU Dublin
Anastasia Potyagalova	Learner Rep	PhD student at DCU, Student Representative. (NSTEP trained)
Dr. Yulia Chertandseva	Subject Matter Expert	Cardiff University
Dr. Glenn Strong	Subject Matter Expert	Assistant Professor Computer Science, Trinity College Dublin
Dr. Barbara Brum	Industry Rep	AI Annotator at Meta

² Replace throughout with actual programme title.

³ Replace throughout with actual programme title.

Section C. Principal Programme

Names of centre(s) where the programme(s) is to be provided	Maximum number of learners (FT)	Maximum number of learners (PT)
CCT College Dublin	180	N/A

Proposed Duration and Enrolment					
	First Intake Date	Duration	Intakes per Annum	Enrolment i.e. learners per Intake	
			Maximum	Minimum	Maximum
Full-Time	Sept 2025	4 years	1	30	180
Intake Schedule e.g. January September		September			

Panel Commentary on proposed enrolment:

The numbers provided are standard for CCT. As the programme has been in operation for several years, CCT already has significant resources in place and commits to further resources should the maximum numbers be attained across all intakes.

Brief synopsis of the programme (e.g. who it is for, what is it for, what is involved for learners, what it leads to.)

This four year IT and Computing degree programme is designed to equip students with the knowledge, skills and competencies required to thrive in the fast-evolving digital landscape. Built around key thematic pillars – Data & Data Science, Programming & Maths, Web, General IT & Software Development, Soft Skills, and Networking & Cybersecurity – the curriculum follows a structured spiral approach. This ensures that students progressively gain a deeper understanding across core areas while developing strong problem-solving and professional skills.

The programme blends theoretical knowledge with hands-on experience, preparing graduates for diverse roles in software development, cybersecurity, data analytics, cloud computing, and IT infrastructure management. Students engage in foundational modules, before advancing to specialised topics such as Artificial Intelligence, Blockchain, and DevOps. The programme culminates in a capstone project, providing an opportunity for specialisation, independent research and/or industry-focused application.

Graduates will be well-positioned for employment in the IT sector or for further studies at Level 9.

Embedded awards at Stage 2 (Higher Certificate in Computing and IT) and Stage 3 (BSc in Computing and IT) allow learners to receive recognised qualifications if they choose to enrol in either of the embedded awards or exit from the programme earlier if enrolled in the principal programme.

Target learner groups

The programme is open to a diverse range of learners, including domestic, European, and international students. It caters to school leavers, mature learners, and industry professionals seeking formal qualifications or career advancement.

The programme welcomes applicants from various entry pathways, including:

- CAO applicants meeting standard entry requirements.
- Graduates of QQI Level 5 awards with a passing grade in Mathematics, either as part of their QQI qualification or at Leaving Certificate level.
- Industry professionals with relevant ICT experience, assessed through the Recognition of Experiential Prior Learning (RPEL) process.
- International students (EU & non-EU) meeting equivalent entry requirements as determined by established international qualification frameworks.

The programme is designed to support students at different stages of their educational and professional journeys, providing structured pathways to success in the IT and computing sector. More details on access, admissions, and entry requirements are outlined in Section 4 of this document.

Approved countries for provision	Ireland
Delivery mode: Full-time/Part-time	Full-Time

The teaching and learning modalities

- Face to Face

Role	Qualifications/Experience Profile	Number Required	In post	To be recruited
Dean of Faculty	The Dean of Faculty is a member of the Executive Leadership Team and reports directly to the College President. This post manages the teaching Faculty within CCT College and takes management responsibility for the operation of the two faculties. Along with the Dean of Teaching & Learning, the Dean of Faculty holds executive responsibility for the development of teaching, learning and assessment within CCT College. The person occupying this role also has operational responsibility for academic standards, academic direction and quality assurance management of programmes within both faculties, and plays a leading role in the periodic review of existing programmes and development of new programmes with support from the Dean of Academic Affairs and other members of the Executive Leadership Team.	1	✓	
Programme Leader	Meets the minimum requirements for a lecturer. In CCT College a programme leader has responsibility for the management, delivery and academic integrity of the programme they lead. This includes but is not limited to ensuring fitness for purpose of all aspects of programme design, development, delivery and assessment, the quality of programme content and the learning experience. A programme leader is required to be cognisant of QA policies and procedures and the parameters of the validation for the programme they lead.	1	✓	
Lecturer	Minimum NFQ Level 9 cognate award is normally required. However NFQ Level 8 in a cognate award is acceptable in cases	1	✓	
Librarian	Relevant qualification and professional experience in librarianship.	1	✓	
Head of Student Services	Relevant qualification and demonstrable experience in the provision of support to diverse learning populations.	1	✓	
EDI Officer	Relevant qualification and demonstrable experience in the provision of support to diverse learning populations.	.5	✓	

Careers Officer	Relevant qualification and demonstrable experience in the provision of support to diverse learning populations.	.5	✓	
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Learning Activity	Ratio of learners to teaching staff
Lecture	1:90
Laboratory Work/Tutorials/Workshops	1:30
Supervised Projects	1:4

Panel Commentary on programme outline and staffing:

The panel is satisfied with the staffing resourcing in place and the commitment by CCT in this area.

Programmes being replaced (applicable to applications for revalidation)

Code	Title	Last enrolment date
(PG24244)	Bachelor of Science (Honours) in Computing & Information Technology	February 2025

Programmes being replaced (applicable to applications for revalidation)

Code	Title	Last enrolment date
PG24245	Bachelor of Science in Computing & Information Technology	February 2025

Programmes being replaced (applicable to applications for revalidation)

Code	Title	Last enrolment date
PG24246	Higher Certificate in Science in Computing & Information Technology	February 2025

Section D. Other noteworthy features of the application

N/A

Part 1A Evaluation of the Case for an Extension of the Approved Scope of Provision (where applicable).

Having examined appropriate QA / Governance procedures, comment on the case for extending the applicant's Approved Scope of Provision to enable provision of this programme. (Especially relevant for move to online delivery / assessment)

N/A

Part 2. Evaluation against the validation criteria

This includes QQI's 12 validation core criteria. When making a judgement on achievement of a core criterion, the panel should use the sub-criteria as guidance. Non-achievement of relevant and significant sub-criteria will mean non-achievement of the core criterion. The panel will apply its expertise and experience in determining 'relevance' and 'significance' of sub-criteria to a particular programme.

The panel should complete this section with commentary against each criterion to support the recommendation given in the 'Satisfactory?' column i.e. Yes, No, or Partially.

If 'Yes', there should be a comment citing the evidence for this finding. Likewise, there should be an explanation as to why the panel have concluded that the criterion has either not been met or only partially so.

Criterion 1. The provider is eligible to apply for validation of the programme

a) The provider meets the prerequisites (section 44(7) of the 2012 Act) to apply for validation of the programme. b) The application for validation is signed by the provider's chief executive (or equivalent) who confirms that the information provided is truthful and that all the applicable criteria have been addressed. c) The provider has declared that their programme complies with applicable statutory, regulatory and professional body requirements.		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	CCT will deliver this programme under its approved Quality Assurance Policies and Procedures. CCT meets the pre-requisites under Section 44 (7) of the 2012 Act to apply for validation of the programme. This was confirmed to the panel during the site visit.
Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme

Criterion 2. The programme objectives and outcomes are clear and consistent with the QQI awards sought

a) The programme aims and objectives are expressed plainly. b) A QQI award is specified for those who complete the programme. (i) Where applicable, a QQI award is specified for each embedded programme. c) There is a satisfactory rationale for the choice of QQI award(s). d) The award title(s) is consistent with unit 3.1 of QQI's Policy and Criteria for Making Awards. e) The award title(s) is otherwise legitimate for example it must comply with applicable statutory, regulatory and professional body requirements. f) The programme title and any embedded programme titles are: (i) Consistent with the title of the QQI award sought. (ii) Clear, accurate, succinct and fit for the purpose of informing prospective learners and other stakeholders. g) For each programme and embedded programme (i) The minimum intended programme learning outcomes and any other educational or training objectives of the programme are explicitly specified. (ii) The minimum intended programme learning outcomes to qualify for the QQI award sought are consistent with the relevant QQI awards standards. h) Where applicable, the minimum intended module learning outcomes are explicitly specified for each of the programme's modules. i) Any QQI minor awards sought for those who complete the modules are specified, where applicable. j) For each minor award specified, the minimum intended module learning outcomes to qualify for the award are consistent with relevant QQI minor awards standards.		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	The panel reflected on the documentation supplied and was satisfied that the programme aims and objectives are expressed plainly. There was also a satisfactory rationale for the choice of QQI award(s), which the panel agreed was appropriate for the Principal and Embedded programmes. The chosen awards and rationale were also consistent with unit 3.1 of QQI's Policy and Criteria for Making Awards. The panel discussed with the provider how the programme has operated and how the planned revalidated programme retains much of the previous programme objectives and outcomes. The provider detailed that it is proposing two embedded awards within this programme - Bachelor of Science in Computing & Information Technology (PG24245) and Higher Certificate in Science in Computing & Information Technology (PG24246). These had been exit awards on the existing iteration of this programme. It was noted that there was no change to the fundamental award being sought for the principal

		programme [Bachelor of Science (Honours) in Computing & Information Technology (PG24244)]. The panel is satisfied that programme objectives and outcomes are thus still fit for purpose and appropriate for the principal programme and the two embedded programmes.
Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme

Criterion 3. The programme concept, implementation strategy, and its interpretation of QQI awards standards are well informed and soundly based (considering social, cultural, educational, professional and employment objectives)

a) The development of the programme and the intended programme learning outcomes has sought out and taken into account the views of stakeholders such as learners, graduates, teachers, lecturers, education and training institutions, employers, statutory bodies, regulatory bodies, the international scientific and academic communities, professional bodies and equivalent associations, trades unions, and social and community representatives. b) The interpretation of awards standards has been adequately informed and researched; considering the programme aims and objectives and minimum intended programme (and, where applicable, modular) learning outcomes. (i) There is a satisfactory rationale for providing the programme. (ii) The proposed programme compares favourably with existing related (comparable) programmes in Ireland and beyond. Comparators should be as close as it is possible to find. (iii) There is support for the introduction of the programme (such as from employers, or professional, regulatory or statutory bodies). (iv) There is evidence of learner demand for the programme. (v) There is evidence of employment opportunities for graduates where relevant. (vi) The programme meets genuine education and training needs. c) There are mechanisms to keep the programme updated in consultation with internal and external stakeholders. d) Employers and practitioners in the cases of vocational and professional awards have been systematically involved in the programme design where the programme is vocationally or professionally oriented. e) The programme satisfies any validation-related criteria attaching to the applicable awards standards and QQI awards specifications.		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	This is the Principal Programme. The programme documentation outlines the various feedback channels in place to obtain stakeholder feedback. Stakeholder engagement was evident with CCT learners, graduates, faculty and employers to attain a rounded perspective and evaluation of the programme. The designation of BSc (Hons) has been chosen for the Principal Programme. The designations of BSc (for Bachelor of Science in Computing & Information Technology (PG24245)) and Higher Certificate in Science (for Embedded Programme 2) have been chosen for the embedded awards and they are the obvious and appropriate designations for the content delivered on these programmes. They also align well with QQI standards and will effectively serve the specific student cohorts. The delivery mode for all programmes will be full-time, face-to-face, accommodating the needs of

		predominantly international students, which is envisaged to be the dominant cohort of the Principal and Embedded programmes. A rationale for continued provision of the principal programme and the introduction of the BSc and the Higher Certificate as embedded rather than exit awards has been provided. The panel is satisfied that CCT has demonstrated that there is sufficient demand for the programmes and that this combination of awards is appropriate to meet this demand. This aspect is revisited under Criterion 4 (below).
Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme

Criterion 4. The programme's access, transfer and progression arrangements are satisfactory

a) The information about the programme as well as its procedures for access, transfer and progression are consistent with the procedures described in QQI's policy and criteria for access, transfer and progression in relation to learners for providers of further and higher education and training. Each of its programme-specific criteria is individually and explicitly satisfied. b) Programme information for learners is provided in plain language. This details what the programme expects of learners and what learners can expect of the programme and that there are procedures to ensure its availability in a range of accessible formats. c) If the programme leads to a higher education and training award and its duration is designed for native English speakers, then the level of proficiency in English language must be greater or equal to B2+ in the Common European Framework of Reference for Languages (CEFR⁴) in order to enable learners to reach the required standard for the QQI award. d) The programme specifies the learning (knowledge, skill and competence) that target learners are expected to have achieved before they are enrolled in the programme and any other assumptions about enrolled learners (programme participants). e) The programme includes suitable procedures and criteria for the recognition of prior learning for the purposes of access and, where appropriate, for advanced entry to the programme and for exemptions. f) The programme title (the title used to refer to the programme): (i) Reflects the core <i>intended programme learning outcomes</i> and is consistent with the standards and purposes of the QQI awards to which it leads, the award title(s) and their class(es). (ii) Is learner focused and meaningful to the learners; (iii) Has long-lasting significance. g) The programme title is otherwise legitimate; for example, it must comply with applicable statutory, regulatory and professional body requirements.		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	This is the Principal Programme. The principal programme has two embedded awards i.e. a Higher Certificate in Science (the first two years of the principal programme) and a BSc (the first three years of the principal programme). The Access, Transfer and Progression criteria and arrangements for progression are outlined in Section 4 of the programme documentation and these procedures are consistent with QQI's policy and criteria. The access criteria and supporting procedures were clearly identified. Furthermore, clear pathways have been established for graduates of the embedded programmes (i.e. from the Higher Certificate programme to the BSc programme, and from the BSc programme to the BSc (Hons) programme). There are also pathways for mature students and those

⁴ http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf (accessed 26/09/2015)

		entering through Recognition of Prior Learning (RPL), with comprehensive assessment methods including the use of interviews and portfolio evaluations. It was clarified that identical entry requirements were in place for the principal programme and the two embedded programmes (Higher Certificate and BSc). This raised the question as to why an applicant would choose to seek direct admission onto the Higher Certificate (or, indeed the BSc) if they were suitably qualified for a higher-level programme. The team suggested that such an entry route might be of interest to those who either lacked confidence in their abilities or were unwilling to commit to four years study (although the panel noted that a learner could defer such a decision until they had successfully completed sufficient stages to leave with an exit award). The programme team accepted that while the market might be small, they would like to keep this open for promotional and recruitment purposes. The panel is happy to facilitate this but suggests that to fully understand the marketplace, CCT seeks clarity from potential learners as to why they are seeking admission to one of the embedded awards when eligible to seek admission to a higher-level qualification. Should any common factors emerge from these discussions, CCT should provide any additional support deemed necessary to assist learners in helping them achieve their goals. The panel has set a recommendation in respect of this, namely: Recommendation 1: The panel recommends that CCT clearly specify the target cohort of each programme and how they may target each of these target cohorts. There are no programme-specific transfer (outward) procedures and criteria however should a learner decide they no longer wish to proceed with this programme they will be invited to meet with the Programme Leader or a member of the Main Office team with a view to providing them with appropriate
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		advice and guidance to assist them in transferring to another programme. The panel is satisfied that CCT's access, transfer and progression arrangements for this programme are clear, transparent and fit for purpose.
Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme.
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme.

Criterion 5. The programme's written curriculum is well structured and fit-for-purpose

a) The programme is suitably structured and coherently oriented towards the achievement by learners of its intended programme learning outcomes. The programme (including any stages and modules) is integrated in all its dimensions. b) In so far as it is feasible the programme provides choice to enrolled learners so that they may align their learning opportunities towards their individual educational and training needs. c) Each module and stage is suitably structured and coherently oriented towards the achievement by learners of the intended <i>programme</i> learning outcomes. d) The objectives and purposes of each of the programme's elements are clear to learners and to the provider's staff. e) The programme is structured and scheduled realistically based on sound educational and training principles. f) The curriculum is comprehensively and systematically documented. g) The credit allocated to the programme is consistent with the difference between the entry standard and minimum intended programme learning outcomes. h) The credit allocated to each module is consistent with the difference between the module entry standard and minimum intended module learning outcomes. i) Elements such as practice placement and work-based phases are provided with the same rigour and attentiveness as other elements. j) The programme duration (expressed in terms of time from initial enrolment to completion) and its fulltime equivalent contact time (expressed in hours) are consistent with the difference between the minimum entry standard and award standard and with the credit allocation.		
Programme	Satisfactory? (yes, no, partially)	Comment

Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Partially	This is the Principal Programme. The panel reflected on the programmes as presented and felt that they were suitably structured and coherently oriented towards the achievement by learners of the intended programme learning outcomes of each programme (i.e. the Principal programme and the two embedded programmes). The four stages of the principal programme are suitably structured and coherently oriented towards
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		the achievement by learners of the intended programme learning outcomes. This is also the case for the three stages of the first embedded programme (the BSc) and the two stages of the second embedded programme (the Higher Certificate). The panel notes that not only is the curriculum comprehensively and systematically documented, the credit and time allocated to each module is appropriate and enables learners to achieve each module's MIMLOs (minimum intended module learning outcomes)) and ultimately the programme's MIPLOs (minimum intended programme learning outcomes). The panel discussed the 6 pillars of the programmes, as outlined in the first session with the programme management. The programme team spoke coherently of these pillars and how they guide the programme's structure. For example, the Networking and Cybersecurity pillar was discussed, and the programme team noted that the Cybersecurity module in Stage 3 of the principal programme builds on the previous Networking modules (i.e. M10, M15 and M20). The team also noted that cybersecurity is embedded in many modules across the syllabus and can be a prominent part of the Capstone Project. The programme team further noted that the pillar is both Networking and Cybersecurity, rather than Cybersecurity exclusively. Though the panel was satisfied with this response and found this to be a helpful discussion, it noted that the modules contributing to each pillar had not been explicitly identified within the documentation. The panel has set a recommendation in respect of this, namely: Recommendation 2: The panel recommends that CCT identify the modules contributing to each of the six identified pillars as this would enhance the documentation and provide additional support and clarity for the overall coherency of the programme. The panel queried the sequencing of the 'soft skills' modules and sought clarification of the rationale for this. The programme team felt that students needed to do some element of research 'early' in the principal
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		programme, rather than leaving this exclusively to the latter part of the principal programme. The panel noted that while the Ethics & Professional Development module contained content that is valuable as students seek to transition to the workplace upon graduation, the nature of some of this module's material was not at the expected level. Examples of this included topics such as CV preparation and cover letter preparation, interview techniques etc. which in many other programmes are presented much earlier in the curriculum. It was also noted that this material would also be of great benefit to students who do not complete the Level 8 programme. The panel queried why this module material was exclusively delivered in the final year of the principal programme. The programme team noted that there are extra resources provided by the College in terms of career support offered to students throughout the programme, but it also acknowledged that there is an argument for the syllabus content of this module to be earlier, particularly if a student is enrolled on, or leaves with, either of the embedded qualifications. The panel has set a condition in respect of this, namely: Condition 1: It is a condition of validation that the syllabus material in the Ethics & Professional Development module is not confined solely to the principal programme. Given its importance, this material should also be covered within the two embedded programme so as it benefits all students. The panel was broadly satisfied with the curriculum as presented and engaged in a detailed debate with the team at both individual module level (including a discussion on the modules contributing to the pillars), stage level and programme level. Within these discussions, a few issues arose. The panel queried what is the main programming language on the programme. The programme document seems to suggest it is Java rather than for example, Python and the panel was keen to hear the rationale for this decision.
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		The programme team noted that Java is useful because mastery of Java provides students with the necessary skills to enable easy transition to other programming languages. The programme team also noted that Java is also still heavily used in enterprise software and is valued by the industry. The panel queried the context of cross-platforms within M22 (Cross-Platform Development) as it was not clear from the module descriptor. The module lead clarified that this is across different computer operating systems (e.g. Windows and Linux) as well as different forms of platforms (e.g. wearables, traditional desktops, mobile devices etc.). The panel queried if students need access to different forms of hardware to undertake this module (e.g. mobile devices for mobile apps). The module lead clarified that the app development libraries allow for developing of apps without the need for a specific hardware device. The panel queried how the theme of ethics is developed as it is presented across a number of modules. The programme team detailed that this was a deliberate choice as the current iteration of the programme has ethics exclusively in one module and learners might not fully appreciate its relevance or application to other areas. The reason for embedding it in a number of different modules allows for a more holistic view of ethics. The panel welcomed this approach. The panel discussed M28 (Cybersecurity). The panel noted that perhaps Network Security may be a more accurate title, and that there may be scope for the introduction of a learning outcome that is focused more generally on Cybersecurity. There also seems to be a disconnect between the LOs (which are Network Security focused) and the indicative syllabus (which is more Cybersecurity focused). The addition (and assessment) of a general Cybersecurity learning outcome (mentioned previously) would resolve this. The module lead concurred with this and agreed that it would make the module descriptor more coherent. The panel queried where in other modules are databases implemented after learning about it initially in the two year 2 modules M14 (Relational Databases) and M19 (Non-Relational Databases). The programme team confirmed this does happen M29 (Data Storage Techniques) and even the Capstone Project (M37)
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		should the students choose to focus on such a project where this is necessary. The panel discussed module M27 (Blockchain Technology & Applications) with the programme team and asked whether they found much interest/demand for this content area (e.g. is it prominent in the roles of graduates). The module lead noted that when some students show a particular interest in this area they also focus their Capstone Project on it. The module lead also noted that the students enjoy the connection between blockchains (e.g. blockchain wallets) and programming. The panel discussed module M32 (Artificial Intelligence). The panel noted there appeared to be just a single session (at the very end) on Large Language Models (LLMs) and queried whether this was sufficient given the current interest in Generative AI. The module lead noted that Generative AI is discussed throughout the module, rather than siloed within a single part of a module syllabus. The programme team also noted that applying LLMs is introduced from the very start of the programme (in year 1). The panel indicated that if this is indeed the case, it needed to be more explicitly outlined in the programme documentation. The panel commends the programme team for its engagement in this lengthy discussion of the syllabus and the collegiate nature of these discussions. However, the panel also notes that this engagement has raised a number of areas where the programme team needs to consider revisions to the syllabus. The panel has set a condition in respect of this, namely: Condition 2: It is a condition of validation that the programme team reflect on the discussions held during the interactions with the panel and update modules as appropriate. The panel had a lengthy discussion with the programme team about the Capstone Project (M37). The panel noted that, in its experience, similar programmes in other institutions tend to have individual projects. This module seems to assume a 2-person group (based on the example assessment brief
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		provided) and that working in pairs (even potentially) had not been clear from the module descriptor. The programme team confirmed that in the current iteration of the Capstone Project, students do have a choice to work individually or in pairs. Approximately two thirds of students opt to undertake an individual project. The programme team noted that the structure of the Project has a number of 'check-ins' to allow the team to track progress and ensure that students were on-track. The programme team acknowledged that in previous iterations there were bigger groups for the Capstone Project, but this proved difficult to manage and not ideal to identify an individual student's effort. The panel noted that, particularly for a capstone activity, it was essential that learner's individual work was fully credited and should not be impacted by the performance of other students. The panel followed up by asking what happens when "something goes wrong in the pair" scenario. The programme team noted that this has not arisen as it is only pairs, although it was an issue when larger groups were used. The contingency scenario for when a pair does not work out is that the project becomes two individual projects. The panel noted that while there appeared to be efficiency gains with 'paired projects', very often the reverse was true to time spent resolving conflict and other issues. The panel queried how supervisors are assigned. The programme team further confirmed that they are linked to domain/discipline experts (e.g. if students opt for a programming type project, they would be linked with a programming lecturer). The panel was satisfied with these responses. The panel noted that the programme document is not clear regarding the option for students to undertake this project as an individual or as a pair and that this should be clarified. The panel also recognised that the ability to work in teams was important but that there was an abundance of groupwork activities throughout the programme. The panel has set a condition in respect of this, namely: Condition 3:
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		It is a condition of validation that CCT reviews the Capstone Project to ensure the integrity of the marks allocated on the Capstone Project accurately reflect the work conducted by the individual student and is unaffected by the work of the other person (where it is taken as a paired project). The panel queried the marking scheme for the Capstone Project part of which included the application of a multiplier (range 0.5 to 1.5). The panel noted that applying this multiplier to a mark of 60% would result in a revised mark of between 30% and 90%. No additional documentation had been supplied to indicate the necessary criteria to indicate when the multipliers (0.5, 0.6, ... 1.4, 1.5) should be applied. The granularity of the multipliers was also queried (e.g. was 0.75 permitted?). The programme team noted that this multiplier was used before on another programme and the rationale for it was in scenarios where a strong report was submitted but a student cannot defend/explain the report in a presentation context (or vice versa). The panel suggested that in such circumstances there may be other issues involved such as plagiarism or contract-cheating which needed investigating. It reiterated its extreme unease with the use of a purely mathematical solution to such a problem particularly given the subjectivity of the exact multiplier applied. The panel noted that a solution to this would be to provide a mark following evaluation of all the available evidence submitted. The panel has set a condition in respect of this, namely: Condition 4 It is a condition of validation that CCT reviews and updates the marking scheme for the Capstone Project so that student effort is rewarded using fair, reliable, verifiable and consistent assessment criteria.
Bachelor of Science in Computing & Information Technology (PG24245)	Partially	As per comments on the Principal Programme (with the exception of Condition 3 & 4).
Higher Certificate in Science in Computing & Information Technology (PG24246)	Partially	As per comments on the Principal Programme (with the exception of Condition 3 & 4).

Criterion 6. There are sufficient qualified and capable programme staff available to implement the programme as planned

a) The specification of the programme's staffing requirements (staff required as part of the programme and intrinsic to it) is precise, and rigorous and consistent with the programme and its defined purpose. The specifications include professional and educational qualifications, licences-to practise where applicable, experience and the staff/learner ratio requirements. See also criterion 12 c). b) The programme has an identified complement of staff (or potential staff) who are available, qualified and capable to provide the specified programme in the context of their existing commitments. c) The programme's complement of staff (or potential staff) (those who support learning including any employer-based personnel) are demonstrated to be competent to enable learners to achieve the intended programme learning outcomes and to assess learners' achievements as required. d) There are arrangements for the performance of the programme's staff to be managed to ensure continuing capability to fulfil their roles and there are staff development opportunities. e) There are arrangements for programme staff performance to be reviewed and there are mechanisms for encouraging development and for addressing underperformance. f) Where the programme is to be provided by staff not already in post there are arrangements to ensure that the programme will not enrol learners unless a complement of staff meeting the specifications is in post.		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	This is the Principal Programme. The panel noted that the programme's staffing requirements (staff required as part of the programme and intrinsic to it) had been appropriately specified for both the principal programme and its embedded programmes. This was precise and rigorous and consistent with each programme and their defined purpose. The specifications include professional and educational qualifications as appropriate. The panel met with the programme team during the site visit. It was noted that most of this team had taught on the programme for a number of years. All of the faculty staff that the panel met were well qualified (supported by the accommodated CVs) and demonstrated in-depth module content knowledge. CCT confirmed that the current staffing structure is sufficient to deliver the programme. The panel noted the minimum requirements set out by CCT for someone to be eligible to teach on this programme, and the exceptions that can be made for those with significant industry experience. However, the panel noted that CCT could also consider a similar exception for those with significant lecturing and/or educational experience.

		Recommendation 3: The panel recommends that lecturing and educational experience be recognised as equivalent to industry experience, where exceptions are made to the minimum requirements stated to lecture on this programme.
Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme.
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme.

Criterion 7. There are sufficient physical resources to implement the programme as planned

a) The specification of the programme's physical resource requirements (physical resources required as part of the programme and intrinsic to it) is precise, and rigorous and consistent with the programme, its defined purpose and its resource/learner-ratio requirements. See also criterion 12 d). b) The programme has an identified complement of supported physical resources (or potential supported physical resources) that are available in the context of existing commitments on these e.g. availability of: (i) suitable premises and accommodation for the learning and human needs (comfort, safety, health, wellbeing) of learners (this applies to all of the programme's learning environments including the workplace learning environment) (ii) suitable information technology and resources (including educational technology and any virtual learning environments provided) (iii) printed and electronic material (including software) for teaching, learning and assessment (iv) suitable specialist equipment (e.g. kitchen, laboratory, workshop, studio) – if applicable (v) technical support (vi) administrative support (vii) company placements/internships – if applicable c) If versions of the programme are provided in parallel at more than one location each independently meets the location-sensitive validation criteria for each location (for example staffing, resources and the learning environment). d) There is a five-year plan for the programme. It should address: (i) Planned intake (first five years) and (ii) The total costs and income over the five years based on the planned intake. e) The programme includes controls to ensure entitlement to use the property (including intellectual property, premises, materials and equipment) required.		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	This is the Principal Programme. The panel is confident that the specification of the programme's physical resource requirements (physical resources required as part of the programme and intrinsic to it) is precise, and rigorous and consistent with the programme, its defined purpose and its resource/learner-ratio requirements. The panel received CCT's Business Case and Costs which included a highly satisfactory sample five-year Income and Expenditure plan for the programme. The panel discussed the physical resources that CCT currently has in place. CCT detailed the number and variety of classrooms it has available at its disposable across its campus. CCT also detailed the broad array of support it provides through its library services. Library services regularly highlight the resources available to learners and there is a facility available to

		learners where they can request resources that the provider does not currently available. The programme document details the resources that the provider has in place, which the panel were satisfied were sufficient for the successful delivery of this programme. The panel is satisfied that there are sufficient physical resources to implement the programme as planned
Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme.
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme.

Criterion 8. The learning environment is consistent with the needs of the programme's learners

a) The programme's physical, social, cultural and intellectual environment (recognising that the environment may, for example, be partly virtual or involve the workplace) including resources and support systems are consistent with the intended programme learning outcomes. b) Learners can interact with, and are supported by, others in the programme's learning environments including peer learners, teachers, and where applicable supervisors, practitioners and mentors. c) The programme includes arrangements to ensure that the parts of the programme that occur in the workplace are subject to the same rigours as any other part of the programme while having regard to the different nature of the workplace.		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	This is the Principal Programme. The panel heard details of the college's learning environment. The programme's physical, social, cultural and intellectual environment (recognising that the environment may, for example, be partly virtual or involve the workplace) including resources and support systems are consistent with the intended programme learning outcomes. CCT confirmed that the programme will be delivered through a full-time delivery model only. CCT already has sufficient classroom capacity for these programmes, and it uses Moodle as its Virtual Learning Environment. Learning will take place using a combination of CCT's Dublin City campus and via the Moodle virtual learning environment. CCT's physical campus contains a number of lecture rooms, interactive learning rooms, two soundproof recording studios to record online classes (for use by the learners afterwards), group-study and research areas, and a library. The student-staff ratio of 90:1 is considered acceptable for lecture-based delivery. Students during discussion were complimentary and provided very positive feedback regarding the estate and the accessibility and supportiveness of the teaching staff at CCT. The panel is satisfied that the learning environment (both physical and virtual) that CCT has in place are sufficient for learners on this programme.
Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme.
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme.

Criterion 9. There are sound teaching and learning strategies

a) The teaching strategies support achievement of the intended programme/module learning outcomes. b) The programme provides authentic learning opportunities to enable learners to achieve the intended programme learning outcomes. c) The programme enables enrolled learners to attain (if reasonably diligent) the minimum intended programme learning outcomes reliably and efficiently (in terms of overall learner effort and a reasonably balanced workload). d) Learning is monitored/supervised. e) Individualised guidance, support and timely formative feedback is regularly provided to enrolled learners as they progress within the programme.		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	This is the Principal Programme. The panel commented positively on the consistency of layout of the documentation and in particular, the module specifications. This included the granularity and consistency with which the individual module learning outcomes had been written. CCT outlined the variety of teaching and learning methodologies adopted for these programmes but also confirmed that the predominant strategy is an applied learning approach. The programme team outlined how application was critical to ensure graduates would be equipped to handle real issues in the workplace. CCT outlined how their newly developed Teaching, Learning, and Assessment (TLA) strategy guides these programmes, emphasising a diversified approach to assessment, moving away from traditional examinations in response to student feedback. This was welcomed by the panel. The panel queried how the College is responding to the impact of generative AI on the programme, and how the College may mitigate the negative impacts of this whilst also leveraging the opportunities that it will bring. Consideration is ongoing regarding the impact of AI on teaching methodologies and assessment practices. Structured approaches, including group contracts and interim/ongoing assessments, are in place to manage group dynamics effectively. The panel is satisfied that there are sound teaching and learning strategies in place at CCT.

Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme.
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme.

Criterion 10. There are sound assessment strategies

a) All assessment is undertaken consistently b) The programme's assessment procedures interface effectively with the provider's QQI approved quality assurance procedures. c) The programme includes specific procedures that are fair and consistent for the assessment of enrolled learners to ensure the minimum intended programme/module learning outcomes are acquired by all who successfully complete the programme. d) The programme includes formative assessment to support learning. e) There is a satisfactory written programme assessment strategy for the programme as a whole and there are satisfactory module assessment strategies for any of its constituent modules. f) Sample assessment instruments, tasks, marking schemes and related evidence have been provided for each award-stage assessment and indicate that the assessment is likely to be valid and reliable. g) There are sound procedures for the moderation of summative assessment results. h) The provider only puts forward an enrolled learner for certification for a particular award for which a programme has been validated if they have been specifically assessed against the standard for that award.		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	This is the Principal Programme. The panel discussed the programme assessment schedule and queried the impact on assessment and volume of assessment given the large number of 5 credit modules, and whether the assessments get bunched near the end of a semester. The programme team noted that they try to spread assessments as much as they can and make a conscious choice to have assessments early in the semester and some post final week of teaching. However, the programme team did also note that having assessments near the end of the semester is inevitable as time is required in the semester to cover the material relevant to the assessment. The panel agreed with this but noted that some additional clarity could be provided to students for the time effort involved in an assessment and the time available for the assessment, rather than simply emphasising the deadline. The panel has set a recommendation in respect of this, namely: Recommendation 4: The panel recommends that CCT review and presents the assessment schedule in an appropriate format to show that assessments can be completed gradually from the time of assessment being given out and the submission deadline.

		The panel discussed the external examiner process, and CCT outlined how this works in practice. The panel noted that upon its review of the previous external examiner reports (which CCT provided), it is of the view that the level of detail provided in the reports is limited. This may be partially due to the information requested in the report form. The panel was of the view that this prevents CCT from fully benefiting from the quality enhancement that an important external examination process should provide to the College. The panel has set a recommendation in respect of this, namely: Recommendation 5: The panel recommends that CCT redesigns its external examiner form to ensure that the College gets optimal value from the external examiner process.
Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme.
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme.

Criterion 11. Learners enrolled on the programme are well informed, guided and cared for

a) There are arrangements to ensure that each enrolled learner is fully informed in a timely manner about the programme including the schedule of activities and assessments. b) Information is provided about learner supports that are available to learners enrolled on the programme. c) Specific information is provided to learners enrolled on the programme about any programme-specific appeals and complaints procedures. d) If the programme is modular, it includes arrangements for the provision of effective guidance services for learners on the selection of appropriate learning pathways. e) The programme takes into account and accommodates to the differences between enrolled learners, for example, in terms of their prior learning, maturity, and capabilities. f) There are arrangements to ensure that learners enrolled on the programme are supervised and individualised support and due care is targeted at those who need it. g) The programme provides supports for enrolled learners who have special education and training needs. h) The programme makes reasonable accommodations for learners with disabilities. i) If the programme aims to enrol international students it complies with the <i>Code of Practice for Provision of Programmes to International Students</i> and there are appropriate in-service supports in areas such as English language, learning skills, information technology skills and such like, to address the particular needs of international learners and enable such learners to successfully participate in the programme. j) The programme's learners will be well cared for and safe while participating in the programme, (e.g. while at the provider's premises or those of any collaborators involved in provision, the programme's locations of provision including any workplace locations or practice-placement locations).		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	This is the Principal Programme. The panel met with a small number of learners (two current students and one recent graduate) whose experience of the programme and faculty had been extremely positive. The three representatives were wonderful ambassadors for both the course and college. It was felt however that it would be preferable if future panels could have access to a larger and more representative group of learners. The panel has set a recommendation in respect of this, namely: Recommendation 6: The panel recommends that CCT investigate ways for future review processes to have a more representative group of students and graduates available to the panel, and that more time is set aside for a panel to interact with students and graduates.

		The panel discussed with the programme management team what supports are in place for the students on this programme. CCT outlined the comprehensive support systems available for international students (the dominant student cohort), including mentorship programmes, visa assistance, and tailored handbooks. Career support services were also outlined, which feature regular workshops and individual career counselling. Academic support through the library and IT services were detailed and appear highly effective, offering personalised assistance. Student attendance and engagement are also actively monitored through virtual learning environments (VLEs), enabling timely interventions. The panel is satisfied that learners enrolled on the programme are well informed, guided and cared for.
Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme.
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme.

Criterion 12. The programme is well managed

a) The programme includes intrinsic governance, quality assurance, learner assessment, and access, transfer and progression procedures that functionally interface with the provider's general or institutional procedures. b) The programme interfaces effectively with the provider's QQI approved quality assurance procedures. Any proposed incremental changes to the provider's QA procedures required by the programme or programme-specific QA procedures have been developed having regard to QQI's statutory QA guidelines. If the QA procedures allow the provider to approve the centres within the provider that may provide the programme, the procedures and criteria for this should be fit-for-purpose of identifying which centres are suited to provide the programme and which are not. c) There are explicit and suitable programme-specific criteria for selecting persons who meet the programme's staffing requirements and can be added to the programme's complement of staff. d) There are explicit and suitable programme-specific criteria for selecting physical resources that meet the programmes physical resource requirements and can be added to the programme's complement of supported physical resources. e) Quality assurance is intrinsic to the programme's maintenance arrangements and addresses all aspects highlighted by the validation criteria. f) The programme-specific quality assurance arrangements are consistent with QQI's statutory QA guidelines and use continually monitored completion rates and other sources of information that may provide insight into the quality and standards achieved. g) The programme operation and management arrangements are coherently documented and suitable. h) There are sound procedures for interface with QQI certification.		
Programme	Satisfactory? (yes, no, partially)	Comment
Bachelor of Science (Honours) in Computing & Information Technology (PG24244)	Yes	This is the Principal Programme. The panel asked CCT to detail its programme management structure and how it relates to this programme. CCT detailed its overarching QA structure and how this allows for strong management of all of its programmes (this is detailed in the programme document). Roles within programme management, including the Programme Leader and Senior Faculty Coordinator, are clearly defined and effectively facilitate student support and timetable organisation. Feedback mechanisms for student evaluation are structured and effective, utilising both formal module surveys and informal feedback channels. Attendance management remains an identified area of focus, with proactive monitoring and student support interventions in place. The panel discussed the programme's timetable with CCT and noted how it was quite condensed in format. CCT confirmed that this was a preference of students and allowed it to facilitate flexibility and accommodate student work and to free up time in the week for

		students to focus on assessment work. The panel noted that it did not have an issue with the number of days that the programme was delivered over, but that further gaps could be introduced within a class and between classes to avoid students being overly fatigued in the latter part of the day (an issue that students noted when the panel met with them). The panel has set a recommendation in respect of this, namely: Recommendation 7: The panel recommends that CCT reviews the timetable structure to try to incorporate more breaks within and between classes. The panel is satisfied that the programme is well-managed.
Bachelor of Science in Computing & Information Technology (PG24245)	Yes	As per comments on the Principal Programme.
Higher Certificate in Science in Computing & Information Technology (PG24246)	Yes	As per comments on the Principal Programme.

Part 3. Overall recommendation to QQI

3.1 Principal programme:

Select one	
	Satisfactory (meaning that it recommends that QQI can be satisfied in the context of unit 2.3) of Core policies and criteria for the validation by QQI of programmes of education and training;
✓	Satisfactory subject to proposed special conditions (specified with timescale for compliance for each condition; these may include proposed pre-validation conditions i.e. proposed (minor) things to be done to a programme that almost fully meets the validation criteria before QQI makes a determination);
	Not satisfactory.

3.2 Exit Award – Level 7 BSc Degree

Select one	
	Satisfactory (meaning that it recommends that QQI can be satisfied in the context of unit 2.3) of Core policies and criteria for the validation by QQI of programmes of education and training;
✓	Satisfactory subject to proposed special conditions (specified with timescale for compliance for each condition; these may include proposed pre-validation conditions i.e. proposed (minor) things to be done to a programme that almost fully meets the validation criteria before QQI makes a determination);
	Not satisfactory.

3.3 Exit Award – Level 6 Higher Certificate

Select one	
	Satisfactory (meaning that it recommends that QQI can be satisfied in the context of unit 2.3) of Core policies and criteria for the validation by QQI of programmes of education and training;
✓	Satisfactory subject to proposed special conditions (specified with timescale for compliance for each condition; these may include proposed pre-validation conditions i.e. proposed (minor) things to be done to a programme that almost fully meets the validation criteria before QQI makes a determination);
	Not satisfactory.

Reasons for the overall recommendation

CCT presented a thorough rationale for the revalidation of this programme. The documentation is thorough, comprehensive and detailed. During the provider meetings, CCT presented as highly functional, well-organised and committed to providing a quality programme. CCT's QA structure was comprehensive and demonstrates an ability to successfully operate this programme.

The panel views the conditions of validation it has determined as relatively minor amendments to the programme and its supporting documentation that will be of benefit to the learners on this programme.

Commendations

CCT is to be commended for:

1. The college's commitment to the student experience and care provided to students including the range of academic and non-academic supports available to enrolled learners.
2. The quality of the documentation produced.
3. The open and constructive nature of CCT's engagement with the panel.
4. The positive attitude of the programme team and how they invested into this programme.
5. The college's clear commitment to provide particular support for those learners with diverse learning needs.

Special Conditions of Validation (directive and with timescale for compliance)

Principle Programme [Bachelor of Science (Honours) in Computing & Information Technology (PG24244)]:

1. It is a condition of validation that the syllabus material in the Ethics & Professional Development module is not confined solely to the principal programme. Given its importance, this material should also be covered in the two embedded programme so as it benefits all students.
2. It is a condition of validation that the programme team reflect on the discussions held during the interactions with the panel and update modules as appropriate.
3. It is a condition of validation that CCT reviews the Capstone Project to ensure the integrity of the marks allocated and that this mark reflects the work conducted by the individual student and is unaffected by the work of the other person (where it is taken as a paired project).
4. It is a condition of validation that CCT reviews and updates the marking scheme for the Capstone Project so that student effort is rewarded using fair, reliable, verifiable and consistent assessment criteria.

Embedded Programme 1 [Bachelor of Science in Computing & Information Technology (PG24245)]

1. It is a condition of validation that the syllabus material in the Ethics & Professional Development module is not confined solely to the principal programme. Given its importance, this material should also be covered in the two embedded programme so as it benefits all students.
2. It is a condition of validation that the programme team reflect on the discussions held during the interactions with the panel and update modules as appropriate.

Embedded Programme 2 [Higher Certificate in Science in Computing & Information Technology (PG24246)]

1. It is a condition of validation that the syllabus material in the Ethics & Professional Development module is not confined solely to the principal programme. Given its importance, this material should also be covered in the two embedded programme so as it benefits all students.
2. It is a condition of validation that the programme team reflect on the discussions held during the interactions with the panel and update modules as appropriate.

o [Summary of recommended special conditions of validation](#)

Principle Programme [Bachelor of Science (Honours) in Computing & Information Technology (PG24244)]:

1. It is a condition of validation that the syllabus material in the Ethics & Professional Development module is not confined solely to the principal programme. Given its importance, this material should also be covered in the two embedded programme so as it benefits all students.

2. It is a condition of validation that the programme team reflect on the discussions held during the interactions with the panel and update modules as appropriate.
3. It is a condition of validation that CCT reviews the Capstone Project to ensure the integrity of the marks allocated and that this mark reflects the work conducted by the individual student and is unaffected by the work of the other person (where it is taken as a paired project).
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Embedded Programme 1 [Bachelor of Science in Computing & Information Technology (PG24245)]

1. It is a condition of validation that the syllabus material in the Ethics & Professional Development module is not confined solely to the principal programme. Given its importance, this material should also be covered in the two embedded programme so as it benefits all students.
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Embedded Programme 2 [Higher Certificate in Science in Computing & Information Technology (PG24246)]

1. It is a condition of validation that the syllabus material in the Ethics & Professional Development module is not confined solely to the principal programme. Given its importance, this material should also be covered in the two embedded programme so as it benefits all students.
2. It is a condition of validation that the programme team reflect on the discussions held during the interactions with the panel and update modules as appropriate.

o Summary of recommendations to the provider

Principle Programme [Bachelor of Science (Honours) in Computing & Information Technology (PG24244)]:

1. The panel recommends that CCT clearly specify the target cohort of each programme and how they may target each of these target cohorts.
2. The panel recommends that CCT identify the modules contributing to each of the six identified pillars as this would enhance the documentation and provide additional support and clarity for the overall coherency of the programme.
3. The panel recommends that lecturing and educational experience be recognised as equivalent to industry experience, where exceptions are made to the minimum requirements stated to lecture on this programme.

4. The panel recommends that CCT review the assessment schedule in an appropriate format to show that assessments can be completed gradually from the time of assessment being given out and the submission deadline.
5. The panel recommends that CCT redesigns its external examiner form to ensure that the College gets optimal value from the external examiner process.
6. The panel recommends that CCT investigate ways for future review processes to have a more representative group of students and graduates available to the panel, and that more time is set aside for a panel to interact with students and graduates.
7. The panel recommends that CCT reviews the timetable structure to try to incorporate more breaks within and between classes.

Embedded Programme 1 [Bachelor of Science in Computing & Information Technology (PG24245)]

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Embedded Programme 2 [Higher Certificate in Science in Computing & Information Technology (PG24246)]

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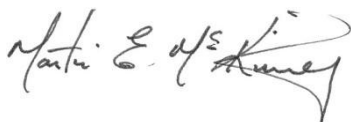
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7. The panel recommends that CCT reviews the timetable structure to try to incorporate more breaks within and between classes.

o Declarations of Evaluators' Interests

This report has been agreed by the evaluation panel and is signed on their behalf by the chairperson.

Panel chairperson: MARTIN MCKINNEY (PROFESSOR)

Date: 09/04/2025

A handwritten signature in black ink, appearing to read 'Martin E. McKinney', written over a horizontal line.

Signed:

3.4 Disclaimer

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.

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Part 4. Proposed programme schedules *(post panel feedback and consequent amendments, if any)*

Full Time Schedules

As per QQI Panel