

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

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	13 September 2022
	Note(s): See <i>Appendix 1</i> for the following: <ul style="list-style-type: none">Virtual Site Visit Agenda (CCT gave a presentation providing the programme context at the start of the virtual validation event). See <i>Appendix 2</i> for the following: <ul style="list-style-type: none">Programme Validation Documentation.
Date of report	13 October 2022

Section A. Overall recommendations

Principal programme	Title	Higher Diploma in Science in Computing
	Award	Major Level 8
	Credit	60 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
Mr David Denieffe	Chair	Vice-President for Academic Affairs and Registrar, South East Technological University (SETU).
Dr Brendan Ryder	Report Writer and Subject Matter Expert	Head of Academic Planning and QA, Dundalk Institute of Technology.
Professor Sarah Jane Delaney	Subject Matter Expert	Professor of Inclusive Computer Science, School of Computer Science, Technological University Dublin (TUD).
Ms Amrita Giri	Learner Representative	Bachelor of Science (Honours) in Computing and Software Development, Dundalk Institute of Technology (DkIT).
Mr Pat Moriarty	Industry Representative	Senior Technologist ICT and Software, Enterprise Ireland.

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)
Higher Diploma in Science in Computing	120	120

Proposed Duration and Enrolment					
	First Intake Date	Duration	Intakes per Annum	Enrolment i.e. learners per Intake	
			Maximum	Minimum	Maximum
Full-Time	Sept 2022	12 Months	2	16	60
Part-Time (Blended Learning)	Sept 2022	12 Months	2	16	60
Intake Schedule e.g. January September		September, February			

Panel Commentary on proposed enrolment:

The panel were satisfied with the proposed enrolment plans. The Panel note that a “*Five-year Forecast for Projected Budgets of Income and Expenditure*” was provided as part of the programme documentation.

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

The *Higher Diploma in Computing* is designed as a conversion programme to facilitate graduates from disciplines other than IT to transition into the discipline, equipping them with the knowledge skill and competence in the core areas of computing. The programme comprises of 60 credits of taught modules and is designed as an active learning experience requiring students to be active

participants in their learning, engaging in industry relevant authentic learning and assessment activities.

The Panel note that CCT are enhancing their programme provision and delivery modes while continuing to meet the ongoing needs of industry (pg. 49 of Programme Descriptor). The proposed programme is a full time and part-time (blended learning) 60 ECTS programme, at NFQ Level 8, targeted at students studying on daytime (full time) and evening / weekend (part time), using a blended learning mode approach to teaching, learning and assessment.

Target learner groups

The programme is available full-time on-campus and part-time via blended learning mode to both domestic and international applicants who can evidence the requisite knowledge, skill and competence. It is envisaged that the full-time programme will be of interest to international learners and new graduates who progressed straight from school to higher education. The part-time blended learning mode of delivery is intended for individuals currently in employment, or with employment experience who can evidence the entry standard through qualifications or RP(E)L. Applicants will normally be graduates disciplines without a significant IT element looking to complete a conversion programme for up-skilling or re-skilling purposes. Applicants with equivalent qualifications or seeking admission through experiential learning will be considered in accordance with CCT policy.

Approved countries for provision

Ireland

Delivery mode: Full-time/Part-time

Full-time

Part-time (Blended Learning)

The teaching and learning modalities

Lectures, Group sessions (on-campus), Online synchronous classes, Labs, Discussion Forum, Tutorials

Summary of specifications for teaching staff

Role	Profile	WTE
Lecturer	<p>The CCT policy as approved by QQI, specifies the following:</p> <p>Academic Council of CCT has outlined the minimum requirements for academic appointments as follows:</p> <ul style="list-style-type: none"> Evidence of appropriate subject matter expertise is essential, evidenced through academic or professional qualifications, and advanced professional, vocational, technical or research activity in a relevant field. Normally, candidates should have a qualification at the NFQ level above the programme on which they will be teaching. In the case of Masters programmes, a Masters or equivalent professional qualification is normally required. Where potential applicant lecturers do not possess a Masters qualification but are identified as experts in their field, applications should be brought to the attention of the Chair of Academic Council, Dean of Faculty and Dean of Academic Affairs who are authorised to approve a derogation, where deemed 	7

	<p>appropriate. In such cases, supervision and mentorship in matters relating to teaching and assessment may be required.</p> <ul style="list-style-type: none"> • Currency of subject matter expertise should be evidenced through recent and regular professional development activity including training and practice. • Training in pedagogy or experience in teaching and assessing is also desirable. Where this is not evidenced, successful candidates will be required to commit to engaging in appropriate activities to develop their experience in this area. 	
Ed Tech	<p>Expertise in using technology to design, create, and deliver curriculum content and learning and assessment activities, employing a variety of tools and platforms, to provide an effective and interactive learning experience in blended learning mode.</p> <p>Works with academic faculty to inform develop, assist in design and creation of content, and undertakes testing as required.</p>	0.25
Dedicated Library Services	College Librarian.	0.20
Programme Leader	Member of teaching faculty of responsibility for programme management.	0.20
Student Services	Student Services Department led by Head of Student Services.	0.10
Technical Support	ICT support officers.	0.10
Programme Admin Support	Faculty Coordinator and Quality Assurance related Administration.	0.50

Learning Activity	Ratio of learners to teaching staff
tutorials	1:20
discussion forums	1:60
labs	1:60
Group sessions / classes / online classes	1:60
Lectures	1:120

Panel Commentary on programme outline and staffing:

The Panel were satisfied with the outline of the programme and the proposed staffing. CCT have a policy on scholarship, professional development, innovation and research. The policy supports professional development activity from in-house workshops to conference attendance, sponsorship of further study and research activities.

Programmes being replaced (applicable to applications for revalidation)

Code	Title	Last enrolment date
N/A	N/A	N/A

Section D. Other noteworthy features of the application

Not applicable.

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)

Not applicable.

Part 2. Evaluation against the validation criteria

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

<p>a) The provider meets the prerequisites (section 44(7) of the 2012 Act) to apply for validation of the programme.</p> <p>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.</p> <p>c) The provider has declared that their programme complies with applicable statutory, regulatory and professional body requirements.¹</p>		
Programme	Satisfactory ? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> • CCT College Dublin is the trading name of CCT Education Limited, a company limited by shares and registered in Ireland, Registered Number: 390136, Registered Office: 30-34 Westmoreland St., Dublin 2. The College was established in February 2005 as a further and higher education provider of programmes mainly within the discipline of Computing. The primary aim of the College in 2005 was to become established as a state validated provider of higher education programmes of learning. • In 2009 CCT agreed its Quality Assurance policies and procedures with HETAC and in 2010 CCT commenced its first HETAC awarded programme. By 2010, CCT was also accredited as an academic support provider of the University of Hertfordshire in the UK, to provide undergraduate and postgraduate programmes. CCT subsequently took the decision to conclude its collaboration with the University of Hertfordshire and develop itself to have the capacity to offer programmes up to NFQ level 9 awarded by QQI. • By 2012 CCT became a provider of professional and higher education only, with all academic programmes awarded by QQI. Since that time the College has focussed on growing its expertise, structures, services, faculty and management to support its academic development and extension of scope of provision in line with student demand and the needs of the Irish economy. In 2018, CCT became the first higher education provider to re-engage with QQI, securing approval of its QA procedures. As part of the re-engagement process the College outlined the intention to apply for extension of scope of provision up to level 9 taught Masters programmes. This intention was realised in March 2019 when the College secured validation of the Masters in Applied Software Development. Most recently the College has further extended its scope of provision to include blended learning programme delivery. This was the outcome of a strategic objective identified in 2017 which has seen the development of the College campus, virtually and physically, investment in new roles, resources and software, implementation of new quality assurance mechanisms specific to online and blended provision, and upskilling of staff and faculty over the intervening years. The current scope of provision therefore comprises of major and non-major awards from level

¹This criterion is to ensure the programme can actually be provided and will not be halted on account of breach of the law. The declaration is sought to ensure this is not overlooked but QQI is not responsible for verifying this declaration of enforcing such requirements.

		<p>6 to level 9 taught Masters in the discipline areas of business, computing and IT in full-time, part-time and blended learning modes.</p> <ul style="list-style-type: none"> • CCT has provided a declaration (pg. 2 of the programme descriptor) confirming that the information provided in the programme validation documentation for the award is truthful and that all the applicable programme criteria have been addressed (as detailed in QQI's Policies and criteria for the validation of programmes of education and training, https://www.qqi.ie/sites/default/files/2021-11/qp-17-policies-and-criteria-for-the-validation-of-programmes-of-education-and-training.pdf). • CCT has confirmed (pg. 2 of the programme descriptor) that the programmes comply with applicable statutory, regulatory and professional body requirements. <p>Commendation(s)</p> <ul style="list-style-type: none"> • None. <p>Condition(s)</p> <ul style="list-style-type: none"> • None. <p>Recommendation(s)</p> <ul style="list-style-type: none"> • None.
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Criterion 2. The programme objectives and outcomes are clear and consistent with the QQI awards sought

<p>a) The programme aims and objectives are expressed plainly.</p> <p>b) A QQI award is specified for those who complete the programme.</p> <p>(i) Where applicable, a QQI award is specified for each embedded programme.</p> <p>c) There is a satisfactory rationale for the choice of QQI award(s).</p> <p>d) The award title(s) is consistent with unit 3.1 of QQI's <i>Policy and Criteria for Making Awards</i>.</p> <p>e) The award title(s) is otherwise legitimate for example it must comply with applicable statutory, regulatory and professional body requirements.</p> <p>f) The programme title and any embedded programme titles are</p> <p>(i) Consistent with the title of the QQI award sought.</p> <p>(ii) Clear, accurate, succinct and fit for the purpose of informing prospective learners and other stakeholders.</p> <p>g) For each programme and embedded programme</p> <p>(i) The minimum intended programme learning outcomes and any other educational or training objectives of the programme are explicitly specified.²</p> <p>(ii) The minimum intended programme learning outcomes to qualify for the QQI award sought are consistent with the relevant QQI awards standards.</p> <p>h) Where applicable, the minimum intended module learning outcomes are explicitly specified for each of the programme's modules.</p> <p>i) Any QQI minor awards sought for those who complete the modules are specified, where applicable.</p>

² Other programme objectives, for example, may be to meet the educational or training requirements of a statutory, regulatory or professional body.

For each minor award specified, the minimum intended module learning outcomes to qualify for the award are consistent with relevant QQI minor awards standards.³

Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> • The aims and objectives of the programme are clearly expressed. Section 2.1 (pg. 22) of the programme descriptor provides the programme aims and objectives. • The QQI award is clearly articulated (pg. 17, 22). • Section 2.2 (pg. 22) of the programme descriptor provides the rationale for the choice of the award which was informed by QQI policy and award standards, specifically Science and Computing, https://www.qqi.ie/what-we-do/qqi-awards/qqi-awards-standards) and relevant stakeholder feedback. • The award titles fully comply with all statutory and regulatory requirements (professional requirements are not applicable for the programme). They are fully consistent with QQI's Policy and Criteria for Making Awards. • The programme title is adequately clear, accurate and unambiguous and is fully consistent with the award sought and this is reflected in the aims and objectives of the programme and the curriculum being offered. Section 3.8 (pg. 45) of the programme validation submission provides a comparative analysis with similar programmes in higher education institutions (public and private). Learners and other stakeholders will be in no doubt as to what is expected on the programme. • The minimum intended programme learning outcomes (MIPLOs) are explicitly specified as evidenced in Section 2.4 of the programme descriptor. The MIPLOs are consistent with the QQI award standards, specifically Science and Computing. • The minimum intended module learning outcomes (MIMLOs) are explicitly specified for each of the programme modules with MIMLOS mapped to MIPLOs as appropriate. Section 2.8 (pg. 29) provides a mapping of the MIPLOs and MIMLOs against the QQI award standards. <p>Commendation(s)</p> <ul style="list-style-type: none"> • None.

³ Not all modules will warrant minor awards. Minor awards feature strongly in the QQI common awards system however further education and training awards may be made outside this system.

		<p>Condition(s)</p> <ul style="list-style-type: none"> • None. <p>Recommendation(s)</p> <ul style="list-style-type: none"> • None.
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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)

<p>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.⁴</p> <p>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.</p> <p>(i) There is a satisfactory rationale for providing the programme.</p> <p>(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.</p> <p>(iii) There is support for the introduction of the programme (such as from employers, or professional, regulatory or statutory bodies).</p> <p>(iv) There is evidence⁵ of learner demand for the programme.</p> <p>(v) There is evidence of employment opportunities for graduates where relevant⁶.</p> <p>(vi) The programme meets genuine education and training needs.⁷</p> <p>c) There are mechanisms to keep the programme updated in consultation with internal and external stakeholders.</p> <p>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.</p> <p>e) The programme satisfies any validation-related criteria attaching to the applicable awards standards and QQI awards specifications.</p>
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Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> • The programme is designed for full-time on-campus and part-time via a blended learning delivery mode to both domestic and international applicants who can evidence the requisite knowledge, skill and competence. It is envisaged that the full-time programme will be of interest to international learners and new graduates who progressed straight from school to higher education. The part-time blended learning delivery

⁴ Awards standards however detailed rely on various communities for their interpretation. This consultation is necessary if the programme is to enable learners to achieve the standard in its fullest sense.

⁵ This might be predictive or indirect.

⁶ It is essential to involve employers in the programme development and review process when the programme is vocationally or professionally oriented.

⁷ There is clear evidence that the programme meets the **target learners'** education and training needs and that there is a clear demand for the programme.

		<p>mode is intended for individuals currently in employment, or with employment experience who can evidence the entry standard through qualifications or RP(E)L. Applicants will normally be graduates of disciplines without a significant IT element looking to complete a conversion programme for up-skilling or re-skilling purposes.</p> <ul style="list-style-type: none"> • CCT has articulated in the programme descriptor, and demonstrated during the virtual site visit, a clear demand and rationale for the programme. Section 3 (pg. 40) of the programme descriptor provides the rationale for the programme and skills shortage/gap reports (national and international), sectoral reports, etc. are provided. • The CCT programme development team has consulted with learners, graduates, employers and other stakeholders as evidenced in Section 3 (pgs. 40-49) of the programme descriptor. • CCT quality assurance and enhancement mechanisms are used to ensure that the programme is continually updated. Section 9.3 (pg. 143) of the programme descriptor provides evidence of such mechanisms, and includes the following: <ul style="list-style-type: none"> ○ Programme Board Meetings; ○ Student Representative Meetings; ○ External Examiner Reports and Feedback; ○ Annual Programme Review and Quinquennial Review; ○ CCT Management Team; ○ Industry Engagement Forum; ○ Programme Alumni. <p>Commendation(s)</p> <ul style="list-style-type: none"> • None <p>Condition(s)</p> <ul style="list-style-type: none"> • None. <p>Recommendation(s)</p> <ul style="list-style-type: none"> • None.
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Criterion 4. The programme's access, transfer and progression arrangements are satisfactory

<p>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 satisfied⁸.</p> <p>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.</p> <p>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 (CEFR⁹) in order to enable learners to reach the required standard for the QQI award.</p> <p>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).</p> <p>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.</p> <p>f) The programme title (the title used to refer to the programme):-</p> <ul style="list-style-type: none"> (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. <p>g) The programme title is otherwise legitimate; for example, it must comply with applicable statutory, regulatory and professional body requirements.</p>		
Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> • Clear requirements regarding access, transfer and progression (ATP) have been provided for the award. The programme is aligned with QQI's Access Transfer and Progression (ATP) Policy (https://www.qqi.ie/sites/default/files/media/file-uploads/ATP%20Policy%20Restatement%20FINAL%202018.pdf) • Minimum requirements for general learning, discipline-specific learning and experiential requirements are provided in the programme descriptor as are minimum language proficiency and mathematics requirements (pgs. 51-52). • Section 6: Admissions, Access, Transfer, Progression Recognition and Certification of the CCT Quality manual provides policies and procedures relating to ATP (https://www.cct.ie/quality-assurance/).

⁸ Each of the detailed criteria set out in the Policy and criteria for access, transfer and progression in relation to learners for providers of further and higher education and training must be addressed in the provider's evaluation report. The detailed criteria are (QQI, restated 2015) arranged under the headings

- Progression and transfer routes
- Entry arrangements
- Information provision

⁹ http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf (accessed 26/09/2015)

		<ul style="list-style-type: none"> • Programme information is provided in plain language for prospective and enrolled learners and is available in a range of accessible formats. Section 4.1 (pg. 50) in the programme descriptor describes learner information. Information on the programme is made available to prospective and enrolled learners using CCT's website (https://www.cct.ie/), brochure material and through the Moodle Virtual Learning Environment (VLE). Section 11: Public Information of the CCT Quality manual provides policies and procedures relating to public information (https://www.cct.ie/quality-assurance/). • Information is provided to registered/enrolled learners in the form of a Programme Handbook (pg. 50). Section 7: Protection of Enrolled Learners – Public Information of the CCT Quality manual provides policies and procedures relating to the protection of the enrolled learner (https://www.cct.ie/quality-assurance/). • The programme title clearly reflects QQI requirements for major awards, the award level and the discipline. The title is legitimate and complies with applicable statutory and regulatory requirements (professional body requirements are not relevant for this programme). Award titles were also considered under Criterion 2. <p>Commendation(s)</p> <ul style="list-style-type: none"> • None. <p>Condition(s)</p> <ul style="list-style-type: none"> • None. <p>Recommendation(s)</p> <ul style="list-style-type: none"> • The panel indicated that all applicants for the programme can be interviewed. CCT should include the interview assessment criteria as appropriate.
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Criterion 5. The programme's written curriculum is well structured and fit-for-purpose

<p>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.</p> <p>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.</p> <p>c) Each module and stage is suitably structured and coherently oriented towards the achievement by learners of the intended <i>programme</i> learning outcomes.</p> <p>d) The objectives and purposes of each of the programme's elements are clear to learners and to the provider's staff.</p> <p>e) The programme is structured and scheduled realistically based on sound educational and training principles¹⁰.</p> <p>f) The curriculum is comprehensively and systematically documented.</p> <p>g) The credit allocated to the programme is consistent with the difference between the entry standard and minimum intended programme learning outcomes.</p> <p>h) The credit allocated to each module is consistent with the difference between the module entry standard and minimum intended module learning outcomes.</p> <p>i) Elements such as practice placement and work-based phases are provided with the same rigour and attentiveness as other elements.</p> <p>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.¹¹</p>		
Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> The programme is well documented, well-structured, coherent and designed so that the learner can achieve the intended programme learning outcomes. This is evidenced in Section 5: Written Curriculum (pg. 54) and Section 5.10: Proposed Programme Schedules (pgs. 68, 69). Module descriptors are provided in Section 6: Module Documentation (pg. 70). The programme (single stage programme, award stage) is suitably structured and designed so that the learner can achieve the intended programme learning outcomes. There are no module electives on the programme. The aims, objectives and learning outcomes of the programme and their associated modules are clear and are logically presented in the programme descriptor. The credits allocated to the programme are consistent with QQI award types and durations and consistent with the difference between the entry standard and minimum intended programme learning outcomes.

¹⁰ This applies recursively to each and every element of the programme from enrolment through to completion.

In the case of a modular programme, the pool of modules and learning pathway constraints (such as any prerequisite and co-requisite modules) is explicit and appropriate to the intended programme learning outcomes.

¹¹ If the duration is variable, for example, when advanced entry is available, this should be explained and justified

		<ul style="list-style-type: none"> • The credits allocated to each module are consistent with the difference between the module entry standard and minimum intended module learning outcomes. • The programme duration is consistent with national norms for programmes of this type. • Indicative timetables are provided in the programme descriptor (pg. 57) for both full-time and part-time (blended delivery mode).
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Modules Feedback

Module Title	Feedback
General	<ul style="list-style-type: none"> • Reading lists should be reviewed to ensure that they are up to date.
Maths for Computing	<ul style="list-style-type: none"> • The programme development team should provide an assessment sample for the Maths Assignment (60% weighting) (as per module descriptor).
Databases	<ul style="list-style-type: none"> • The programme development team should articulate how MLO 1 and MLO 3 are measured (see condition under Criterion 10).
Algorithms and Constructs	<ul style="list-style-type: none"> • The programme development team should review the module assessment strategy to ensure that it reflects what is intended.

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

<p>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).</p> <p>b) The programme has an identified complement of staff¹² (or potential staff) who are available, qualified and capable to provide the specified programme in the context of their existing commitments.</p> <p>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.</p> <p>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 development¹³ opportunities¹⁴.</p>
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¹² Staff here means natural persons required as part of the programme and accountable (directly or indirectly) to the programme's provider, it may for example, include contracted trainers and workplace supervisors.

¹³ Development here is for the purpose of ensuring staff remain up-to-date on the discipline itself, on teaching methods or on other relevant skills or knowledge, to the extent that this is necessary to ensure an adequate standard of teaching.

¹⁴ Professional or vocational education and training requires that teaching staff's professional/vocation knowledge is up to date. Being qualified in a discipline does not necessarily mean that a person is currently competent in that discipline. Therefore, performance management and development of professional and vocational staff needs to focus on professional/vocational competence as well as pedagogical competence.

<p>e) There are arrangements for programme staff performance to be reviewed and there are mechanisms for encouraging development and for addressing underperformance.</p> <p>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.</p>		
Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> • CCT has the required complement of staff, including additional capacity within the bank of contracted faculty (pg. 134 of the programme descriptor and confirmed during the virtual validation event). However, in accordance with current policy and practice, should additional recruitment be required during the life of the programme, this will be undertaken in a timely manner. • The specification of staff, both academic/professional and pedagogical, required to teach on the programme is provided in the programme descriptor (pg. 20). The specification of staff required to teach particular module(s) is provided in the module descriptors (Section 6: Module Documentation, pg. 70). • There is a clear commitment to scholarship, professional development, innovation and research. CCT has enhanced its provision to include blended delivery in recent years and it is clearly evident that they have evolved the organisations structures, supports and processes to take account of this evolution. This is evidenced in the organisational chart in the programme descriptor (pg. 13), staff profiles (pg. 20) and the enhanced professional development activities for teaching faculty undertaken by the CCT Centre for Teaching and Learning (CTL) (recorded in the CCT Register of Professional Development): <ul style="list-style-type: none"> ○ CCT Professional Development Bulletin. ○ The CCT Excellence in Teaching Series ○ CCT Certificate in Teaching Series Lectures from the Certificate are available on open access via CCTs institutional repository. ○ Online Guides on the learning space ○ Current Awareness Activities: The CCT Library Service offers a current awareness service that faculty can register with to receive automatic alerts from academic journals on subject areas of their choice. ○ Sectoral engagement ○ Engagement with the National Forum, NStEP (https://studentengagement.ie/) and the HECA'S Academic Quality Enhancement Forum • The Panel also note that CCT is a member of the Higher Education Colleges Association (HECA) and is represented on the HECA Board, the HECA Higher Education Quality Assurance and Enhancement Forum, and the HECA Library Committee.

Professional development may include placement in industry, for example. In regulated professions it would be expected that there are a suitable number of registered practitioners involved.

		<ul style="list-style-type: none"> • Section 8: Quality Assurance of Teaching Staff and Human Resources of the CCT Quality manual provides policies and procedures relating to teaching staff and human resources (https://www.cct.ie/quality-assurance/), which includes the following: <ul style="list-style-type: none"> ○ Recruitment, Selection and Probation; ○ Induction of New Staff; ○ Staff Code of Conduct; ○ Performance Management Appraisal; ○ Scholarship, Professional Development, Innovation and Research; ○ Conflict of Interest; ○ Mutual Respect.
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Criterion 7. There are sufficient physical resources to implement the programme as planned

<p>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).</p> <p>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:</p> <ul style="list-style-type: none"> (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 <p>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).</p> <p>d) There is a five-year plan for the programme. It should address</p> <ul style="list-style-type: none"> (i) Planned intake (first five years) and (ii) The total costs and income over the five years based on the planned intake. <p>e) The programme includes controls to ensure entitlement to use the property (including intellectual property, premises, materials and equipment) required.</p>		
Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> • CCT confirmed that there are no special resources beyond the existing physical and virtual campus facilities of CCT required for the delivery of this programme (programme descriptor (pg. 21, confirmed during the virtual validation event). • CCT has the necessary physical resources in place to deliver a high-quality programme, in both full-time and part-time

		<p>(blended delivery), in order to provide an excellent student experience (Section 8: Physical Resources of the programme descriptor) (pg. 135).</p> <ul style="list-style-type: none"> • Sufficient technical and administrative support is provided for the programme, as evidenced in the programme descriptor (pg. 139) and confirmed during the virtual validation event. • CCT has a five-year plan addressing planned intake (first five years) which includes costs and income over the plan period. • CCT has a clear policy and procedure regarding Intellectual Property (IP) of its programmes, and has ownership or formal legal agreements relating to all materials, equipment and premises (pg. 140 of programme descriptor). • See Criterion 8 feedback which relates to criterion 7 which combined relate to the student experience. <p>Commendation(s)</p> <ul style="list-style-type: none"> • None. <p>Condition(s)</p> <ul style="list-style-type: none"> • None. <p>Recommendation(s)</p> <ul style="list-style-type: none"> • CCT should consider providing access to key software resources and tools through virtualization (cross referenced in Criterion 8, 11).
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Criterion 8. The learning environment is consistent with the needs of the programme’s learners

<p>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.</p> <p>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.</p> <p>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.</p>		
Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> • The programme’s physical, social, cultural and intellectual environment including resources and support systems are

		<p>consistent with the intended programme learning outcomes.</p> <ul style="list-style-type: none"> • Sub-criterion (c) is not applicable as no parts of the programme occur in the workplace (as confirmed in Section 5.6 of the programme descriptor (pg. 62)). • See Criterion 11 for student supports. <p>Commendation(s)</p> <ul style="list-style-type: none"> • None. <p>Condition(s)</p> <ul style="list-style-type: none"> • None. <p>Recommendation(s)</p> <ul style="list-style-type: none"> • CCT should consider providing access to key software resources and tools through virtualization (cross referenced in Criterion 7, 11).
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Criterion 9. There are sound teaching and learning strategies

<p>a) The teaching strategies support achievement of the intended programme/module learning outcomes.</p> <p>b) The programme provides authentic learning opportunities to enable learners to achieve the intended programme learning outcomes.</p> <p>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).</p> <p>d) Learning is monitored/supervised.</p> <p>e) Individualised guidance, support and timely formative feedback is regularly provided to enrolled learners as they progress within the programme.</p>		
Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> • The teaching and learning strategies support the achievement of the intended programme and module learning outcomes by providing authentic and realistic learning opportunities. The following teaching and learning activities are employed in the programme: <ul style="list-style-type: none"> ○ Formal Lectures ○ Case Studies ○ Project Based Learning ○ Problem Based Learning ○ Collaborative Learning ○ Directed Learning ○ Self-directed Learning ○ Industry Guest Lectures

		<ul style="list-style-type: none"> • At a programme level the teaching and learning strategies and their support for the learning outcomes are evidenced in Section 5.5 of the programme descriptor (pg. 59). CCT have provided clear information on teaching and learning strategies for full-time and part-time delivery, including the use of synchronous and asynchronous learning activities. • Module descriptors include teaching and learning strategies, are provided in Section 6: Module Documentation of the programme descriptor (pg. 70). • Learner engagement monitoring strategies are in place for the programme. • Programme learning will be monitored, supervised and assessed in accordance with Section 5: Student-centred teaching, learning and assessment of the CCT Quality manual provides policies and procedures relating to teaching, learning and assessment (https://www.cct.ie/quality-assurance/). • See Criterion 6 for information on the CCT Centre for Teaching and Learning (CTL) <p>Commendation(s)</p> <ul style="list-style-type: none"> • The Panel commend CCT’s ongoing commitment to teaching and learning (and assessment) excellence co-ordinated through the CCT Centre for Teaching and Learning (referenced in Criterion 10 also). The Panel note the best practice being implemented through CCT’s Student Success Initiative. <p>Condition(s)</p> <ul style="list-style-type: none"> • None. <p>Recommendation(s)</p> <ul style="list-style-type: none"> • CCT should include a Moodle VLE implementation of a module(s) design provided using the ADDIE Instructional Design model. This would provide an overview of the types of learning activities, both synchronous and asynchronous, that students would be expected to undertake on the programme (cross referenced in Criterion 10).
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Criterion 10. There are sound assessment strategies

<p>a) All assessment is undertaken consistently with <i>Assessment Guidelines, Conventions and Protocols for Programmes Leading to QQI Awards</i>¹⁵</p> <p>b) The programme's assessment procedures interface effectively with the provider's QQI approved quality assurance procedures.</p> <p>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.¹⁶</p> <p>d) The programme includes formative assessment to support learning.</p> <p>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.¹⁷</p> <p>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.</p> <p>g) There are sound procedures for the moderation of summative assessment results.</p> <p>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.¹⁸</p>		
Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Partially	<ul style="list-style-type: none"> • Programme assessment is conducted in accordance with <i>CCT's Marks and Standards</i> for CCT Programmes Leading to QQI Awards and Teaching, Learning and assessment policies (Section 5: Student-centred teaching, learning and assessment of the CCT Quality manual (https://www.cct.ie/quality-assurance/)). Assessment policies and procedures have been informed by and are aligned with the relevant QQI policies, procedures, guidelines and protocols. • CCT has embedded formative and summative assessment and feedback best practice into the programme. There is a variety of assessment types incorporated into the programme including individual, group, peer and self-assessment. Integrated/cross-modular assessments are also incorporated. (as evidenced in Section 5.9 (pg. 65) and Section 6: Module Documentation (pg. 70)). • CCT's standard policies and procedures for assessment are based on the principles of fairness, consistency, authenticity and transparency and apply to the programme. There is an external examining system in place to ensure that assessments standards are met.

¹⁵ See the section on transitional arrangements.

¹⁶ This assumes the minimum intended programme/module learning outcomes are consistent with the applicable awards standards.

¹⁷ The programme assessment strategy is addressed in the *Assessment Guidelines, Conventions and Protocols for Programmes Leading to QQI Awards*. See the section on transitional arrangements.

¹⁸ If the award is a QQI CAS compound award it is not necessarily sufficient that the learner has achieved all the components specified in the certification requirements unless at least one of those components is a capstone component (i.e. designed to test the compound learning outcomes).

		<ul style="list-style-type: none"> Careful consideration of the issue of learner over-assessment is evident with indicative assessments schedules being provided to students (pg. 66 of programme descriptor). Module assessment strategies are provided in the module descriptors (Section 6: Module Documentation in programme descriptor (pg. 70)). An indicative programme assessment schedule (pg. 66) has been provided as have sample assessments with marking schemes (Appendix 1). <p>Commendation(s)</p> <ul style="list-style-type: none"> The Panel commend CCT's ongoing commitment to teaching and learning (and assessment excellence) co-ordinated through the CCT Centre for Teaching and Learning (referenced in Criterion 9 also). The Panel note the best practice being implemented through CCT's Student Success Initiative. <p>Condition(s)</p> <ul style="list-style-type: none"> The programme development team should revisit all programme modules to clearly show how the minimum intended module learning outcomes (MLOs) are assessed (i.e. identify the module learning outcome(s) (MLOs) measured by assessment components). <p>Recommendation(s)</p> <ul style="list-style-type: none"> CCT should provide further detail on the assessment strategies pertaining to the use of cross-modular/integrated assessment, group assessment (clearly specifying how individuals are assessed as part of the group) and oral examination/verification in the programme documentation. CCT should clarify the use of the generic grade descriptor in the programme. CCT should include a Moodle VLE implementation of a module(s) design provided using the ADDIE Instructional Design model. This would provide an overview of the types of learning activities, both synchronous and asynchronous, that students would be expected to undertake on the programme (cross referenced in Criterion 9).
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Criterion 11. Learners enrolled on the programme are well informed, guided and cared for

<p>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.</p> <p>b) Information is provided about learner supports that are available to learners enrolled on the programme.</p> <p>c) Specific information is provided to learners enrolled on the programme about any programme-specific appeals and complaints procedures.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>g) The programme provides supports for enrolled learners who have special education and training needs.</p> <p>h) The programme makes reasonable accommodations for learners with disabilities¹⁹.</p> <p>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>²⁰ 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.</p> <p>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).</p>		
Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> • CCT provides student-centric 'holistic' supports for all learners, which includes the following (face-to-face and virtual): <ul style="list-style-type: none"> ○ Academic Support including library; ○ Pastoral Support Service; ○ Guidance and Careers Support Service; ○ Attendance Support; ○ Supports for Learners with Additional Needs; ○ Supports for Disabled Learners; ○ Supports for International Learners (in accordance with the QQI Code of Practice for Provision of Programmes of Education and Training to International Learners (2015)); ○ General Student Services: Support for social and sports programmes, Medical insurance provision, Subsidised health service, Subsidised counselling service, General international student registration support, Provision of cultural learning and activities, Provision of information with regard to student safety and security, Accommodation service.

¹⁹ For more information on making reasonable accommodations see www.AHEAD.ie and QQI's Policies, Actions and Procedures for Access, Transfer and Progression for Learners (QQI, restated 2015).

²⁰ See Code of Practice for Provision of Programmes to International Students (QQI, 2015)

		<ul style="list-style-type: none"> • There are arrangements to ensure that learners enrolled on the programme are supervised and individualised support and due care is targeted at those who require it. • CCT’s quality system ensures that learners are informed about the college, its organisation, and the various elements of the programme of study (including timetables, assessments requirements, policies and procedures, etc.). Information relating to CCT and the programme is made available to prospective learners using CCT’s website (https://www.cct.ie/) and brochure material. Information is provided to registered/enrolled learners in the form of a Programme Handbook. • The Panel note CCT’s Student Success Initiative which identifies at risk students by monitoring student performance, attendance, engagement with the library and support services together with student engagement and interaction with the Moodle Virtual Learning Environment (VLE) (evidenced in Section 5.8 of the programme descriptor (pg. 63) and confirmed during the virtual validation event). • Section 9: Learning Resource and Student Support of the CCT Quality manual provides policies and procedures relating to learning resources and student supports (https://www.cct.ie/quality-assurance/). <p>Commendation(s)</p> <ul style="list-style-type: none"> • None. <p>Condition(s)</p> <ul style="list-style-type: none"> • None. <p>Recommendation(s)</p> <ul style="list-style-type: none"> • That the need to be numerate is clearly articulated to prospective students. • CCT should consider providing access to key software resources and tools through virtualization (cross referenced in Criterion 7, 8).
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Criterion 12. The programme is well managed

<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>e) Quality assurance²¹ is intrinsic to the programme’s maintenance arrangements and addresses all aspects highlighted by the validation criteria.</p> <p>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.</p> <p>g) The programme operation and management arrangements are coherently documented and suitable.</p> <p>h) There are sound procedures for interface with QQI certification.</p>		
Programme	Satisfactory? (yes, no, partially)	Comment
Higher Diploma in Science in Computing	Yes	<ul style="list-style-type: none"> • CCT has a governance structure that facilitates the effective provide of higher education programmes at NFQ Levels 6 to 9 on the National Framework of Qualifications (NFQ). • It is clear that CCT has an ongoing commitment to providing quality higher education, and continuous improvement and enhancement are embedded in the culture of the organisation. • CCT’s quality system is informed by and aligned with the European Standards and Guidelines (https://www.engq.eu/esg-standards-and-guidelines-for-quality-assurance-in-the-european-higher-education-area/). • CCT has a comprehensive, well-documented quality assurance and enhancement (QAE) system in place (https://www.cct.ie/quality-assurance/) and the programme interfaces effectively with the quality system. The manual contains the following: <ul style="list-style-type: none"> ○ Section 3: Policy for Quality Assurance ○ Section 4: Approval, Design, Monitoring and Review of Programmes ○ Section 5: Student-centred teaching, learning and assessment

²¹ See also QQI’s Policy on Monitoring (QQI, 2014)

		<ul style="list-style-type: none"> ○ Section 6: Admissions, Access, Transfer, Progression Recognition and Certification ○ Section 7: Protection of Enrolled Learners – Public Information ○ Section 8: Quality Assurance of Teaching Staff and Human Resources ○ Section 9: Learning Resource and Student Support ○ Section 10: Information Management ○ Section 11: Public Information ○ Section 12: Ongoing Monitoring and Review <ul style="list-style-type: none"> ● The programme descriptor provides the criteria for the selection of staff to teach the modules on the programme (evidenced in Section 6: Module Documentation (pg. 70)). See Criterion 6 also. ● CCT has confirmed, both in the programme descriptor and during the virtual validation event that they are committed to providing all required facilities and resources in order to run the programme. CCT has mechanisms and criteria in place for determining the adequacy of existing facilities and resources and for identifying and procuring additional facilities and resources. ● CCT have quality assurance arrangements in place relating to the operation and management of programmes as evidenced in Section 9: Programme Management (pg. 142) of the programme descriptor (Programme Boards, Examination Boards, Academic Council, etc.). ● QQI has procedures agreed with QQI in relation to the transfer of assessment results, endorsing learner achievement of learning outcomes and facilitating the production of parchments by QQI to underpin certification.
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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;
X	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.

Reason(s) for the Overall Recommendation

1. The Panel are satisfied that the programme presented sufficiently addressed the core policies and criteria (criterion 1 to 12 inclusive) for the validation by QQI of programmes of education and training, subject to the satisfactory completion of the identified condition(s).

Commendation(s)

The Panel commend the following:

1. CCT for the active and robust participation of the programme development team during the virtual programme validation event.
2. CCT for enhancing their programme provision and delivery modes while continuing to meet the ongoing needs of industry. The Panel note that the enhancements are incremental, meticulously considered and informed by best practice.
3. CCT's ongoing commitment to teaching and learning (and assessment) excellence co-ordinated through the CCT Centre for Teaching and Learning. The Panel note the best practice being implemented through CCT's Student Success Initiative.
4. The student-centred approach to the development of the programme adopted by the programme development team.
5. CCT's focus on digital innovation, student partnership and academic integrity, particularly from 2020/2021 onwards.
6. The range of student support mechanisms, including virtual supports, that are tailored to the student needs on the programme (including the Student Mentoring Academy).
7. The quality of the programme documentation provided.

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

1. The programme development team should revisit all programme modules to clearly show how the minimum intended module learning outcomes (MLOs) are assessed (i.e. identify the module learning outcomes (MLOs) measured by assessment components) (Criterion 10).

Timescale: On soon as possible.

Summary of Recommendation(s) to the Provider

1. That the need to be numerate is clearly articulated to prospective students (Criterion 11).
2. The panel indicated that all applicants for the programme can be interviewed. CCT should include the interview assessment criteria as appropriate (Criterion 4).
3. CCT should consider providing access to key software resources and tools through virtualization (Criteria 7, 8 and 11).
4. CCT should provide further detail on the assessment strategies pertaining to the use of cross-modular/integrated assessment, group assessment (clearly specifying how individuals are assessed as part of the group) and oral examination/verification in the programme documentation (Criterion 10).
5. CCT should clarify the use of the generic grade descriptor in the programme.
6. CCT should include a Moodle VLE implementation of a module(s) design provided using the ADDIE Instructional Design model. This would provide an overview of the types of learning activities, both synchronous and asynchronous, that students would be expected to undertake on the programme. (Criterion 9).

Embedded Programme:

Select one	
N/A	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;
N/A	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);
N/A	Not satisfactory.

Reasons for the Overall Recommendation

1. Not applicable.

Commendations

1. Not applicable.

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

1. Not applicable.

Summary of Recommendation(s) to the Provider

7. Not applicable.

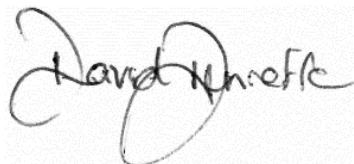
Declarations of Evaluators' Interests

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

Panel chairperson:

Date: 19th October 2022

Signed:

A handwritten signature in black ink, appearing to read 'David Denieffe', written over a light grey grid background.

David Denieffe

3.2 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.

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

Part 4. Proposed Programme Schedules

Name of Provider:		CCT College Dublin												
Programme Title		Higher Diploma in Science in Computing												
Award Title		Higher Diploma in Science in Computing												
Stage Exit Award Title		N/A												
Modes of Delivery (FT/PT):		Full-time												
Teaching and learning modalities		Lectures, group sessions, labs, tutorials and supervision												
Award Class	Award NFQ level	Award EQF Level	Stage	Stage NFQ Level²	Stage EQF Level	Stage Credit (ECTS)					Date Effective	ISCED Subject code		
Major	8	6	Award	8	6	60					September 2022	0611		
Module Title (Up to 70 characters including spaces)	Semester no where applicable. (Semester 1 or Semester2)	Module		Credit Number	Total Student Effort (hours)						Allocation Of Marks			
		Status⁷	NFQ Level where specified	Credit Units	Total Hours	Class (or equiv) Contact Hours	Directed e-learning	Learning Independent	Hours of independent learning effort	Work-based learning effort	C.A. %	Supervised Project %	Proctored practical demonstration	Proctored written exam %
				ECTS										
M1. Introduction to Computing	1	M	7	5	125	30	0	95	0	100	0	0	0	
M2. Introduction to Programming	1	M	7	10	250	60	0	190	0	100	0	0	0	
M3. Maths for Computing	1	M	7	5	125	30	0	95	0	100	0	0	0	
M4. Operating Systems and Architecture	1	M	8	5	125	30	0	95	0	100	0	0	0	
M5. Databases	1	M	8	5	125	30	0	95	0	100	0	0	0	
M6. Web Development	2	M	8	5	123	30	0	95	0	100	0	0	0	
M7. Software Development Fundamentals	2	M	8	5	125	30	0	95	0	100	0	0	0	
M8. Algorithms and Constructs	2	M	8	5	125	30	0	95	0	100	0	0	0	
M9. Networking and Virtualisation	2	M	8	5	125	30	0	95	0	100	0	0	0	
M10. Project Skills and Professionalism	2	M	8	10	250	60	0	190	0	100	0	0	0	
Special Regulations (Up to 280 characters)														

⁷ Mandatory (m) or elective (E)

Name of Provider:		CCT College Dublin												
Programme Title		Higher Diploma in Science in Computing												
Award Title		Higher Diploma in Science in Computing												
Stage Exit Award Title		N/A												
Modes of Delivery (FT/PT):		Part-time												
Teaching and learning modalities		Asynchronous online activities / pre-recorded lectures, group sessions including synchronous online, labs / virtual labs tutorials and supervision												
Award Class	Award NFQ level	Award EQF Level	Stage	Stage NFQ Level²	Stage EQF Level	Stage Credit (ECTS)	Date Effective	ISCED Subject code						
Major	8	6	Award	8	6	60	September 2022	0611						
Module Title (Up to 70 characters including spaces)		Semester no where applicable. (Semester 1 or Semester2)	Module		Credit Number	Total Student Effort (hours)				Allocation Of Marks				
			Status⁸	NFQ Level where specified	Credit Units	Total Hours	Class (or equiv) Contact Hours	Directed e-learning	Independent Learning	Hours of Independent learning effort	Work-based learning effort	C.A. %	Supervised Project %	Proctored practical demonstration
ECTS														
M1. Introduction to Computing		1	M	7	5	125	18	12	95	0	100	0	0	0
M2. Introduction to Programming		1	M	7	10	250	36	24	190	0	100	0	0	0
M3. Maths for Computing		1	M	7	5	125	18	12	95	0	100	0	0	0
M4. Operating Systems and Architecture		2	M	8	5	125	18	12	95	0	100	0	0	0
M5. Databases		1	M	8	5	125	18	12	95	0	100	0	0	0
M6. Web Development		2	M	8	5	123	18	12	95	0	100	0	0	0
M7. Software Development Fundamentals		2	M	8	5	125	18	12	95	0	100	0	0	0
M8. Algorithms and Constructs		2	M	8	5	125	18	12	95	0	100	0	0	0
M9. Networking and Virtualisation		3	M	8	5	125	18	12	95	0	100	0	0	0
M10. Project Skills and Professionalism		3	M	8	10	250	36	24	190	0	100	0	0	0
Special Regulations (Up to 280 characters)														

Appendix 1:

Virtual Site Visit Agenda (13th September 2022)

Note: Programme validation event took place virtually using web conferencing software (Microsoft Teams)



QQI

Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

QQI Validation

Panel meetings with

CCT College

for the evaluation of

Higher Diploma in Science in Computing (60 ECTS)

on

13th September 2022

Panel Members:

Name	Role	Affiliation
David Denieffe	Chair	VP for Academic Affairs & Registrar, South East TU
Brendan Ryder	Report writer and subject expert	Head of Academic Planning and QA, Dundalk Institute of Technology
Sarah Jane Delaney	Subject expert	Professor of Inclusive Computer Science, Technological University Dublin
Amrita Giri	Learner Representative	Computing and Software Development, DKIT
Pat Moriarty	Industry Representative	Senior Technologist ICT & Software, Enterprise Ireland

AGENDA

Please Note: The agenda is subject to change. While the main criteria are listed for each session, other criteria may be discussed.

13th September 2022 Programme Validation via Microsoft Teams

08.30 - 09.15 Private meeting of panel

09.15-10.15 Session 1

Attendees from provider: *Neil Gallagher, Karl Gallagher, Naomi Jackson, Denis Cummins*

Provider presentation (10 mins)

Main criteria to be discussed:

- 1 – the provider is eligible to apply for validation of the programme;
- 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);
- 6 – there are sufficient qualified and capable programme staff available to implement the programme as planned;
- 7 – there are sufficient physical resources to implement the programme as planned.

10.15 –11.30 Break

11.30 –12.15 Session 2

Attendees from provider: *Karl Gallagher, Naomi Jackson, Denis Cummins, Ger O’Callaghan, Amanda Russell, Kathleen Embleton, Debora Zorzi, Marie O’Neill, Ken Healy*

Main criteria to be discussed include:

- 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);
- 4 – the programme’s access, transfer and progression arrangements are satisfactory.

With reference to:

- 2 – the programme objectives and outcomes are clear and consistent with the QQI awards sought.

12.15– 12:45 Session 3

Attendees from provider: *Karl Gallagher, Naomi Jackson, Denis Cummins, Amanda Russell, Marie O’Neill, Ken Healy, all teaching faculty*

Main criteria to be discussed:

- 11 – learners enrolled on the programme are well informed, guided and cared for;
 - 8 - the learning environment is consistent with the needs of the programme’s learners;
 - 12 – the programme is well managed.
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12.45 – 13.30 Session 4

Attendees from provider: *Karl Gallagher, Naomi Jackson, Denis Cummins, Amanda Russell, Marie O’Neill, Ken Healy, all teaching faculty*

Main criteria to be discussed include:

- 2 - the programme objectives and outcomes are clear and consistent with the QQI awards sought;
 - 9 – there are sound teaching and learning strategies;
 - 10 – there are sound assessment strategies.
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13.30 – 14.00 Lunch

14.00 – 15.15 Session 5

Attendees from provider: *Karl Gallagher, Naomi Jackson, Denis Cummins, Amanda Russell, Marie O’Neill, Ken Healy, all teaching faculty*

Main criteria to be discussed include:

- 5 – the programme’s written curriculum is well structured and fit-for-purpose;

With reference to:

- 2 - the programme objectives and outcomes are clear and consistent with the QQI awards sought;
 - 6 – there are sufficient qualified and capable programme staff available to implement the programme as planned;
 - 7 – there are sufficient physical resources to implement the programme as planned.
 - 8 – the learning environment is consistent with the needs of the programme’s learners;
 - 9 – there are sound teaching and learning strategies;
 - 10 – there are sound assessment strategies.
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15.15 – 15.30 Private meeting of panel

15.30 Preliminary oral feedback to CCT College

15:40 Meeting concludes

CCT Attendees

Name	Role
Neil Gallagher	College President
Karl Gallagher	Dean for Admin & Finance
Naomi Jackson	Dean of Academic Affairs
Denis Cummins	Dean of Faculty
Ken Healy	Programme Leader / Ed Tech Manager
Marie O'Neill	Head of Enhancement and Head of CTL
Ger O'Callaghan	Head of Admissions
Kathleen Embleton	Head of Student Services
Amanda Russell	QA Lead
Debora Zorzi	College Librarian
Dermot Glanville	Faculty Coordinator (ICT)
Muhammad Iqbal	Teaching Faculty
Aldana Louzán Grandi	Teaching Faculty
Michael Weiss	Teaching Faculty
Mikhail Timofeev	Teaching Faculty
David McQuaid	Teaching Faculty
Sam Weiss	Teaching Faculty (observer)

Appendix 2: Programme Validation Documentation

Provided Pre-Site Visit

Main programme validation document (<i>Programme Descriptor HDip Computing Revised.pdf</i>)
Appendix 1-Sample Assessments and Grade Descriptor (<i>Appendix 1 - Sample Assessments and Grade Descriptor Password.pdf</i>).
Appendix 2-Five-year Forecast for Projected Budgets of Income and Expenditure-(Appendix 2 HDIP in Comp Bus Plan Password.pdf).
Programme Schedule (<i>Programme Schedule Report.pdf</i>)
Provider Self-Evaluation against Criteria for Validation conducted as part of programme development (<i>Independent Evaluation Template - HDip Computing May 2022 Password.pdf</i>).
CCT's Quality Assurance Handbook: https://www.cct.ie/quality-assurance/
The Computing and Science award standards which the provider used in the development of the programme.
QQI Policies and criteria for the validation of programmes of education and training (<i>qp-17-policies-and-criteria-for-the-validation-of-programmes-of-education-and-training.pdf</i>).
QQI Policy and Criteria for Making Awards (<i>qp-11-policy-and-criteria-for-making-awards.pdf</i>).
QQI Assessment and Standards Revised 2013 (<i>assessment_and_standards-revised-2013.pdf</i>).
Roles Responsibilities and Code of Conduct for Reviewers and Evaluators – guidance and code of practice for panel members.
Validation Report template
Initial Comments Report (<i>Initial Comments Form – Validation.doc</i>).

Provided During the Site Visit

Presentation from programme context session (CCT Intro Presentation HDip for panel visit 13.09.22.ppt).
