

**Quality Enhancement Plan**  
**School of Computer Science and Information Technology**  
**February 2025**

FOR COMPLETION BY QEU	
Date of Peer Review visit: 26 <sup>th</sup> – 28 <sup>th</sup> February 2019	Head of Unit: Professor Dirk Pesch
Link to Panel Report published on QEU website: <a href="https://www.ucc.ie/en/media/support/qualityenhancementunit/reports/sefs/CSIT_Panel_Report_QEC.pdf">https://www.ucc.ie/en/media/support/qualityenhancementunit/reports/sefs/CSIT_Panel_Report_QEC.pdf</a>	Date QEP considered by Quality Enhancement Committee: 15 <sup>th</sup> May 2025

The table below provides an overview of the recommendations of the Quality Review Panel, who conducted a quality review of the School of Computer Science and Information Technology. Panel recommendations are grouped under key headings in the table below. The table further includes the School's response and planned actions, as well as an indication of responsibilities, implications for resources, implementation date, and a summary of any progress that has been achieved thus far.

Item N <sup>o</sup>	Panel Recommendations	School Response and Actions Planned <sup>1</sup>	Responsibility for Action <sup>2</sup>	Resource Implications <sup>3</sup>	Implementation Date <sup>4</sup>	Progress Achieved	2025 update
<b>Strategy</b> <b>The Panel recommends that the School:</b>							
1	Responds more positively/ambitiously in its strategic targets,	The school firmly believe that there is clear evidence we are	Head of School (HOS); Heads of	Ref 1: CSIT will have a deficit of 70 research spaces	Ref 1: Commenced Sept. 2019.	Ref 1: First intake of PhD	

<sup>1</sup> This column includes the response received to the recommendations. Please feel free to update or add to this section if required.

<sup>2</sup> E.g. Head of School, School Manager, all staff, specific committees etc

<sup>3</sup> Resources – the financial or human resources required to implement the recommendation

<sup>4</sup> Interim milestone dates can be included here

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	taking account of the national and regional demand for more computer science graduates, and strong student demand at graduate level.	<p>already responding positively and ambitiously to our strategic targets, and we note the substantial ongoing growth in our student numbers in recent years which was detailed in our SER. Nonetheless we wish to highlight the following points:</p> <ol style="list-style-type: none"> <li>1. The school plans to increase PhD numbers by 50 (over next four years) based on receipt of SFI awards for two Centres for Research Training (CRTs), Confirm and Phase 2 Centre awards for, the SFI Research Centres Insight, Lero and CONNECT.</li> <li>2. We will explore opportunities to scale the number of students in</li> </ol>	CRTS and SFI research centres.	<p>over the next four years based on current research grant awards.</p> <p>Ref 2: The requirement for lecturing staff to cater for increased numbers.</p> <p>Ref 3: As numbers are increasing a formal tutoring /demonstrating framework is essential to maintain and enhance student experience. This requires dedicated staff to manage and oversee a panel of part-time tutors/demonstrators. Initial cost for one person - salary scale €48,051-57,252 PA.</p> <p>Ref 3: Growth is constrained by availability of laboratory and</p>	<p>Ref 2: Ongoing. Implementation in 2020 if we proceed and get approval.</p> <p>Ref 3: Ongoing. Student numbers will continue to grow over next 2 years.</p> <p>Ref 4: Planned first intake in 2021/22, subject to agreement, approval and accreditation.</p>	<p>students completed.</p> <p>Ref 2: Initial discussions at school staff meeting.</p> <p>Ref 3: Second intake to both degrees in Sept 2019.</p> <p>Ref 4: Meetings with UCC School of Education; agreed degree structure and learning outcomes.</p>	<p>1 PhD numbers 106 - ↑ 70% compared to 2020.</p> <p>2. Not pursued after analysis.</p>

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		<p>conversion courses funded under the Human Capital Initiative (HCI).</p> <p>3. In response to national and regional demands for more UG students, the school has recently introduced <i>two</i> new UG programmes: BSc in Data Science &amp; Analytics and BA Psychology &amp; Computing.</p> <p>4. The school is exploring the introduction of an undergraduate degree to cater for teachers of computer science at secondary school level.</p> <p>All of these initiatives explicitly support the actions specified in the school's strategic plan.</p>		<p>lecture theatre of suitable size.</p> <p>Ref 4: Additional lecturing staff and tutors.</p>			<p>3. UG FTE481 - ↑ 17% compared to 2020.</p> <p>4. BSc Education Maths and CS specialisation.</p>

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2	Harnesses existing external expertise and goodwill by establishing a School Advisory Committee/Industry Board comprising of external stakeholders and alumni to advise on industry trends, strategic direction and programme planning.	We will establish a School Advisory Committee consisting of industry and other external stakeholders to advise on alignment with the long-term needs of industry.	HOS, Professors.	None.	During 2020.		Not implemented, will be implemented in 2025 under new HOS.
3	Undertakes a review of its module offerings and delivery to ensure the most efficient use of resources, including expertise and laboratories; ensure that students have familiarity with the latest industry-standard technologies and opportunities to develop their soft skills.	<ol style="list-style-type: none"> <li>Institute a systematic review of module offerings focused on relevance, coherence and seeking greater efficiencies.</li> <li>Conduct an audit of laboratory and demonstrating needs to optimise effectiveness.</li> </ol>	Ref 1: CSIT Teaching Committee. Ref 2: CSIT Systems Support with input from Academic Administrator. Ref 3: CSIT Systems Support with input from Teaching Committee.	Ref 1: None. Ref 2: May require special budget allocation to upgrade or re-purpose labs. Ref 3: Will require special budget allocation to purchase identified gaps in computing hardware or software. The school is already aware of the pressing need to purchase (i) Virtual	Ref 1: Review to be completed in Q2 2020. Ref 2: Audit to be completed Q2 2020. Ref 3: Review to be completed in Q1 2020.		<ol style="list-style-type: none"> <li>Delayed due to Covid – undertaken in April 2023. The review resulted in a reduction of 65 credits.</li> <li>Continuous optimisation, labs have been updated until this year – resources removed now</li> </ol>

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		3. Review requirements for industry standard technologies and skills to ensure that our labs have all necessary software and hardware.		Reality devices and (ii) high-end workstations (approx. 70K) plus software for data analytics / machine learning (approx. 15K pa).			dependant on SEFS.  3. Conducted annually by systems admin manager in consultation with academic staff.
4	Develops an internationalization strategy including expanding the recruitment and support of students at undergraduate level and for inward and outward staff mobility.	<p>The school played a key role in developing UCC's earliest partnerships with Chinese universities and boasts a large number of Non-EU students at graduate level. We plan the following actions:</p> <ol style="list-style-type: none"> <li>1. Provide input to the SEFS internationalisation strategy.</li> <li>2. Develop a framework to determine suitable international partner institutions.</li> </ol>	<p>Ref 1 + 2: CSIT and SEFS Internationalisation Committees.</p> <p>Ref 3: School manager plus PR committee.</p> <p>Ref 4: School's Internationalisation Committee.</p>	<p>Ref 3: Special travel budget allocation to deliver international partnerships and additional UG students – estimated at €5,000 - €10,000 PA.</p> <p>Ref 3: Recruitment SEA to support recruitment activities (international and national) - €30,791-43,534 PA.</p>	<p>Ref 1: Q1 2020 – SEFS strategy to be launched Q1 2020.</p> <p>Ref 2: Q2 2020.</p> <p>Ref 3: Ongoing</p> <p>Ref 4: Q1 2020 and ongoing.</p>		<ol style="list-style-type: none"> <li>1. Providing input to SEFS, SEFS plan to appoint dean of internationalisation who will coordinate for the college.</li> <li>2. HNU Master and Doctoral Collaborative Programmes Agreement – 2023</li> </ol>

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		3. Work with the International Office and UCC Academy to increase non-EU UG students, ideally filling the relevant quota on each degree every year. 4. Raise awareness that the school continues to be open to opportunities for inward and outward staff mobility.					3. International student FTEs PGT: 125 Non-EU - ↑ 37% compared to 2020 PGR: 77 Non-EU ↑ 144% compared to 2020 UG: 39 Non-EU - ↑ 82% compared to 2020 4. Ongoing support for staff to take up Erasmus, sabbatical opportunities – Erasmus - one member going out in 2025. Sabbatical – four staff member availed of sabbatical in last 5 years.
5	Makes sure that all of the activities are focused on achieving the strategic	The school's activities are aligned to the current strategic plan; we will continue to monitor and reviewed	HOS.		Ongoing monitoring.		The school aligns with the University strategic plan focused on its disciplinary strengths and ambitions. For

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	objectives of the School.	considering the SEFS strategic plan and future CSIT plans.					example, a member of school staff is director of UCC Futures Artificial Intelligence and Data Analytics.
<b>Reputation and rankings</b> <b>The Panel recommends that the School:</b>							
6	Exploits the School's improved international ranking (QS 2019) and proactively develops its international reputation.	1. CSIT ranking information has been communicated to staff. 2. Ranking information to be updated on PR materials. 3. Research web pages being updated to highlight school success. 4. As part of the schools strategic plan we will encourage staff to seek positions of international leadership the benefit the schools'	Ref 1, 2 + 3: HOS, school manager, PR committee, Internationalisation committee.	None.	Ref 1: Completed. Ref 2+3: Ongoing.	Ref 4: Professors from the school currently have international leadership positions e.g. President of the European Artificial Intelligence Association, Vice Chair of the European Commission High-Level Expert Group on AI.  Ref 4: Encouraging staff via the	1. Done annually.  2. To be done  3. Monday morning news circulated widely, including website highlighting success stories.  4. Many staff have international leadership positions e.g. Professor Barry

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		international reputation.				PRDS process to seek international leadership roles.	O'Sullivan, vice Chair EU high level expert group on AI. Academics leading Chair of international conference, Prof. Dirk Pesch, Prof. Cormac Sreenan
7	Capitalises on the School's strong reputation within the College of SEFS and within the University to ensure that the School is adequately resourced in line with its ambition.	<ol style="list-style-type: none"> <li>1. Work with Head of College (HOC) to ensure school staffing plans are delivered, including the computer language teacher highlighted in the peer review report.</li> <li>2. Work with HOC to ensure all staff retirements are replaced.</li> <li>3. Work with HOC to ensure the additional research space is delivered and teaching space</li> </ol>	Ref 1, 2, 3: HOS, HOC.	<p>Ref 1: Two additional posts: Computer Language teacher and SEA (recruitment).</p> <p>Ref 2: All retired staff are replaced at current grade.</p> <p>Ref 3: 70 additional research spaces required over next 4 years.</p>	<p>Ref 1: In post for 2020/21.</p> <p>Ref 2: To be include in SEFS staffing plans each year, starting 2020/21.</p> <p>Ref 3: Submission to UCC Space Sub-Committee in Q3 2019.</p>	<p>Ref 1,2: Submitted CSIT staffing plan for 19/20 and 20/21 to HOC.</p> <p>Ref 3: Submitted Space Strategy for school to UCC Space Sub-Committee.</p>	<ol style="list-style-type: none"> <li>1. Language teacher not delivered due to limited resources.</li> <li>2. All staff have been replaced at grade of incumbent. Strategic work force development plan underway.</li> <li>3. Ongoing review – working patterns have changed since Covid which has lessened the pressure on</li> </ol>



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		upgrades are funded.					research space. The CUC space has been re-purposed for a Visualization research lab. Up until 2025, the maintained labs to the most modern standards. With the removal of school funds this will be more challenging going forward.
8	Exploits connections with graduates and engages with the Development and Alumni Relations Office to increase philanthropic funding for strategic staffing and laboratories.	<ol style="list-style-type: none"> <li>1. Work with Cal Healy to develop a strategy for philanthropy and alumni relations.</li> <li>2. Exploit existing industry / alumni contacts</li> <li>3. Capitalize on relationship with IT@Cork.</li> </ol>	Ref 1: HOS and school manager.  Refs 2, 3: HOS and academic staff.		Ref 1, 2, 3 - Q4 2020.		<ol style="list-style-type: none"> <li>1. Working with Saba Loftus, SEFS Alumni rep on many initiatives including seeking philanthropic funding for senior staff.</li> <li>2. Business Development manager appointed part-time.</li> <li>3. Business development manager plus</li> </ol>

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							IT@Cork (now Tech Industry Alliance) hosted a joint event in Jan 2025.
9	In the context of its highly successful research centres, works to ensure integration of the School and the centres, while ensuring that the School's ethos of collegiality and inclusiveness is maintained and protected.	<p>The school's research centres are already well integrated within the school. The academic staff in research centres teach on all academic programmes. The PhD and post-doc students funded by research centres actively support teaching in the school and support other initiatives such as MPT, the ACM Student Chapter, Intercollegiate Programming Competition, amongst many others.</p> <p>1. Develop a school seminar series to replace individual research centre seminars.</p>	<p>Ref 1: CSIT Research Committee.</p> <p>Ref 2: HOS, Centre Directors / Pls.</p> <p>Ref 3: HOS, school manager.</p> <p>Ref 4: Research Centre Directors.</p> <p>Ref 5: HOS, Teaching Committee</p>		<p>Ref 1: Q3 2019.</p> <p>Ref 2, 3, 4: Ongoing.</p> <p>Ref 5: 2021/22 academic year.</p>	<p>Ref 1: Up and running.</p> <p>Ref 2: Email sent to all CSIT staff and research students.</p> <p>Ref 5: Working group established and liaising with office of the Deputy President.</p>	<p>1. School seminar series delivers x 2 per month.</p> <p>2. Staff reminded annually.</p>

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		2. Highlight the importance of including the school affiliation on publications. 3. Include research staff in school activities as appropriate e.g. academic activities, representation in school structures, at social gatherings etc. 4. Enhance UG student opportunities to engage in research. 5. Progress proposals to cater for gifted students e.g. by developing flexible pathways and links to research centres.					3 Research staff are invited to school meetings and monthly coffee morning.  4 UG internships are offered by the research centres.  5 Investigated but decided not to proceed.
<b>Staff</b> <b>The Panel recommends that the School:</b>							

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10	Develops a strategy for addressing the shortage of high-quality tutors and demonstrators, including harnessing the enthusiasm of PhDs and postdocs to support labs, and explore the possibility of teaching only contracts.	<ol style="list-style-type: none"> <li>1. Employ a computer language teacher to support and coordinate tutorial and lab-based activities including training and overseeing demonstrators.</li> <li>2. PhDs and Post-docs in the school already contribute to teaching and the support of laboratories. We will continue to incentivise PhD students to become demonstrators.</li> </ol>	Ref 1: HOS, HOC.	Ref 1: salary scale €48,051-57,252. Ref 2: annual cost of demonstrators - €40,000 (currently funded under ITIF retention fund, which may not be sustained).	Ref 1: In-post for 2020/22. Ref 2: Ongoing.	Ref 1: Submitted CSIT staffing plan for 19/20 and 20/21 to HOC.	<ol style="list-style-type: none"> <li>1. Computer language teacher not employed due to insufficient financial resources.</li> <li>2. More PhD students acting as demonstrators. Policy developed to underpin the supervision of student projects by research staff.</li> </ol>
11	Creates and implements a staff development plan which enables staff to proactively advance their own career objectives, aligned with the strategic	<ol style="list-style-type: none"> <li>1. School will undertake PDRS interviews with all staff during the 2020 cycle.</li> <li>2. Development plans for new staff are ongoing including the assignment of a</li> </ol>	Ref 1: HOS and appropriate line managers. Ref 3: HOS.	Ref 3: Would require the school to set aside funds to support a PhD scholarship.	Ref 1: by Q3 2020. Refs 2, 3: Ongoing.	Ref 1: HR gave PDRS presentation to CSIT staff. Ref1: HOS presented the strategic context for PDRS at	<ol style="list-style-type: none"> <li>1. TBC, interrupted due to Covid and change of HOS.</li> <li>2. Formal mechanisms developed in the school to support staff applying for promotion – 5</li> </ol>



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	direction of the University.	mentor from amongst experienced staff. 3. The school funds a PhD scholarship (currently 1) and provides travel funds to present at conferences. Investigating opportunities to fund another PhD scholarship.				school meeting.	successful to date. Formal mentorship scheme being launched. 3. The school had funded three school scholarships to date.
12	Puts in place a gender action plan to work towards an Athena Swan award.	1. Appoint an Athena Swan Champion. 2. CSIT will apply for Athena Swan accreditation, target Q3 2022. 3. An application has been submitted for a SALI professorship.	Ref 1: P. Palmieri appointed as champion /represents CSIT on SEFS AS committee.  Ref 2: Committee to be appointed by HOS.  Ref 3: HOS, HOC.	Ref 2: Preparation for an Athena SWAN award will require the provision of additional administrative resources to the school on a fixed-term basis.	Ref 2: Target submission Q3 – 2022.	Ref 1: Champion appointed.  Ref 3: CSIT submitted application for SALI professorship 2019. We recently learned to our great surprise and disappointment that our proposal has not been selected to be	1. Champion appointed.  2. Bronze award achieved in 2023. 3. SALI professorship scheme not continued.

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						put forward as part of the UCC submission.	
<b>Teaching, Learning, Assessment and Student Experience</b> <b>The Panel recommends that the School</b>							
13	Takes steps to ensure communication, coordination and coherence of the joint programmes from a student perspective.	1. Coordination and coherence of the joint programmes from a student perspective will be progressed via the boards of studies for the school's four interdisciplinary degrees. 2. Appoint student mentors for 1 <sup>st</sup> years. 3. Ensure student representatives are invited to meet staff -student liaison school representative.	Ref 1+2: Chair of relevant board of studies.  Ref 3: CSIT staff student committee chair.		2019-2020 academic year.	Ref 1: Completed. Ref 2: Completed. Ref 3: Completed.	1. Boards of studies appointed for all joint degrees.  2. Mentor appointed for international UG students and female students. Year heads appointed for all four years of UG degree.  3. School appoints a student liaison school representative each year.

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14	Extends the opportunities for group-work throughout the degree programmes to develop students' transversal skills – this addresses student interests and motivation, and employers' expectations.	<p>All of the schools' UG degrees include teamwork but we will explore opportunities to extend further where is it possible and appropriate to do so.</p> <ol style="list-style-type: none"> <li>1. Enhance 3<sup>rd</sup> year software modules to incorporate more team-based activities.</li> <li>2. Review UG curriculum to identify further opportunities for group work in year 1 and 2.</li> </ol>	<p>Ref 1: 3<sup>rd</sup> year lecturers.</p> <p>Ref 2: Teaching committee.</p>		<p>Ref 1: Academic year 2019-20 onwards.</p> <p>Ref 2: 2020/21 onwards.</p>	<p>Ref 1: Mini team-based project included to intensify teamwork.</p>	<ol style="list-style-type: none"> <li>1. CS3500 – group activities included.</li> <li>CS3305 – team software project.</li> <li>2. To be reviewed to evaluate opportunities.</li> </ol>
15	Reviews the approach to assessment and its weightings and ensures timely feedback to students.	<ol style="list-style-type: none"> <li>1. Audit assessments load and weightings for UG and taught PG programmes.</li> <li>2. Ensure that staff are aware of UCC policy on the timeliness and nature of assignment feedback.</li> </ol>	<p>Ref 1: Teaching committee and course co-ordinators.</p> <p>Ref 2: Academic administrator.</p>		In advance of 2020-21 academic year.		<ol style="list-style-type: none"> <li>1. Delayed due to Covid, module review completed in 2023; this will be done in 2025.</li> <li>2. Done annually.</li> </ol>

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16	Ensures that all staff of the School move exclusively to the University's new VLE, Canvas and other standard University systems.	1. Decision taken at school meeting to adopt Canvas as the only VLE to be used by school staff.	Ref 1: HOS.		Ref 1: Starting from 2019-20 academic year.	Ref 1: Completed.	1. Canvas is the only VLE used in UCC
17	Develops its graduate school, particularly in the light of imminent recruitment of greater numbers of PhD students, to enhance the student experience and ensure full utilisation of wider University supports. Link with the Dean of Graduate Studies to ensure that the PhD experience is in line with University policy.	1. Review graduate education system and processes to ensure student experience is comparable for all students and in line with UCC policies. 2. Identify any graduate school functions that are not being fulfilled by the school's graduate studies committee. 3. Investigate the opportunities for PhD level modules.	Ref 1: Graduate studies committee / CRT Directors.  Ref 2, 3: Graduate studies committee.		In time for 2020-21 academic year.		1. Graduate committee and PhD programme director appointed annually.  2. Need clarification.  3. Three PhD level modules developed by the CRTS.



For completion by Unit		
<b>Head of School/Unit:</b> <b>Prof. Dirk Pesch</b>	<b>Signature:</b> 	<b>Date:</b> <b>1 May 2025</b>
<b>Head of College/Functional Area:</b>	<b>Signature:</b> 	<b>Date:</b> <b>6<sup>th</sup> May 2025</b>