Independent Panel Report on a Provider's Programme Review

Provider	Dublin Business School ("DBS")
Programme(s) Reviewed	**Principal Programme** Bachelor of Science (Honours) in Computing **Embedded Programme (Exit Award)** Bachelor of Science in Computing

Independent Panel Members

Name	Role on Panel	Affiliation
Dr Josephine Browne	Chair	Former Head of Faculty of Enterprise and Humanities, IADT
Matthew Hurley	Report Writer	Independent Consultant
Frances Sheridan	Academic Representative	Lecturer at National College of Ireland
Dr John Healy	Academic Representative	Senior Lecturer in the Department of Computer Science in ATU
Seamus Minogue	Industry Representative	Head of Information Technology at Enterprise Ireland
Dillon Reilly	Learner Representative	NStEP trained in Quality Assurance

All members of the independent panel declared their independence of Dublin Business School and that they have no conflict of interest

Part 1. Introduction

An Independent Evaluation Panel ("The Panel") was convened in June 2025 to conduct an evaluation of Dublin Business School's Bachelor of Science (Honours) in Computing and it's Level 7 embedded programme, the Bachelor of Science in Computing. The membership of the Panel comprised six individuals, including the Chair, Report Writer, two Academic Representatives, one Industry Representative, and one Learner Representative. This report on DBS' programme review process comprises the Panel's findings in relation to DBS' internal review of the programmes, and should be read in conjunction with the Independent Evaluation Report (IER), which detail the Panel's findings in relation to the modified programme (i.e. the programme as it will run over the next validation period).

Part 2. Evaluation Process

2.1 Documents Supplied to the Panel

	Document Type	**Document Name**
1.	Agenda	BSc (Hons) in Computing Programme Review Agenda
2.	CVs	Programme Team CVs
3.	Descriptor	Module and Assessment Document
4.	Descriptor	Programme Document
5.	Handbook	Programme Handbook
6.	Regulatory Requirements	• DBS Cover Letter Declaration • Deed of Guarantee • Fee Cover Note • PEL Refund Arrangement
7.	Report	Programme Review Report
8.	Supporting Documents	• 2020 Validation Documents • 2024 Feedback • Annual Programme Reports • Attendance Records • Board of Studies Reports • Certificate of Validation • Enrolment, Progression and Graduate Data • Exam Paper Samples • External Examiner Reports • Handbooks • Independent Evaluation Report 2020 • Learner Feedback Documents • Programme Team Meeting Minutes • QQI Documents • Strategy Documents
9.	Terms of Reference	BSc (Hons) in Computing Terms of Reference

2.2 Provider's Representatives Met

	Person	Role / Job Title
1.	Tim Bicknell	President
2.	Lori Johnston	Academic Dean
3.	Dr David Williams	Academic Director
4.	Dr Paul McEvoy	Assistant Academic Director
5.	Amy Hayes	Academic Programmes Manager
6.	Jennifer Byrne	Programme Level Manager / Lecturer
7.	Dr Shazia Afzal	Placement Coordinator / Lecturer
8.	Rory O'Donnell	Lecturer
9.	Bernie Lydon	Lecturer
10.	Andy Fitzgerald	Lecturer
11.	Michelle O'Connor	Lecturer
12.	Kingsley Ibomo	Lecturer
13.	Damien Kettle	Lecturer
14.	Luciana Nascimento	Lecturer
15.	Ehtisham Yasin	Lecturer
16.	Derek Mizak	Lecturer
17.	Terri Hoare	Lecturer
18.	Nitya Govindaraju	Lecturer
19.	Jaroslaw Woznica	Lecturer
20.	Oleksandr Bezrukavyi	Lecturer
21.	Shane Mooney	Head of Student Experience
22.	Darragh Breathanch	Chief Operating Officer & Registrar
23.	Anita Dwyer	Assistant Registrar
24.	Sarah Sharkey	Senior Learner Support and Retention Officer
25.	Trevor Haugh	Head of Academic Information and Resource Centre / Library
26.	Francisca Knight	Head of Academic Operations
27.	Nicholas Kelly	Head of Faculty Management
28.	Various	Current Learners & Graduates

2.3 Description of evaluation process

Following provision of the programme documentation by DBS, and in advance of the virtual site visit, the Panel undertook an desk evaluation of the documentation to identify areas of strength, areas for enhancement, and areas requiring additional information or clarification. The site visit was then held virtually, via Teams, and began with an initial private meeting of the Panel in order to exchange observations for agree a plan for the day ahead.

Over the course of the virtual site visit, the Panel met with DBS representatives at all levels, including senior management, the programme team (including lecturers), and support staff. The Panel also had an opportunity to speak with current learners and recent graduates, who provided valuable insights on their experiences on the programme. These discussions allowed the Panel a more holistic view of the programme than could be obtained from the documentation alone.

The Panel appreciated the open and constructive dialogue with DBS staff and found the programme, too, to be overall well structured (notwithstanding some conditions and recommendations for enhancement. At the conclusion of the virtual site visit, the Panel agreed on a recommendation that the programme was satisfactory subject to proposed special conditions, which are listed in this report and contextualised in detail in the IER.

Part 3. Panel Findings on Provider Programme Review Report

The following is the panel's commentary and recommendations on the provider's programme review report. It follows the section structure of the report in headings and in sequence. References to specific parts of the provider report will use the relevant report reference e.g. 2.2.4 Programme Management

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

Commentary:

In accordance with statutory requirements and Dublin Business School's own programmatic review policy and schedule, an Independent Evaluation Panel has been convened to conduct an evaluation of the following programme(s):

Principal Programme: Bachelor of Science (Honours) in Computing (240 ECTS)

Embedded Programme: Bachelor of Science in Computing (180 ECTS)

Terms of reference have been documented and these clearly outline the context and purpose of the programme review process.

Recommendations:

The Panel is satisfied with the context and terms of reference for the programme review and has no specific recommendations to make.

Section B. Provider Information and Programme Context

Commentary:

Dublin Business School is a Dublin City-based provider of higher education programmes at levels 6 to 9 on the National Framework of Qualifications. Established in 1975, DBS has an active population of over 8,000 students across a range of subject areas, including accounting, business, film and creative media, finance, humanities and social sciences, law, marketing, and the computer sciences.

The BSc (Hons) in Computing and its embedded exit award are positioned within the Computing Discipline. The principal programme runs over 4 years in full-time mode and 5 years in part-time mode, and learners who do not progress beyond Year 3 may be eligible for the exit award.

Recommendations:

The Panel is satisfied with the provider information and programme context and has no specific recommendations to make.

Section C. Baseline qualitative and quantitative information

Programme Data Overview

Commentary:

DBS has recorded generally strong application numbers over the last validation period, despite some year-on-year fluctuations. Application numbers received reached a high of 866 in the academic year 2021/22, with 763 received in the 2023/24 academic year (the last year in the validation period for which data is available). The conversion rate has steadily increased over the same period, from 12% in 2020/21 up to 22% in 2023/24. This translates to 181 enrolments for 2023/24, a substantial increase from the 57 enrolments recorded in 2020/21.

Up to 2022/23, the gender balance was significantly male-dominated, reaching a high of 80.79% in 2022/23. However, the 2023/24 year saw a complete flip with 79.03% female enrolment. The Panel was intrigued by this dramatic turnaround and sought to understand the reason(s) for it. DBS commented that they have been working to support increased female participation on STEM programmes and that these efforts have included ensuring that there is a gender balance across senior management and on the programme team. DBS is hopeful that the increased female participation seen on this programme is a reflection of its growth as an institution.

An average withdrawal rate of 5.45% has been recorded over the last validation period, while the number of learners who failed their exams is consistent with the previous validation period. Having used the HEA Graduate Outcomes Survey to identify the employment pathways of graduates, DBS found that, on average, respondents the programme to the 2024 survey fell slightly below the DBS average for Level 8 programmes in the same year. Notwithstanding this, those who had found employment were in roles such as QA Lead, Software Development Engineers, Data Analyst, and Financial Analyst.

Recommendations:

The Panel is satisfied with DBS' reporting and analysis of the programme's performance data and has no recommendations to make.

Programme Delivery and Teaching & Learning Strategies

Commentary:

DBS has a comprehensive range of physical and digital facilities and resources to support effective provision and delivery of its programmes, including Moodle access; a Media Lab; a Library containing 40,000+ print books, 30,000+ eBooks, and 35,297 full-text e-journals; classroom spaces equipped with modern audiovisual equipment and interactive whiteboards; computer labs; and virtual technology such as Zoom for online learning.

On the matter of timetabling, one of the changes borne out of DBS' programmatic review is the decision to bring the start time of the revised programme forward by one hour, from 9am to 8am. This decision was made to alleviate some of the pressure on DBS' facilities which are running at almost full capacity, according to the review report. The Panel expressed some concern (further explored in the IER) that this move may negatively impact some learners, particularly those who have to commute, as well as expand the length of the day, which finishes for learners at 6pm (accounting for a gap of several hours from midday to mid-afternoon).

As part of the review process, DBS examined the workload on learners across each module and stage. It found that contact hours are in line with best practice and not considered excessive.

Teacher to learner ratios for different types of learning activities have been revised as a result of the review process. Classroom sessions have increased from a ratio of 1:50 to 1:60 and workshops have increased from 1:25 to 1:30, while practical sessions have decreased from 1:35 to 1:30 and live online classes have decreased from 1:50 to 1:30.

In reviewing its teaching and learning strategies, DBS found these to be overall effective, while making some changes to enhance the programme's coherence and pedagogical approach. This has involved revising the sequence of certain modules in order to create a more logical progression. DBS has also made efforts to diversify the assessment strategy, place increased focus on real-world skills application, and to ensure the assessment workload is manageable. DBS is also aware of issues with the timely provision of assessment feedback and the Panel notes the ongoing efforts to address this.

Recommendations:

Though there are no conditions or recommendations relating to DBS' review of its programme delivery or teaching and learning strategies, the Panel refers to the IER which contains several conditions and recommendations on issues relating to the programme schedules and timetabling, and assessment feedback . It may therefore be the case that future programmatic reviews take account of these.

Section D. Evaluation of the programme by stakeholders

Evaluation by current learners and graduates of the programme

Commentary:

The review report notes that two different surveys were conducted in 2024 of current learners and learners who have graduated since 2020. DBS noted a total of 13 responses from current learners to this survey, the results from which are included in the review report. This feedback highlighted a need for modernisation of the programme, greater focus on problem-solving and fundamental programming constructs, increased opportunities for specialisation, and concerns about slow and minimal assessment feedback.

It is noted that DBS has made efforts to respond to some of these matters in the revised programme, but also that some of the issues are ongoing, such as the need for timely and more detailed feedback.

Recommendations:

Some of the conditions and recommendations in the IER were informed, at least in part, by learner feedback. Though these do not necessarily concern DBS' review process, future programmatic reviews may take account of these.

Evaluation of the programme by Staff

Commentary:

Feedback from staff involved in the delivery of the programme is an important way to shape and enhance a programme. In the case of the BSc in Computing, staff feedback indicated general satisfaction with the overall structure of the programme, but highlighted a need for increased focus on academic scholarship and research-oriented activities, as well as core skills. The decision to alter certain assessment tasks was also informed by staff feedback.

Recommendations:

The Panel has no recommendations to make.

External Examiner Feedback

Commentary:

The BSc in Computing has had two External Examiners over the last validation period, with both complimenting the overall structure of the curriculum and assessments. Specific points raised by examiners included the limitations of fully assessing the breath of learning opportunities when only a 'paper view' is provided, as well as the inconsistent provision of feedback to learners, which was often too basic to provide learners with meaningful guidance for improvement. DBS itself also noted a need for clearer communication with External Examiners, as instances were noted in which an External Examiner was unable to attend a meeting of the Exam Board due to late notification of such.

Recommendations:

The Panel notes that DBS is aware of its need to address the issues raised by External Examiners. In particular, the Panel has identified a recommendation, contextualised in the IER, which advises DBS to expedite the work of the Feedback Review Working Group to ensure the timely provision of sufficiently detailed summative assessment feedback to learners.

Section E. Programme Quality Assurance

Complaints, appeals and commendations

Commentary:

Appeals and complaints are addressed in accordance with DBS' institution-wide policies, and the Panel has not identified any specific issues relating to these policies or their corresponding processes. A total of 8 appeals and one complaint were recorded over the last validation period. The review report notes that in all of these cases, the grades were upheld.

Recommendations:

The Panel has no specific recommendations to make.

Quality Assurance Systems and Processes

Commentary:

DBS has a well-established quality assurance system and associated procedures underpinning the provision and delivery of its programmes. These are maintained by a robust governance structure and monitored and reviewed periodically. The Panel is satisfied that the programmatic review process for the BSc (Hons) in Computing was conducted in accordance with these procedures.

Recommendations:

The Panel has no specific recommendations to make.

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

Commentary:

There are no additional quality assurance systems or processes required for this programme. Should this change, the Panel is satisfied that DBS has the capacity to put in place the necessary measures for this.

Recommendations:

The Panel has no specific recommendations to make.

Section F. Summary Analysis of the programme

Commentary:

A SWOT analysis of the programme has been conducted by DBS and included as part of the review report. Strengths highlights by this analysis include the breadth of the curriculum and practical focus of the programme, while one primary weakness was identified, that being the limited capacity to facilitate work placement opportunities. The potential ways for the programme to enhance and develop (through online learning and integration of new technologies) were identified as potential opportunities, while the challenges of meeting industry demand and the competition from other institutions were seen as threats.

Recommendations:

The Panel has no specific recommendations to make.

Section G. Revision of the programme

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

Commentary:

The following modifications have been proposed for the revised programme:

- It is proposed to add a new module in Semester 1 of Year 3 titled, 'Workplace Skills and Professional Development.'
- It is proposed to remove two elective modules: 'Cloud Platform Development' and 'Mobile and Social Computing'.
- Several changes to the module content and MMLOs are proposes, largely to move around the point in the programme at which a given module will be taken.
- It is proposed to update the teaching, learning and assessment strategies; in particular, DBS proposes to formally move part of the teaching delivery online for both the full-time and part-time versions of the programme.

Recommendations:

The Panel is of the view that these are relevant changes to ensure the programme's currency and has no specific recommendations to make.

Part 4. Overall Findings

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

Section A. Commentary on review process:

The Panel is satisfied that DBS has conducted a comprehensive review into the programme's performance over the last validation period and taken genuine consideration of stakeholder feedback as part of this review. The review report presents the breadth of considerations which have informed the modifications to the revised programme. Although some issue remain ongoing, DBS has in many cases, highlighted how it is already endeavouring to address these.

Section B. Recommendations on review process:

The Panel has no recommendations regarding DBS' review process specifically. Notwithstanding this, some of the conditions and recommendations identified in the Independent Evaluation Report may have implications on future reviews.

Section C. Commentary on programme revisions:

The Panel is satisfied that DBS has used the data and feedback gathered as part of its programmatic review process to inform necessary and advisable changes to the programme. Where a change has not been fully effected, DBS has in many cases, indicated how it intends or is currently endeavouring to address the matter. The proposed revisions to the programme are, on the whole, important for the programme's currency; particularly in light of how much and how quickly the computing field has changed in recent years. Notwithstanding this, the Panel has identified a number of conditions and recommendations (see Section D below and the IER for context) to further enhance the programme for the next validation period.

Section D. Recommendations on programme revisions:

The Panel has identified the following special conditions of validation and recommendations which are contextualised in the Independent Evaluation Report:

Special Conditions of Validation

1. DBS must include the mechanism for computing the denomination of level 7 exit awards in the programme documentation.

2. DBS must more clearly define the breakdown of synchronous online and on-campus learning in the proposed programme schedules.

3. DBS must update its programme schedule for the part-time programme to reflect the programme's five year duration.

4. DBS must include the teaching of API development as part of relevant programming modules.

5. Each module must include a mechanism for verifying the AIAS level in its assessment strategy. This must be included as part of the programme documentation.

Recommendations

1. The Panel recommends that DBS consider an exit award for learners who are unable to progress in the programme beyond Year 2.

2. The Panel recommends that, in the absence of electives, the Programme Board consider renaming the programme with the title BSc in Computing (Data Analytics).

3. The Panel recommends that DBS engage with public sector bodies in relation to potential work placement opportunities.

4. The Panel recommends that DBS consider incorporating credit-bearing opportunities for learners to undertake industry-relevant certification in Year 3 in lieu of work placement.

    a. Further, the Panel recommends that a more formalised alternative (e.g. group project-based module focused on a real-world problem) be considered for students who don't secure a work placement or industry project.

5. The Panel recommends that DBS consider a more outcome-drive approach to the learning outcomes of the Workplace Skills and Professional Development module, incorporating learners' soft skills and interpersonal skills that are important for industry.

6. The Panel recommends that DBS review the modernity of its modules to ensure that the breadth of technologies which will receive meaningful coverage in the programme is comprehensively articulated in the programme documentation (e.g. AI, Git and version control, prompt engineering, Python, ethics, sustainability, testing, etc.).

    a. Extending from this, the Panel recommends that the programme documentation be updated to reflect the inclusion of AI-related content across modules.

7. The Panel recommends that DBS consider changing the name of the Year 4 module 'Big Data: Achieving Scale' to a more appropriate alternative (e.g. 'Enterprise Data Analytics').

8. The Panel recommends that DBS consider introducing topical subjects such as staff awareness and identity management to the Cybersecurity module in Year 4, and

more practical elements such as phishing simulations.

9. The Panel recommends that DBS consider introducing content around the ethical use of AI in the workplace.

10. The Panel strongly recommends that DBS ensure that the provision of information to learners about work placement is clear, visible, accessible, and sets out the responsibilities and expectations of the learner in seeking placement opportunities themselves, as well as the supports available from DBS in assisting learners in this process. This should be completed within the next 12 months.

11. The Panel recommends that DBS articulate in its Learning, Teaching and Assessment Strategy why it has moved toward greater use of online proctored exams as opposed to on-campus exams.

12. The Panel recommends that DBS explore opportunities for cross-module assessment in modules that build upon each other, e.g. databases and object-oriented programming.

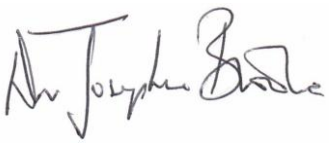
13. The Panel recommends that DBS expedite the work of the Feedback Review Working Group to ensure the provision of summative assessment feedback to learners.

14. The Panel recommends that DBS create a more frequent and inclusive student consultation forum, with representation from class representatives, faculty and DBS management.

15. The Panel recommends that DBS implement a more student-friendly timetable and set of guidelines around the scheduling and re-scheduling of classes, e.g. one class per day.

16. The Panel recommends that DBS re-examine that supports in place for International Students through student consultation, with a view to ensuring these are fit for purpose and visible.

17. The Panel recommends more coordinated communication between the Industry Advisory Board and the Programme Team regarding technology modernisation.

Signed: _  _____

Panel Chairperson:

Date: ___25th July, 2025_____

Dearbhú Cáilíochta
agus Cáilíochtaí Éireann
Quality and
Qualifications Ireland

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

Part 1. Provider details

Provider name	Dublin Business School ("DBS")
Date of site visit	19 June 2025
Date of report	17 July 2025

Section A. Overall recommendations

Principal programme	**Title**	Bachelor of Science (Hons) in Computing
	Award	Honours Bachelor Degree
	Credit	240 ECTS
	Recommendation *Satisfactory OR Satisfactory subject to proposed conditions OR Not Satisfactory*	Satisfactory subject to proposed conditions

Embedded programme	**Title**	Bachelor of Science in Computing
	Award	Bachelor Degree
	Credit	180 ECTS
	Recommendation *Satisfactory OR Satisfactory subject to proposed conditions OR Not Satisfactory*	Satisfactory subject to proposed conditions

Section B. Expert Panel

Name	Role	Affiliation
Dr Josephine Browne	Chair	Former Head of Faculty of Enterprise and Humanities, IADT
Matthew Hurley	Report Writer	Independent Consultant
Frances Sheridan	Academic Representative	Lecturer at National College of Ireland
Dr John Healy	Academic Representative	Senior Lecturer in the Department of Computer Science in ATU
Seamus Minogue	Industry Representative	Head of Information Technology at Enterprise Ireland
Dillon Reilly	Learner Representative	NStEP trained in Quality Assurance

Section C. Principal Programme: Bachelor of Science (Hons) in Computing

Names of centre(s) where the programme(s) is to be provided	**Maximum number of learners** *(FT)*	**Maximum number of learners** *(PT)*
Dublin Business School, 13-14 Aungier Street, Dublin 2	300	150

Proposed Duration and Enrolment					
	First Intake Date	**Duration**	**Intakes per Annum**	**Enrolment i.e. learners per Intake**	
			Maximum	**Minimum**	**Maximum**
Full-Time	September 2025	4 years / 48 months	2	7	150
Part-Time	September 2025	5 years / 60 months	1	7	150
Intake Schedule e.g. January September		September; January			

Panel Commentary on proposed enrolment:

The Panel is satisfied with the minimum and maximum enrolment figures proposed and DBS' capacity to respond to increased numbers as appropriate.

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

Computing is the most robust industry in the world and information systems, cloud computing, web security and data management play a leading role in the information technology and computing industries as well as the majority of businesses. Ireland has witnessed an increased need for computing specialists, who have core foundational computer science skills and who can apply these skills to business and technology.

The Bachelor of Science (Hons) in Computing (240 ECTS) programme provides the academic knowledge and practical skills needed for a foundational computing qualification with further specialisation possible in the areas of web and mobile, data analytics, software development, databases and security, etc. The aim of the programme is to deliver high-quality, educated and informed graduates with understanding of core computer technologies and information systems while also having the requisite up-to-date practical technical skills in these areas. In addition, the proposed programme will enhance the learner's employability by addressing and developing competencies in communication, self-management, and teamwork.

Stage one lays the groundwork for the programme and encompasses mostly foundational modules that focus on providing a solid and comprehensive understanding of the relevant concepts such as programming fundamentals, computer architecture, information systems and mathematics and statistics for computing, introduction to web development and cloud computing. Learners will also develop skills such as Information and Communications Technology Essentials and logic and problem solving.

Stage two will build on the knowledge developed at Stage one in object-oriented programming, data communications and networks, algorithms and data structures, database systems, software engineering, web development and operating systems. In addition, learners will gain an understanding of principles of professional practice in IT project management.

Stage three will further advance learners' knowledge and practical skills in advanced web design, systems analysis and design and introduction to data science. Learners professional development will be further enhanced through the work placement component.

Stage four (Award) will complete learners' instruction with Cybersecurity plus Data Mining & Big Data Analytics and Big Data: Achieving Scale. Learners will complete their award stage with a capstone project.

On completion of this programme, learners will have theoretical and practical skills in the area of information systems with computing skills; they will have the technical competencies and soft, transversal skills that are necessary in any business environment.

This programme accommodates a wide audience of learners whose specific interests in computing may either be technically-focused or business-focused. It is a 4 year full-time programme of 240

Target learner groups

The profile of learners who would be enrolled on this programme would be school leavers who wish to specialise in the field of computing with a view to entering industry. The programme is also of interest to more mature learners who wish to move into the IT industry and may have previously studied in a different field. Cognate subjects include science, technology, computing, engineering, mathematics or related discipline. This programme may also be of interest to those with a second class second division (2.2) honours undergraduate bachelor degree in a non-cognate area who require a qualification in this area in order to progress professionally.

This programme is aimed at learners who wish to specialise in the field of information systems and computing with a view to entering industry or progressing to further study.

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

The teaching and learning modalities
• On-site, face-to-face • Synchronous online • Asynchronous • Independent • Work-based

Summary of specifications for teaching staff		
Role	**Profile**	**WTE**
Lecturer	Lecturing staff will have a minimum of a Masters and/or PhD in the following areas: ● Computing science / Computing ● Quantitative methods ● Analytics ● Networking ● Information Systems ● Computer Technology ● Research methods ● Mathematics and statistics In modules where industry experience is desirable, those who are exceptionally qualified by virtue of senior significant experience may also be considered.	12

Learning Activity	**Ratio of learners to teaching staff**
Lectures	1:60
Workshops	1:30
Practical Sessions	1:30
Live online classes	1:30

Panel Commentary on programme outline and staffing: The Panel is satisfied with the specification of staffing requirements articulated in the documentation, but has noted a number of conditions and recommendations in relation to the revised programme (contextualised throughout this report).

Programmes being replaced (applicable to applications for revalidation)		
Code	**Title**	**Last enrolment date**
PG24463	Bachelor of Science (Honours) in Computing	December 2025

Section C.1 Embedded Programme: Bachelor of Science in Computing

Names of centre(s) where the programme(s) is to be provided	**Maximum number of learners** *(FT)*	**Maximum number of learners** *(PT)*
Dublin Business School, 13-14 Aungier Street, Dublin 2	N/A	N/A

Proposed Duration and Enrolment					
	First Intake Date	**Duration**	**Intakes per Annum**	**Enrolment i.e. learners per Intake**	
			Maximum	**Minimum**	**Maximum**
Full-Time	N/A	3 years / 36 months	N/A	N/A	N/A
Part-Time	N/A	4 years / 48 months	N/A	N/A	N/A
Intake Schedule e.g. January September					

Panel Commentary on proposed enrolment:
This programme is an exit-award only and does not recruit directly.

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 Bachelor of Science in Computing is offered as an exit award for learners who cannot complete the full programme.	
Target learner groups	
The Bachelor of Science in Computing is offered as an exit award for learners who cannot complete the full programme.	
Approved countries for provision	Ireland
Delivery mode: Full-time/Part-time	Full-time and Part-time

The teaching and learning modalities
• On-site, face-to-face • Synchronous online • Asynchronous • Independent • Work-based

Summary of specifications for teaching staff		
Role	**Profile**	**WTE**
Lecturer	Lecturing staff will have a minimum of a Masters and/or PhD in the following areas: ● Computing science / Computing ● Quantitative methods ● Analytics ● Networking ● Information Systems ● Computer Technology ● Research methods ● Mathematics and statistics In modules where industry experience is desirable, those who are exceptionally qualified by virtue of senior significant experience may also be considered.	12

Learning Activity	**Ratio of learners to teaching staff**
Lectures	1:60
Workshops	1:30
Practical Sessions	1:30
Live online classes	1:30

Panel Commentary on programme outline and staffing:

The Panel is satisfied with the specification of staffing requirements articulated in the documentation, but has noted a number of conditions and recommendations in relation to the revised programme (contextualised throughout this report).

Programmes being replaced (applicable to applications for revalidation)		
Code	**Title**	**Last enrolment date**
PG24464	Bachelor of Science in Computing	N/A

Section D. Other noteworthy features of the application

1. The Panel commends the sound structure of the programme and DBS' defence of the programme.
2. The Panel commends the support provided by the Programme Module Leaders to students.
3. The Panel commends the comprehensive mental health supports available to students.

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**

a) The provider meets the prerequisites (section 44(7) of the 2012 Act) to apply for validation of the programme. b) The application for validation is signed by the provider's chief executive (or equivalent) who confirms that the information provided is truthful and that all the applicable criteria have been addressed. c) The provider has declared that their programme complies with applicable statutory, regulatory and professional body requirements.		
Programme	**Satisfactory? (yes, no, partially)**	**Comment**
BSc (Hons) in Computing	Yes	The Panel is satisfied that DBS meets the prerequisites to apply for validation of the programme and is in compliance with all relevant statutory, regulatory and professional body requirements relevant to its provision of this programme.
BSc in Computing (Exit Award)	Yes	As per principal programme.

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

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

Programme	Satisfactory? (yes, no, partially)	Comment
BSc (Hons) in Computing	Partially	The Panel is partially satisfied that QQI's requirements under this criterion have been addressed. The documentation viewed by the Panel was overall comprehensive and clearly articulated the aims and objectives of the programme, as well as key programme and award information. The award title aligns with QQI's Policy and Criteria for Making Awards, and the programme title is consistent with the award sought (however, the Panel also refers to Recommendation 2 which suggests a title change to more accurately reflect the choice of modules on the programme). The Programme Descriptor establishes a clear set of minimum intended programme and module learning outcomes which are similarly consistent with the QQI award sought. The Panel noted, however, that the method through which DBS computes the award denomination for the Level 7 exit award was not clearly specified in the documentation. Specifically, it was unclear whether the calculation is, for example, based on credits from Year 3 or whether DBS also considers credits from Year 2. To ensure the accuracy and fairness of this, it is important for this information to be included and transparent. In respect of this, the Panel has identified the following condition: **Condition 1** DBS must include the mechanism for computing the denomination of level 7 exit awards in the programme documentation.

		Early on in the site visit, the Panel raised the idea of an exit award after Year 2 for those are, for whatever reason, unable to continue with the programme. DBS expressed its openness to this, particularly the idea of Certificate to acknowledge the two years of learning, but also noted that records have not shown a lot of learners leaving after Year 2. Rather, this is more likely to occur in Year 3 when work placement comes into play. While acknowledging DBS' perspective, the Panel is of the view that the possibility of an exit award after Year 2 is worth exploring in terms of viability. In respect of this, the Panel makes the following recommendation: **Recommendation 1** The Panel recommends that DBS consider an exit award for learners who are unable to progress in the programme beyond Year 2. In the last iteration of the programme, the Panel noted the availability of elective modules to learners in Year 4, including 'Cloud Platform Development' and 'Mobile and Social Computing'. However, in an effort to simplify the programme's structure, elective module options have been removed for the revised programme. With this removal, the Panel was of the view that the programme now leans quite heavily into data analytics, particularly in Year 4, at which point 50% of the modules focus on data analytics. DBS representatives remarked upon this by stating that there is an early focus in the programme on web development and object oriented programming, and then data analytics is brought in over the last two years in addition to areas like cybersecurity. The intention is to cover the breadth of the industry while also preparing learners to work in key skills areas. Additionally, DBS has in place an Industry Advisory Board which offers guidance to the programme team to ensure the programme reflects current and emerging trends as much as possible. The Panel appreciates the level of stakeholder engagement which DBS has undertaken in its review and revision of the programme. Notwithstanding this, the Panel also noted that the particular focus on data analytics in Years 3 and 4 is more apparent given the lack of elective options. In respect of this, the Panel makes the following recommendation: **Recommendation 2** The Panel recommends that, in the absence of electives, the Programme Board consider renaming the programme with the title BSc in Computing (Data Analytics).
BSc in Computing (Exit Award)	Partially	As per principal programme.

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

a) The development of the programme and the intended programme learning outcomes has sought out and taken into account the views of stakeholders such as learners, graduates, teachers, lecturers, education and training institutions, employers, statutory bodies, regulatory bodies, the international scientific and academic communities, professional bodies and equivalent associations, trades unions, and social and community representatives.
b) The interpretation of awards standards has been adequately informed and researched; considering the programme aims and objectives and minimum intended programme (and, where applicable, modular) learning outcomes.
    (i) There is a satisfactory rationale for providing the programme.
    (ii) The proposed programme compares favourably with existing related (comparable) programmes in Ireland and beyond. Comparators should be as close as it is possible to find.
    (iii) There is support for the introduction of the programme (such as from employers, or professional, regulatory or statutory bodies).
    (iv) There is evidence of learner demand for the programme.
    (v) There is evidence of employment opportunities for graduates where relevant.
    (vi) The programme meets genuine education and training needs.
c) There are mechanisms to keep the programme updated in consultation with internal and external stakeholders.
d) Employers and practitioners in the cases of vocational and professional awards have been systematically involved in the programme design where the programme is vocationally or professionally oriented.
e) The programme satisfies any validation-related criteria attaching to the applicable awards standards and QQI awards specifications.

Programme	Satisfactory ? (yes, no, partially)	Comment
BSc (Hons) in Computing	Yes	The Panel is satisfied that QQI's requirements under this criterion have been addressed. DBS has a number of mechanisms in place to gather feedback from staff, learners, graduates, and industry representatives. An Industry Advisory Board is one of the important advisory groups with which DBS engages to ensure the programme remains up to date and with and responsive to current and emerging trends. The programme has been running since 2015 and DBS has conducted an analysis of sectoral trends which have identified the growth of the ICT sector in the intervening years. While acknowledging employee layoffs which have hit parts of the sector quite significantly and a decrease in recruitment in individual years, research has shown that employment across the ICT sector between 2017 and 2022 grew by 42%. Through its analysis and sectoral research, DBS has identified a genuine case for the programme's continued provision, including evidence of learner demand and employment opportunities. A benchmarking exercise against similar programmes in other higher education institutions has also been conducted, with the findings reported in the Programme Descriptor.

BSc in Computing (Exit Award)	Yes	As per principal programme.

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

a) The information about the programme as well as its procedures for access, transfer and progression are consistent with the procedures described in QQI's policy and criteria for access, transfer and progression in relation to learners for providers of further and higher education and training. Each of its programme-specific criteria is individually and explicitly satisfied.
b) Programme information for learners is provided in plain language. This details what the programme expects of learners and what learners can expect of the programme and that there are procedures to ensure its availability in a range of accessible formats.
c) If the programme leads to a higher education and training award and its duration is designed for native English speakers, then the level of proficiency in English language must be greater or equal to B2+ in the Common European Framework of Reference for Languages (CEFRL[1]) in order to enable learners to reach the required standard for the QQI award.
d) The programme specifies the learning (knowledge, skill and competence) that **target learners** are expected to have achieved before they are enrolled in the programme and any other assumptions about enrolled learners (programme participants).
e) The programme includes suitable procedures and criteria for the **recognition of prior learning** for the purposes of access and, where appropriate, for advanced entry to the programme and for exemptions.
f) The programme title (the title used to refer to the programme):-
    (i) Reflects the core *intended programme learning outcomes*, and is consistent with the standards and purposes of the QQI awards to which it leads, the award title(s) and their class(es).
    (ii) Is learner focused and meaningful to the learners;
    (iii) Has long-lasting significance.
g) The programme title is otherwise legitimate; for example, it must comply with applicable statutory, regulatory and professional body requirements.

Programme	Satisfactory? (yes, no, partially)	Comment
BSc (Hons) in Computing	Yes	The Panel is satisfied that QQI's requirements under this criterion have been addressed. The minimum entry requirements for the programme, including those for general learning, English language proficiency, and mathematical proficiency are clearly articulated and specify the learning that prospective learners must be able to evidence before they can be enrolled. DBS also operates recognition of prior learning (RPL) for advanced entry or access to the BSc in Computing. Applicants are considered on a case-by-case basis in accordance with DBS' established process for RPL. DBS' arrangements for inward transfer and progression are documentation, but is it noted that there are no formal progression arrangements in place onto, for example, a master's programme.
BSc in Computing (Exit Award)	Yes	The embedded programme is an exit-only award and does not involve direct enrolment of learners.

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

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

a) The programme is suitably structured and coherently oriented towards the achievement by learners of its intended programme learning outcomes. The programme (including any stages and modules) is integrated in all its dimensions.
b) In so far as it is feasible the programme provides choice to enrolled learners so that they may align their learning opportunities towards their individual educational and training needs.
c) Each module and stage is suitably structured and coherently oriented towards the achievement by learners of the intended *programme* learning outcomes.
d) The objectives and purposes of each of the programme's elements are clear to learners and to the provider's staff.
e) The programme is structured and scheduled realistically based on sound educational and training principles.
f) The curriculum is comprehensively and systematically documented.
g) The credit allocated to the programme is consistent with the difference between the entry standard and minimum intended programme learning outcomes.
h) The credit allocated to each module is consistent with the difference between the module entry standard and minimum intended module learning outcomes.
i) Elements such as practice placement and work-based phases are provided with the same rigour and attentiveness as other elements.
j) The programme duration (expressed in terms of time from initial enrolment to completion) and its fulltime equivalent contact time (expressed in hours) are consistent with the difference between the minimum entry standard and award standard and with the credit allocation.

Programme	Satisfactory? (yes, no, partially)	Comment
BSc (Hons) in Computing	Partially	The Panel is partially satisfied that QQI's requirements under this criterion have been addressed. On the whole, the Panel agreed that the structure of the programme was coherently oriented towards achievement of the intended learning outcomes, although the Panel identified specific aspects of the curriculum which could be enhanced. In relation to the proposed programme schedules, the Panel noted some missing and erroneous information required for full clarity and transparency as to how DBS intends to operate the programme. Firstly, the Panel noted that the schedules do not include the breakdown of synchronous online and on-campus learning, which is particularly important in view of DBS' decision to move some parts of the programme formally online. Secondly, the Panel noted that the schedule for the part-time version of the programme does not accurately reflect the five-year duration of the programme, instead repeating the same four-year structure of the full-time version of the programme. In respect of these matters, the Panel has identified the following conditions: **Condition 2** DBS must more clearly define the breakdown of synchronous online and on-campus learning in the proposed programme schedules. **Condition 3**

		DBS must update its programme schedule for the part-time programme to reflect the programme's five year duration. In general, the Panel admired the culture of gradual learning achieved through the restructuring of modules. However, there was an observed reliance on older technologies such as ASP.NET and, at the same time, an absence of more modern and increasingly important tools such as APIs (and API development). The Panel commented that this could be integrated through an enhanced focus on Full Stack Development, with the UI connecting to an API which in turn connects back to a database, creating a through-line across the web development process. The Panel was of the view that the curriculum of relevant programming modules could be revisited to include the teaching of API development. In respect of this, the Panel has identified the following condition: **Condition 4** DBS must include the teaching of API development as part of relevant programming modules. One of the particular challenges highlighted during the Panel's evaluation concerned work placement and the difficulties learners have faced in securing placement opportunities. Although DBS confirmed that it is the learner's responsibility to secure their own work placement, the Panel was of the view that DBS should consider how it can leverage its industry connections, particularly its relationships with public sector bodies, to identify potential work placement opportunities for learners. In respect of this, the Panel makes the following recommendation: **Recommendation 3** The Panel recommends that DBS engage with public sector bodies in relation to potential work placement opportunities. Staying on the matter of work placement, learners who do not manage to secure a work placement opportunity will undertake a project as an alternative. However, the Panel was of the view that DBS should consider expanding the opportunities available to learners who do not undertake placement. This might be credit-bearing industry-relevant certification or indeed a more formalised alternative such as group project-based module with real-world application. This would afford all learners the opportunity to engage in work that is industry-facing, even if they do not have a formal placement. In respect of this, the Panel makes the following recommendations: **Recommendation 4** The Panel recommends that DBS consider incorporating credit-bearing opportunities for learners to undertake industry-relevant certification in Year 3 in lieu of work placement.

		Recommendation 4(a) Further, the Panel recommends that a more formalised alternative (e.g. group project-based module focused on a real-world problem) be considered for students who don't secure a work placement or industry project. Due to recurring issues with work placement and the low attendance at the voluntary placement preparation workshops, DBS has developed a credit-bearing Workplace Skills and Professional Development module designed to equip learners will industry-ready skills and workplace preparation. The Panel agreed on the importance and potential of the module, but also expressed the view that it could have a more outcome-drive approach which incorporates transversal skills that are crucial for industry progression. In respect of this, the Panel makes the following recommendation: **Recommendation 5** The Panel recommends that DBS consider a more outcome-drive approach to the learning outcomes of the Workplace Skills and Professional Development module, incorporating learners' soft skills and interpersonal skills that are important for industry. In its evaluation of the module descriptors, the Panel was sometimes unable to identify whether a particular (important) topic had much or any coverage within a given module. On speaking with the Programme Team and individual lecturers, it became apparent that the descriptors did not fully articulate the breadth of technologies which will receive meaningful coverage. These include, among others, artificial intelligence, Git, Python, and testing. The Panel noted that the descriptors should be updated to include this information so that it is clear what learners can expect to receive genuine training on. With regard to AI, in particular, the Panel identified a need for DBS to update its documentation to fully reflect the coverage of AI-related content across modules and, by effect, the programme as a whole. In respect of this, the Panel makes the following recommendations: **Recommendation 6** The Panel recommends that DBS review the modernity of its modules to ensure that the breadth of technologies which <u>will</u> receive meaningful coverage in the programme are comprehensively articulated in the programme documentation (e.g. AI, Git and version control, prompt engineering, Python, ethics, sustainability, testing, etc.). **Recommendation 6(a)** Extending from this, the Panel recommends that the programme documentation be updated to reflect the inclusion of AI-related content across modules. The title of a module can be an important factor in conveying the essence of the module's content to both prospective and enrolled

		learners. Thus, as much as the Panel evaluates the content of each modules, so too does the Panel look at the clarity of module titles. In Year 4, the Panel noted that the title of one module was 'Big Data: Achieving Scale', remarking that it reads more like a headline than a title and that DBS should consider changing it to something more appropriate, such as Enterprise Data Analytics, so that the focus of the module is clear. In respect of this, the Panel makes the following recommendation: **Recommendation 7** The Panel recommends that DBS consider changing the name of the Year 4 module 'Big Data: Achieving Scale' to a more appropriate alternative (e.g. 'Enterprise Data Analytics'). The Panel recognises the importance of the Cybersecurity module in Year 4 and also the wide range of topics which could be discussed in such a module. While acknowledging the relevance of the existing content, the Panel noted that DBS should also give consideration to the inclusion of topical subjects such as staff awareness and identity management, and the introduction of practical elements such as phishing simulations. These would set in focus the human component of cybersecurity, which is often the most vulnerable. In respect of this, the Panel makes the following recommendation: **Recommendation 8** The Panel recommends that DBS consider introducing topical subjects such as staff awareness and identity management to the Cybersecurity module in Year 4, and more practical elements such as phishing simulations. Finally, the Panel spent time discussing the use and integration of AI-related content on the programme, highlighting the apparent absence of content on ethical AI use in a workplace setting. Given the surge of interest in AI in recent years, and its adoption in many workplaces, the Panel agreed that there would be a strong argument for coverage of the topic at some point in the programme. In respect of this, the Panel makes the following recommendation: **Recommendation 9** The Panel recommends that DBS consider introducing content around the ethical use of AI in the workplace.
BSc in Computing (Exit Award)	Partially	As per principal programme, with the exception of Recommendations 7 and 8 and their respective contexts, as these relate to Year 4 modules only.

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

a) The specification of the programme's staffing requirements (staff required as part of the programme and intrinsic to it) is precise, and rigorous and consistent with the programme and its defined purpose. The specifications include professional and educational qualifications, licences-to practise where applicable, experience and the staff/learner ratio requirements. See also criterion 12 c).
b) The programme has an identified complement of staff (or potential staff) who are available, qualified and capable to provide the specified programme in the context of their existing commitments.
c) The programme's complement of staff (or potential staff) (those who support learning including any employer-based personnel) are demonstrated to be competent to enable learners to achieve the intended programme learning outcomes and to assess learners' achievements as required.
d) There are arrangements for the performance of the programme's staff to be managed to ensure continuing capability to fulfil their roles and there are staff development opportunities.
e) There are arrangements for programme staff performance to be reviewed and there are mechanisms for encouraging development and for addressing underperformance.
f) Where the programme is to be provided by staff not already in post there are arrangements to ensure that the programme will not enrol learners unless a complement of staff meeting the specifications is in post.

Programme	Satisfactory? (yes, no, partially)	Comment
BSc (Hons) in Computing	Yes	The Panel is satisfied that QQI's requirements under this criterion have been addressed. The specification of the programme's staffing requirements, including management and lecturers, is clearly documented in the Programme Descriptor, and CVs of key staff were provided to the Panel in support of this. During the virtual site visit, the Panel had an opportunity to speak with staff members involved in the management and delivery of the programme, which allowed for insight into programme provision beyond what the documentation alone could convey. The Panel is satisfied that DBS has a qualified and capable complement of staff in situ for effective delivery of the programme, and that there are well-established policies and procedures for the staff recruitment (as needed), management and professional development.
BSc in Computing (Exit Award)	Yes	As per principal programme.

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

a) The specification of the programme's physical resource requirements (physical resources required as part of the programme and intrinsic to it) is precise, and rigorous and consistent with the programme, its defined purpose and its resource/learner-ratio requirements. See also criterion 12 d).
b) The programme has an identified complement of supported physical resources (or potential supported physical resources) that are available in the context of existing commitments on these e.g. availability of:
   (i) suitable premises and accommodation for the learning and human needs (comfort, safety, health, wellbeing) of learners (this applies to all of the programme's learning environments including the workplace learning environment)
   (ii) suitable information technology and resources (including educational technology and any virtual learning environments provided)
   (iii) printed and electronic material (including software) for teaching, learning and assessment
   (iv) suitable specialist equipment (e.g. kitchen, laboratory, workshop, studio) – if applicable
   (v) technical support
   (vi) administrative support
   (vii) company placements/internships – if applicable
c) If versions of the programme are provided in parallel at more than one location each independently meets the location-sensitive validation criteria for each location (for example staffing, resources and the learning environment).
d) There is a five-year plan for the programme. It should address
   (i) Planned intake (first five years) and
   (ii) The total costs and income over the five years based on the planned intake.
e) The programme includes controls to ensure entitlement to use the property (including intellectual property, premises, materials and equipment) required.

Programme	Satisfactory? (yes, no, partially)	Comment
BSc (Hons) in Computing	Yes	The Panel is satisfied that QQI's requirements under this criterion have been addressed. Giving consideration to the large number of actively enrolled learners, DBS has in place a range of physical and digital infrastructure to support programme provision. This includes 47 lecture rooms / classroom spaces across three buildings, each of which contains modern audio-visual equipment, whiteboard / interactive whiteboards, and Zoom technology to facilitate synchronous online learning activities. These rooms hold between 30 and 150 people. DBS also has a large library of both print books (approx. 40,000) and eBooks (approx. 30,000). The physical library is accessible six days per week while the digital library is accessible 24/7 on and off campus. Study rooms and computer labs are available as required, and DBS has a Computer Services department to offer IT assistance and support for those undertaking their studies on and off campus. A Student Experience Team has been established to support and promote a positive learner experience during their time with DBS; they can provide guidance in relation to sourcing accommodations, health and wellbeing, professional services, clubs and societies, digital badges, visas, careers and personal development, and job opportunities. A five-year projection of income and expenditure over the next validation period has been included in the documentation, as has the

		planned number of intakes per year and the proposed minimum and maximum number of learners per intake.
BSc in Computing (Exit Award)	Yes	As per principal programme.

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

a) The programme's physical, social, cultural and intellectual environment (recognising that the environment may, for example, be partly virtual or involve the workplace) including resources and support systems are consistent with the intended programme learning outcomes.
b) Learners can interact with, and are supported by, others in the programme's learning environments including peer learners, teachers, and where applicable supervisors, practitioners and mentors.
c) The programme includes arrangements to ensure that the parts of the programme that occur in the workplace are subject to the same rigours as any other part of the programme while having regard to the different nature of the workplace.

Programme	Satisfactory? (yes, no, partially)	Comment
BSc (Hons) in Computing	Yes	The Panel is satisfied that QQI's requirements under this criterion have been addressed. All enrolled learners within DBS has access the variety of supports and services available, and opportunities for peer learning and personalised feedback and guidance are built into the teaching and learning strategy (See Criterion 9). One of the key findings of the Panel concerned the work placement element of the programme which takes place in Year 3. The Panel learned of particular challenges with the provision of this module, including learner difficulty with securing placement opportunities, the preparation of learners for placement, and DBS' capacity to support placement. From DBS' perspective, there appeared to be a common misunderstanding that the College would set them up with their placement, when in reality they are expected to source their own placement opportunity. From the learner perspective, information about how placement works appeared unclear for many, with learners reporting that only a very small number of those in a group actually secure placement. Those who do no secure placement instead work on a project. An additional issue that was raised was the lack of payment for some placements, meaning some learners are left juggling their own jobs and studies with the placement. DBS informed the Panel that there are workshops set up to prepare learners for placement and to establish the expectations around this but that attendance has typically been quite poor, possibly due to scheduling issues and/or the advertising of the workshops. Hearing the perspectives of both DBS staff and learners, the Panel found a great need for enhanced information provision to learners so that the expectations and responsibilities in respect of placement are clearly established, visible and accessible. In respect of this, the Panel has identified the following recommendation: **Recommendation 10**

		The Panel strongly recommends that DBS ensure that the provision of information to learners about work placement is clear, visible, accessible, and sets out the responsibilities and expectations of the learner in seeking placement opportunities themselves, as well as the supports available from DBS in assisting learners in this process. This should be completed within the next 12 months.
BSc in Computing (Exit Award)	Yes	As per principal programme.

Criterion 9. There are sound teaching and learning strategies

a) The teaching strategies support achievement of the intended programme/module learning outcomes.
b) The programme provides authentic learning opportunities to enable learners to achieve the intended programme learning outcomes.
c) The programme enables enrolled learners to attain (if reasonably diligent) the minimum intended programme learning outcomes reliably and efficiently (in terms of overall learner effort and a reasonably balanced workload).
d) Learning is monitored/supervised.
e) Individualised guidance, support and timely formative feedback is regularly provided to enrolled learners as they progress within the programme.

Programme	Satisfactory? (yes, no, partially)	Comment
BSc (Hons) in Computing	Yes	The Panel is satisfied that QQI's requirements under this criterion have been addressed. The Programme Team will employ a variety teaching strategies to facilitate and support learning, including problem-based learning, critical reflection, skills application, and critiques. This is done through a variety of delivery modes, such as lectures, workshops, tutorials and practical sessions. A number of modules have been restructured to offer learners a more natural progression of learning and skills development, and the curriculum incorporates real-world challenges and reflection to make information more applicable to learners. Peer review is incorporated into the overarching teaching and learning strategy and provides a mechanism for learners to learn from each other. In addition to this, formative assessment opportunities are built into modules and offer checkpoints for personalised feedback and individualised guidance.
BSc in Computing (Exit Award)	Yes	As per principal programme.

Criterion 10. **There are sound assessment strategies**

a) All assessment is undertaken consistently
b) The programme's assessment procedures interface effectively with the provider's QQI approved quality assurance procedures.
c) The programme includes specific procedures that are fair and consistent for the assessment of enrolled learners to ensure the minimum intended programme/module learning outcomes are acquired by all who successfully complete the programme.
d) The programme includes formative assessment to support learning.
e) There is a satisfactory written **programme assessment strategy** for the programme as a whole and there are satisfactory module assessment strategies for any of its constituent modules.
f) Sample assessment instruments, tasks, marking schemes and related evidence have been provided for each award-stage assessment and indicate that the assessment is likely to be valid and reliable.
g) There are sound procedures for the moderation of summative assessment results.
h) The provider only puts forward an enrolled learner for certification for a particular award for which a programme has been validated if they have been specifically assessed against the standard for that award.

Programme	Satisfactory? (yes, no, partially)	Comment
BSc (Hons) in Computing	Partially	The Panel is partially satisfied that QQI's requirements under this criterion have been addressed. DBS employs a variety of assessment techniques across the programme, including continuous assessment, quizzes, reflective case studies, presentations, reflections, written assignments, proctored exams, projects, in-class tests, and reports. The assessment process is underpinned by DBS' established processes for assessment, and there are procedures in place to ensure the fair and consistent assessment of learners. The Panel discussed assessment at length with the Programme Team. Among the subjects discussed was the topic of Generative AI use in assessment and how DBS mitigates against abuse and preserves the integrity of its assessments. Representatives noted that lecturers are asked to consider the use of Gen AI in assessment and the extent to which it is allowed and appropriate. To this end, DBS utilises a scale in which lecturers can specify exactly how much learners can use Gen AI in assessment. However, it was unclear to the Panel how lecturers determine which level on the Artificial Intelligence Assessment Scale (AIAS) is most appropriate for a particular piece of assessment and agreed that this needed to be included in the programme's assessment strategy for transparency. In respect of this, the Panel has identified the following condition: **Condition 5** For each module, DBS must include a mechanism for verifying the AIAS level in its assessment strategy. This must be included as part of the programme documentation.

		The Panel noted DBS' decision to increase its use of online proctored exams as part of the formal integration of online elements to the programme. However, the Panel found limited information in the teaching, learning and assessment strategy justifying or contextualising the decision. Given that this is quite a significant shift in assessment modality, the Panel is of the view the strategy should be updated to articulate DBS' rationale. In respect of this, the Panel makes the following recommendation: **Recommendation 11** The Panel recommends that DBS articulate in its Learning, Teaching and Assessment Strategy why it has moved toward greater use of online proctored exams as opposed to on-campus exams. Due to the restructuring of certain modules following the Programme Team's review of the programme, there is now a clearer progression between modules, allowing learners to build their knowledge from one module to the next. The Panel was of the view that this may also bring about opportunities for cross-module assessment, which do not currently exist on the programme but which DBS could consider integrating. In respect of this, the Panel makes the following recommendation: **Recommendation 12** The Panel recommends that DBS explore opportunities for cross-module assessment in modules that build upon each other, e.g. databases and object-oriented programming. One of the key findings that came out of DBS' own review into the programme, and which emerged from the Panel's evaluation, was the need for greater attention to the timely provision of comprehensive feedback to learners. DBS noted that it has established a Feedback Review Working Group to identify how best to address this issue. The Panel acknowledges this as an important step forward but also advises that the work of the Group be treated as a priority matter and completed in a reasonable timeframe. In respect of this, the Panel makes the following recommendation: **Recommendation 13** The Panel recommends that DBS expedite the work of the Feedback Review Working Group to ensure the provision of summative assessment feedback to learners.
BSc in Computing (Exit Award)	Partially	As per principal programme.

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

a) There are arrangements to ensure that each enrolled learner is fully informed in a timely manner about the programme including the schedule of activities and assessments.
b) Information is provided about learner supports that are available to learners enrolled on the programme.
c) Specific information is provided to learners enrolled on the programme about any programme-specific appeals and complaints procedures.
d) If the programme is modular, it includes arrangements for the provision of effective guidance services for learners on the selection of appropriate learning pathways.
e) The programme takes into account and accommodates to the differences between enrolled learners, for example, in terms of their prior learning, maturity, and capabilities.
f) There are arrangements to ensure that learners enrolled on the programme are supervised and individualised support and due care is targeted at those who need it.
g) The programme provides supports for enrolled learners who have special education and training needs.
h) The programme makes reasonable accommodations for learners with disabilities.
i) If the programme aims to enrol international students it complies with the *Code of Practice for Provision of Programmes to International Students* and there are appropriate in-service supports in areas such as English language, learning skills, information technology skills and such like, to address the particular needs of international learners and enable such learners to successfully participate in the programme.
j) The programme's learners will be well cared for and safe while participating in the programme, (e.g. while at the provider's premises or those of any collaborators involved in provision, the programme's locations of provision including any workplace locations or practice-placement locations).

Programme	Satisfactory? (yes, no, partially)	Comment
BSc (Hons) in Computing	Yes	The Panel is satisfied that QQI's guidelines under this criterion have been addressed. During the site visit, the Panel had an opportunity to speak with a select group of current learners and recent graduates, who provided valuable insight into their experiences on the programme. One of the key points raised in this session concerned the challenges of having specific issues addressed despite multiple communication attempts with DBS. Issues with receiving timely feedback, with work placement, and with timetabling were some of the issues raised. However, learners did not always feel they had received an adequate response or solution to these. The Panel proposed that a more frequent and inclusive student consultation forum may help ensure the voices of learners and class representatives are appropriately heard and also provide a channel for communicating how issues are being addressed. In respect of this, the Panel has identified the following recommendation: **Recommendation 14** The Panel recommends that DBS create a more frequent and inclusive student consultation forum, with representation from class

		representatives, faculty and DBS management. In respect of this, the Panel has identified the following recommendation: One of the changes to the revised programme included a change in start time from 9am to 8am. Additionally, the Panel noted that on days where learners have two classes, these are often space hours apart, meaning that a learner may have one class from 8am to 11am and not start their second class until 4pm, finishing then at 6pm. The Panel agreed that this is both a long day but also awkward timing for learners who have rely on public transport to attend classes; both because of issues they may face in getting a bus or train early enough (and at a reasonable time) and due to their inability to go home during the long gap between classes. The Panel is of the view that DBS should identify how it can adjust the programme's timetable, and its guidelines around the scheduling of classes, to make these more student-friendly. In respect of this, the Panel makes the following recommendation: **Recommendation 15** The Panel recommends that DBS implement a more student-friendly timetable and set of guidelines around the scheduling and re-scheduling of classes, e.g. one class per day. The enrolment data included in the Programme Review Report highlights that a significant number of learners on the programme are international. Given this context, the Panel noted some important considerations such as the need for many international learners to work in conjunction with their studies, and that some international learners may become unable to progress beyond a certain year for a variety of factors. This brings an additional perspective to previously raised issues such as class scheduling, work placement and the lack of an exit award after Year 2. In view of this, the Panel advises that DBS re-examine its supports in place for International Students, ensuring clear and accurate information provision, and visibility of supports, resources, and channels for raising issues. In respect of this, the Panel has identified the following recommendation: **Recommendation 16** The Panel recommends that DBS re-examine that supports in place for International Students through student consultation, with a view to ensuring these are fit for purpose and visible.
BSc in Computing (Exit Award)	Yes	As per principal programme.

Criterion 12. **The programme is well managed**

a) The programme includes intrinsic governance, quality assurance, learner assessment, and access, transfer and progression procedures that functionally interface with the provider's general or institutional procedures.
b) The programme interfaces effectively with the provider's QQI approved quality assurance procedures. Any proposed incremental changes to the provider's QA procedures required by the programme or programme-specific QA procedures have been developed having regard to QQI's statutory QA guidelines. If the QA procedures allow the provider to approve the centres within the provider that may provide the programme, the procedures and criteria for this should be fit-for-the-purpose of identifying which centres are suited to provide the programme and which are not.
c) There are explicit and suitable programme-specific criteria for selecting persons who meet the programme's staffing requirements and can be added to the programme's complement of staff.
d) There are explicit and suitable programme-specific criteria for selecting physical resources that meet the programmes physical resource requirements, and can be added to the programme's complement of supported physical resources.
e) Quality assurance is intrinsic to the programme's maintenance arrangements and addresses all aspects highlighted by the validation criteria.
f) The programme-specific quality assurance arrangements are consistent with QQI's statutory QA guidelines and use continually monitored completion rates and other sources of information that may provide insight into the quality and standards achieved.
g) The programme operation and management arrangements are coherently documented and suitable.
h) There are sound procedures for interface with QQI certification.

Programme	Satisfactory? (yes, no, partially)	Comment
BSc (Hons) in Computing	Yes	The Panel is satisfied that QQI's requirements under this criterion have been addressed. DBS has a well-established, QQI-approved quality assurance (QA) system underpinning and supporting the provision, management and delivery of its programmes. The Panel found no evidence to suggest misalignment between these procedures and the programme. Further, the Panel is satisfied that DBS has the capacity and expertise to manage its programmes in accordance with its QA procedures, making adjustments as required. The structures through with DBS manages the programme are clearly articulated in the Programme Descriptor, with details made available on the management structures in place to oversee programme-related affairs. During the virtual site visit, the important role of the Industry Advisory Board made was raised on a number of occasions. The Panel found that communication between the Programme Team and Industry Advisory Board could be enhanced to facilitate more efficient dialogue regarding programme matters. In particular, the Panel highlighted a need for DBS to modernise its use and coverage of relevant technologies on the programme to give learners a solid foundation of these for when they enter the workplace. The Industry Advisory Board provides an ideal mechanism to consult with those actively working in the sector to identify which technologies should take precedence or brought more to the fore.

		In respect of this, the Panel makes the following recommendation: **Recommendation 17** The Panel recommends more coordinated communication between the Industry Advisory Board and the Programme Team regarding technology modernisation.
BSc in Computing (Exit Award)	Yes	As per principal programme.

Part 3. Overall recommendation to QQI

3.1 Principal programme: Bachelor of Science (Honours) in Computing

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.

Reasons for the overall recommendation

The programme almost fully meets the validation criteria.

Commendations

1. The Panel commends the sound structure of the programme and DBS' defence of the programme.
2. The Panel commends the support provided by the Programme Module Leaders to students.
3. The Panel commends the comprehensive mental health supports available to students.

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

1. DBS must include the mechanism for computing the denomination of level 7 exit awards in the programme documentation.
2. DBS must more clearly define the breakdown of synchronous online and on-campus learning in the proposed programme schedules.
3. DBS must update its programme schedule for the part-time programme to reflect the programme's five year duration.
4. DBS must include the teaching of API development as part of relevant programming modules.
5. Each module must include a mechanism for verifying the AIAS level in its assessment strategy. This must be included as part of the programme documentation.

Recommendations

1. The Panel recommends that DBS consider an exit award for learners who are unable to progress in the programme beyond Year 2.

2. The Panel recommends that, in the absence of electives, the Programme Board consider renaming the programme with the title BSc in Computing (Data Analytics).

3. The Panel recommends that DBS engage with public sector bodies in relation to potential work placement opportunities.

4. The Panel recommends that DBS consider incorporating credit-bearing opportunities for learners to undertake industry-relevant certification in Year 3 in lieu of work placement.

    a. Further, the Panel recommends that a more formalised alternative (e.g. group project-based module focused on a real-world problem) be considered for students who don't secure a work placement or industry project.

5. The Panel recommends that DBS consider a more outcome-drive approach to the learning outcomes of the Workplace Skills and Professional Development module, incorporating learners' soft skills and interpersonal skills that are important for industry.

6. The Panel recommends that DBS review the modernity of its modules to ensure that the breadth of technologies which will receive meaningful coverage in the programme is comprehensively articulated in the programme documentation (e.g. AI, Git and version control, prompt engineering, Python, ethics, sustainability, testing, etc.).

    a. Extending from this, the Panel recommends that the programme documentation be updated to reflect the inclusion of AI-related content across modules.

7. The Panel recommends that DBS consider changing the name of the Year 4 module 'Big Data: Achieving Scale' to a more appropriate alternative (e.g. 'Enterprise Data Analytics').

8. The Panel recommends that DBS consider introducing topical subjects such as staff awareness and identity management to the Cybersecurity module in Year 4, and more practical elements such as phishing simulations.

9. The Panel recommends that DBS consider introducing content around the ethical use of AI in the workplace.

10. The Panel strongly recommends that DBS ensure that the provision of information to learners about work placement is clear, visible, accessible, and sets out the responsibilities and expectations of the learner in seeking placement opportunities themselves, as well as the supports available from DBS in assisting learners in this process. This should be completed within the next 12 months.

11. The Panel recommends that DBS articulate in its Learning, Teaching and Assessment Strategy why it has moved toward greater use of online proctored exams as opposed to on-campus exams.

12. The Panel recommends that DBS explore opportunities for cross-module assessment in modules that build upon each other, e.g. databases and object-oriented programming.

13. The Panel recommends that DBS expedite the work of the Feedback Review Working Group to ensure the provision of summative assessment feedback to learners.

14. The Panel recommends that DBS create a more frequent and inclusive student consultation forum, with representation from class representatives, faculty and DBS management.

15. The Panel recommends that DBS implement a more student-friendly timetable and set of guidelines around the scheduling and re-scheduling of classes, e.g. one class per day.

16. The Panel recommends that DBS re-examine that supports in place for International Students through student consultation, with a view to ensuring these are fit for purpose and visible.

17. The Panel recommends more coordinated communication between the Industry Advisory Board and the Programme Team regarding technology modernisation.

Embedded programme: Bachelor of Science in Computing (Exit Award)

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.

Reasons for the overall recommendation

The programme almost fully meets the validation criteria.

Commendations

1. The Panel commends the sound structure of the programme and DBS' defence of the programme.

2. The Panel commends the support provided by the Programme Module Leaders to students.

3. The Panel commends the comprehensive mental health supports available to students.

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

1. DBS must include the mechanism for computing the denomination of level 7 exit awards in the programme documentation.

2. DBS must more clearly define the breakdown of synchronous online and on-campus learning in the proposed programme schedules.

3. DBS must update its programme schedule for the part-time programme to reflect the programme's five year duration.

4. DBS must include the teaching of API development as part of relevant programming modules.

5. Each module must include a mechanism for verifying the AIAS level in its assessment strategy. This must be included as part of the programme documentation.

Recommendations

1. The Panel recommends that DBS consider an exit award for learners who are unable to progress in the programme beyond Year 2.

2. The Panel recommends that, in the absence of electives, the Programme Board consider renaming the programme with the title BSc in Computing (Data Analytics).

3. The Panel recommends that DBS engage with public sector bodies in relation to potential work placement opportunities.

4. The Panel recommends that DBS consider incorporating credit-bearing opportunities for learners to undertake industry-relevant certification in Year 3 in lieu of work placement.

    a. Further, the Panel recommends that a more formalised alternative (e.g. group project-based module focused on a real-world problem) be considered for students who don't secure a work placement or industry project.

5. The Panel recommends that DBS consider a more outcome-drive approach to the learning outcomes of the Workplace Skills and Professional Development module, incorporating learners' soft skills and interpersonal skills that are important for industry.

6. The Panel recommends that DBS review the modernity of its modules to ensure that the breadth of technologies which will receive meaningful coverage in the programme is comprehensively articulated in the programme documentation (e.g. AI, Git and version control, prompt engineering, Python, ethics, sustainability, testing, etc.).

    a. Extending from this, the Panel recommends that the programme documentation be updated to reflect the inclusion of AI-related content across modules.

7. Not applicable to the embedded programme.

8. Not applicable to the embedded programme.

9. The Panel recommends that DBS consider introducing content around the ethical use of AI in the workplace.

10. The Panel strongly recommends that DBS ensure that the provision of information to learners about work placement is clear, visible, accessible, and sets out the responsibilities and expectations of the learner in seeking placement opportunities

themselves, as well as the supports available from DBS in assisting learners in this process. This should be completed within the next 12 months.

11. The Panel recommends that DBS articulate in its Learning, Teaching and Assessment Strategy why it has moved toward greater use of online proctored exams as opposed to on-campus exams.

12. The Panel recommends that DBS explore opportunities for cross-module assessment in modules that build upon each other, e.g. databases and object-oriented programming.

13. The Panel recommends that DBS expedite the work of the Feedback Review Working Group to ensure the provision of summative assessment feedback to learners.

14. The Panel recommends that DBS create a more frequent and inclusive student consultation forum, with representation from class representatives, faculty and DBS management.

15. The Panel recommends that DBS implement a more student-friendly timetable and set of guidelines around the scheduling and re-scheduling of classes, e.g. one class per day.

16. The Panel recommends that DBS re-examine that supports in place for International Students through student consultation, with a view to ensuring these are fit for purpose and visible.

17. The Panel recommends more coordinated communication between the Industry Advisory Board and the Programme Team regarding technology modernisation.

Summary of recommended special conditions of validation

1. DBS must include the mechanism for computing the denomination of level 7 exit awards in the programme documentation.

2. DBS must more clearly define the breakdown of synchronous online and on-campus learning in the proposed programme schedules.

3. DBS must update its programme schedule for the part-time programme to reflect the programme's five year duration.

4. DBS must include the teaching of API development as part of relevant programming modules.

5. Each module must include a mechanism for verifying the AIAS level in its assessment strategy. This must be included as part of the programme documentation.

Summary of recommendations to the provider

1. The Panel recommends that DBS consider an exit award for learners who are unable to progress in the programme beyond Year 2.

2. The Panel recommends that, in the absence of electives, the Programme Board consider renaming the programme with the title BSc in Computing (Data Analytics).

3. The Panel recommends that DBS engage with public sector bodies in relation to potential work placement opportunities.

4. The Panel recommends that DBS consider incorporating credit-bearing opportunities for learners to undertake industry-relevant certification in Year 3 in lieu of work placement.

    a. Further, the Panel recommends that a more formalised alternative (e.g. group project-based module focused on a real-world problem) be considered for students who don’t secure a work placement or industry project.

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testing, etc.).

   a. Extending from this, the Panel recommends that the programme documentation be updated to reflect the inclusion of AI-related content across modules.

7. The Panel recommends that DBS consider changing the name of the Year 4 module 'Big Data: Achieving Scale' to a more appropriate alternative (e.g. 'Enterprise Data Analytics').

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9. The Panel recommends that DBS consider introducing content around the ethical use of AI in the workplace.

10. The Panel strongly recommends that DBS ensure that the provision of information to learners about work placement is clear, visible, accessible, and sets out the responsibilities and expectations of the learner in seeking placement opportunities themselves, as well as the supports available from DBS in assisting learners in this process. This should be completed within the next 12 months.

11. The Panel recommends that DBS articulate in its Learning, Teaching and Assessment Strategy why it has moved toward greater use of online proctored exams as opposed to on-campus exams.

12. The Panel recommends that DBS explore opportunities for cross-module assessment in modules that build upon each other, e.g. databases and object-oriented programming.

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16. The Panel recommends that DBS re-examine that supports in place for International Students through student consultation, with a view to ensuring these are fit for

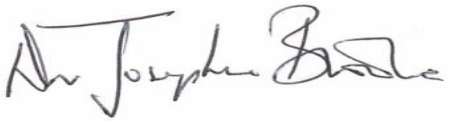
purpose and visible.

17. The Panel recommends more coordinated communication between the Industry Advisory Board and the Programme Team regarding technology modernisation.

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: 25th July, 2025

Signed: 

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 *(post panel feedback and consequent amendments, if any)*

1B.3 Proposed Programme Schedule(s) FULL TIME																	
Name of Provider:	Dublin Business School																
Programme Title *(Principal)*	Bachelor of Science (Honours) in Computing (Full-Time)				**QQI Award Title**	Bachelor of Science							**ECTS**	240			
Stage (1,2,3, Award etc)	1	**Exit Award Title** *(if relevant)*			Bachelor of Science in Computing								**Stage ECTS**	60			
Programme Delivery Mode - ✓*one as appropriate.*	**On-site Face-to-Face**		**Blended**			**Online**			**Apprenticeship**								
			✓														
Teaching and Learning Modalities – ✓ *one or more as appropriate.*	**On-site Face-to-Face**		**Synchronous Hybrid**		**Synchronous Online**		**Asynchronous**		**Independent**		**Work Based**						
	✓				✓				✓		✓						
Assessment Techniques Utilised in Stage – ✓*one or more as appropriate.*	**Continuous Assessment**		**Invigilated Exam – in person**		**Proctored Exam - online**		**Project**		**Practical Skills Demonstration**		**Work Based**						
	✓		✓		✓		✓		✓		✓						
Modules in this stage (add rows as required)																	
					Total Student Effort Module (hours)					**Assessment – Allocation of Marks** *(from the module assessment strategy)*							
Module Title	**Semester**	**Mandatory (M) or Elective (E)**	**Credits (ECTS)**	**Total Hours**	**On-site Face-to-Face**	**Synchronous**	**Asynchronous**	**Independent**	**Work Based**	**Continuous Assessment %**	**Invigilated Exam – in person %**	**Proctored Exam – online %**	**Project**	**Practical Skills Demonstration %**	**Work Based %**		
Logic and Problem Solving	1	M	5	125	36			89		100%							

Information and Communications Essentials	1	M	5	125	36			89		100%					
Programming Fundamentals	1&2	M	10	250	72			178		50%			50%		
Mathematics and Statistics for Computing	1&2	M	10	250	72			178		60%	40%				
Fundamentals of Information Systems	1&2	M	10	250	72			178		20%			80%		
Computer Architecture	1&2	M	10	250	72			178		50%		50%			
Introduction to Web Development	2	M	5	125	36			89		100%					
Introduction to Cloud Computing	2	M	5	125	36			89		50%				50%	

Name of Provider:	Dublin Business School															
Programme Title *(Principal)*	Bachelor of Science (Honours) in Computing (Full-Time)				**QQI Award Title**	Bachelor of Science							**ECTS**	240		
Stage (1,2,3, Award etc)	2	**Exit Award Title** *(if relevant)*			Bachelor of Science in Computing								**Stage ECTS**	60		
Programme Delivery Mode - ✓*one as appropriate.*	**On-site Face-to-Face**		**Blended**		**Online**		**Apprenticeship**									
			✓													
Teaching and Learning Modalities – ✓ *one or more as appropriate.*	**On-site Face-to-Face**		**Synchronous Hybrid**		**Synchronous Online**		**Asynchronous**		**Independent**		**Work Based**					
	✓				✓				✓		✓					
Assessment Techniques Utilised in Stage – ✓*one or more as appropriate.*	**Continuous Assessment**		**Invigilated Exam – in person**		**Proctored Exam - online**		**Project**		**Practical Skills Demonstration**		**Work Based**					
	✓		✓		✓		✓		✓		✓					
Modules in this stage (add rows as required)																
					Total Student Effort Module (hours)					**Assessment – Allocation of Marks** *(from the module assessment strategy)*						
Module Title	**Semester**	**Mandatory (M) or Elective (E)**	**Credits (ECTS)**	**Total Hours**	**On-site Face-to-Face**	**Synchronous**	**Asynchronous**	**Independent**	**Work Based**	**Continuous Assessment %**	**Invigilated Exam – in person %**	**Proctored Exam – online %**	**Project**	**Practical Skills Demonstration %**	**Work Based %**	
Software Engineering	1	M	5	125	32			93		100%						

IT Project Management	1	M	5	125	32			93		100%					
Object-Oriented Programming	1&2	M	10	250	64			186		100%					
Algorithms and Data Structures	1&2	M	10	250	64			186		60%		40%			
Data Communications & Networks	1&2	M	10	250	64			186		50%		50%			
Database Systems	1&2	M	10	250	64			186					100%		
Web Development	2	M	5	125	32			93		100%					
Operating Systems	2	M	5	125	32			93		100%					

Name of Provider:	Dublin Business School															
Programme Title *(Principal)*	Bachelor of Science (Honours) in Computing (Full-Time)				**QQI Award Title**	Bachelor of Science							**ECTS**	240		
Stage (1,2,3, Award etc)	3	**Exit Award Title** *(if relevant)*			Bachelor of Science in Computing								**Stage ECTS**	60		
Programme Delivery Mode - ✓*one as appropriate.*	**On-site Face-to-Face**		**Blended**		**Online**		**Apprenticeship**									
			✓													
Teaching and Learning Modalities – ✓ *one or more as appropriate.*	**On-site Face-to-Face**		**Synchronous Hybrid**		**Synchronous Online**		**Asynchronous**		**Independent**		**Work Based**					
	✓				✓				✓		✓					
Assessment Techniques Utilised in Stage – ✓*one or more as appropriate.*	**Continuous Assessment**		**Invigilated Exam – in person**		**Proctored Exam - online**		**Project**		**Practical Skills Demonstration**		**Work Based**					
	✓		✓		✓		✓		✓		✓					
Modules in this stage (add rows as required)																
					Total Student Effort Module (hours)					**Assessment – Allocation of Marks** *(from the module assessment strategy)*						
Module Title	**Semester**	**Mandatory (M) or Elective (E)**	**Credits (ECTS)**	**Total Hours**	**On-site Face-to-Face**	**Synchronous**	**Asynchronous**	**Independent**	**Work Based**	**Continuous Assessment %**	**Invigilated Exam – in person %**	**Proctored Exam – online %**	**Project**	**Practical Skills Demonstration %**	**Work Based %**	
Advanced Web Development	1	M	10	250	64			186		100%						

Foundations in Data Science	1	M	10	250	64			186		40%			60%		
Workplace Skills and Professional Development	1	M	5	125	32			93							
Systems Analysis & Design	1	M	5	125	32			93		100%					
Work Placement/Project	2	M	30	500		24		276	200						100%

Name of Provider:	Dublin Business School															
Programme Title *(Principal)*	Bachelor of Science (Honours) in Computing (Full-Time)				**QQI Award Title**		Bachelor of Science						**ECTS**			
Stage (1,2,3, Award etc)	Award	**Exit Award Title** *(if relevant)*			Bachelor of Science in Computing								**Stage ECTS**			
Programme Delivery Mode - ✓*one as appropriate.*	**On-site Face-to-Face**				**Blended**				**Online**				**Apprenticeship**			
					✓											
Teaching and Learning Modalities – ✓ *one or more as appropriate.*	**On-site Face-to-Face**				**Synchronous Hybrid**				**Synchronous Online**				**Asynchronous**		**Independent**	**Work Based**
	✓								✓						✓	✓
Assessment Techniques Utilised in Stage – ✓*one or more as appropriate.*	**Continuous Assessment**				**Invigilated Exam – in person**				**Proctored Exam - online**				**Project**		**Practical Skills Demonstration**	**Work Based**
	✓				✓				✓				✓		✓	✓
Modules in this stage (add rows as required)																
					Total Student Effort Module (hours)					**Assessment – Allocation of Marks** *(from the module assessment strategy)*						
Module Title	**Semester**	**Mandatory (M) or Elective (E)**	**Credits (ECTS)**	**Total Hours**	**On-site Face-to-Face**	**Synchronous**	**Asynchronous**	**Independent**	**Work Based**	**Continuous Assessment %**	**Invigilated Exam – in person %**	**Proctored Exam – online %**	**Project**	**Practical Skills Demonstration %**	**Work Based %**	
Cybersecurity	1	M	10	250	60			190		80%			20%			

Data Mining & Big Data Analytics	1	M	10	250	60			190		50%			50%		
Enterprise Data Analytics	1	M	10	250	60			190		100%					
Project	2	M	30	750		60		690					100%		

1B.4 Proposed Programme Schedule(s) PART TIME

Name of Provider:	Dublin Business School					
Programme Title *(Principal)*	Bachelor of Science (Honours) in Computing (Part-Time)		**QQI Award Title**	Bachelor of Science	**ECTS**	240
Stage (1,2,3, Award etc)	1	**Exit Award Title** *(if relevant)*	Bachelor of Science in Computing		**Stage ECTS**	60

Programme Delivery Mode - ✓*one as appropriate.*	**On-site Face-to-Face**	**Blended**	**Online**	**Apprenticeship**
		✓		

Teaching and Learning Modalities – ✓ *one or more as appropriate.*	**On-site Face-to-Face**	**Synchronous Hybrid**	**Synchronous Online**	**Asynchronous**	**Independent**	**Work Based**
	✓		✓		✓	✓

Assessment Techniques Utilised in Stage – ✓*one or more as appropriate.*	**Continuous Assessment**	**Invigilated Exam – in person**	**Proctored Exam - online**	**Project**	**Practical Skills Demonstration**	**Work Based**
	✓	✓	✓	✓	✓	✓

Modules in this stage (add rows as required)

					Total Student Effort Module (hours)					**Assessment – Allocation of Marks** *(from the module assessment strategy)*					
Module Title	**Semester**	**Mandatory (M) or Elective (E)**	**Credits (ECTS)**	**Total Hours**	**On-site Face-to-Face**	**Synchronous**	**Asynchronous**	**Independent**	**Work Based**	**Continuous Assessment %**	**Invigilated Exam – in person %**	**Proctored Exam – online %**	**Project**	**Practical Skills Demonstration %**	**Work Based %**
Programming Fundamentals	1&2	M	10	250	36			214		50%			50%		

Mathematics and Statistics for Computing	1&2	M	10	250	36			214		60%	40%				
Fundamentals of Information Systems	1&2	M	10	250	36			214		20%			80%		
Computer Architecture	1&2	M	10	250	36			214		50%		50%			

Name of Provider:	Dublin Business School															
Programme Title *(Principal)*	Bachelor of Science (Honours) in Computing (Part-Time)				**QQI Award Title**	Bachelor of Science							**ECTS**	240		
Stage (1,2,3, Award etc)	2	**Exit Award Title** *(if relevant)*			Bachelor of Science in Computing								**Stage ECTS**	60		
Programme Delivery Mode - ✓*one as appropriate.*	**On-site Face-to-Face**				**Blended**				**Online**				**Apprenticeship**			
					✓											
Teaching and Learning Modalities – ✓ *one or more as appropriate.*	**On-site Face-to-Face**				**Synchronous Hybrid**				**Synchronous Online**				**Asynchronous**		**Independent**	**Work Based**
	✓								✓						✓	✓
Assessment Techniques Utilised in Stage – ✓*one or more as appropriate.*	**Continuous Assessment**				**Invigilated Exam – in person**				**Proctored Exam - online**				**Project**		**Practical Skills Demonstration**	**Work Based**
	✓				✓				✓				✓		✓	✓
Modules in this stage (add rows as required)																
					Total Student Effort Module (hours)					**Assessment – Allocation of Marks** *(from the module assessment strategy)*						
Module Title	**Semester**	**Mandatory (M) or Elective (E)**	**Credits (ECTS)**	**Total Hours**	**On-site Face-to-Face**	**Synchronous**	**Asynchronous**	**Independent**	**Work Based**	**Continuous Assessment %**	**Invigilated Exam – in person %**	**Proctored Exam – online %**	**Project**	**Practical Skills Demonstration %**	**Work Based %**	
Logic and Problem Solving	3	M	5	125	18			107		100%						

Information and Communications Technology Essentials	3	M	5	125	18			107		100%					
Object-Oriented Programming	3&4	M	10	250	36			214		100%					
Algorithms and Data Structures	3&4	M	10	250	36			214		60%		40%			
Introduction to Web Development	4	M	5	125	18			107		100%					
Introduction to Cloud Computing	4	M	5	125	18			107		50%				50%	

Name of Provider:	Dublin Business School																	
Programme Title *(Principal)*	Bachelor of Science (Honours) in Computing (Part-Time)				**QQI Award Title**	Bachelor of Science							**ECTS**	240				
Stage (1,2,3, Award etc)	3	**Exit Award Title** *(if relevant)*			Bachelor of Science in Computing								**Stage ECTS**	60				
Programme Delivery Mode - ✓*one as appropriate.*	**On-site Face-to-Face**				**Blended**				**Online**				**Apprenticeship**					
					✓													
Teaching and Learning Modalities – ✓ *one or more as appropriate.*	**On-site Face-to-Face**				**Synchronous Hybrid**				**Synchronous Online**				**Asynchronous**		**Independent**		**Work Based**	
	✓								✓						✓		✓	
Assessment Techniques Utilised in Stage – ✓*one or more as appropriate.*	**Continuous Assessment**				**Invigilated Exam – in person**				**Proctored Exam - online**				**Project**		**Practical Skills Demonstration**		**Work Based**	
	✓				✓				✓				✓		✓		✓	
Modules in this stage (add rows as required)																		
					Total Student Effort Module (hours)					**Assessment – Allocation of Marks** *(from the module assessment strategy)*								
Module Title	**Semester**	**Mandatory (M) or Elective (E)**	**Credits (ECTS)**	**Total Hours**	**On-site Face-to-Face**	**Synchronous**	**Asynchronous**	**Independent**	**Work Based**	**Continuous Assessment %**	**Invigilated Exam – in person %**	**Proctored Exam – online %**	**Project**	**Practical Skills Demonstration %**	**Work Based %**			
Software Engineering	5	M	5	125	18			107		100%								

IT Project Management	5	M	5	125	18			107		100%					
Data Communications & Networks	5&6	M	10	250	36			214		50%		50%			
Database Systems	5&6	M	10	250	36			214					100%		
Web Development	6	M	5	125	18			107		100%					
Operating Systems	6	M	5	125	18			107		100%					

Name of Provider:	Dublin Business School													
Programme Title *(Principal)*	Bachelor of Science (Honours) in Computing (Part-Time)				**QQI Award Title**	Bachelor of Science						**ECTS**	240	
Stage (1,2,3, Award etc)	4	**Exit Award Title** *(if relevant)*			Bachelor of Science in Computing							**Stage ECTS**	60	
Programme Delivery Mode - ✓*one as appropriate.*	**On-site Face-to-Face**		**Blended**		**Online**		**Apprenticeship**							
			✓											
Teaching and Learning Modalities – ✓ *one or more as appropriate.*	**On-site Face-to-Face**		**Synchronous Hybrid**		**Synchronous Online**		**Asynchronous**		**Independent**		**Work Based**			
	✓				✓				✓		✓			
Assessment Techniques Utilised in Stage – ✓*one or more as appropriate.*	**Continuous Assessment**		**Invigilated Exam – in person**		**Proctored Exam - online**		**Project**		**Practical Skills Demonstration**		**Work Based**			
	✓		✓		✓		✓		✓		✓			
Modules in this stage (add rows as required)														
					Total Student Effort Module (hours)					**Assessment – Allocation of Marks** *(from the module assessment strategy)*					
Module Title	**Semester**	**Mandatory (M) or Elective (E)**	**Credits (ECTS)**	**Total Hours**	**On-site Face-to-Face**	**Synchronous**	**Asynchronous**	**Independent**	**Work Based**	**Continuous Assessment %**	**Invigilated Exam – in person %**	**Proctored Exam – online %**	**Project**	**Practical Skills Demonstration %**	**Work Based %**
Advanced Web Development	7	M	10	250	36			214		100%					

Foundations in Data Science	7	M	10	250	36			214		40%			60%		
Workplace Skills and Professional Development	7	M	5	125	18			107							
Systems Analysis & Design	7	M	5	125	18			107		100%					
Work Placement/Project	8	M	30	500		24		276	200						100%

Name of Provider:	Dublin Business School													
Programme Title *(Principal)*	Bachelor of Science (Honours) in Computing (Part-Time)			**QQI Award Title**	Bachelor of Science							**ECTS**		
Stage (1,2,3, Award etc)	Award	**Exit Award Title** *(if relevant)*		Bachelor of Science in Computing								**Stage ECTS**		
Programme Delivery Mode - ✓*one as appropriate.*	**On-site Face-to-Face**			**Blended**			**Online**			**Apprenticeship**				
				✓										
Teaching and Learning Modalities – ✓ *one or more as appropriate.*	**On-site Face-to-Face**			**Synchronous Hybrid**			**Synchronous Online**			**Asynchronous**		**Independent**		**Work Based**
	✓						✓					✓		✓
Assessment Techniques Utilised in Stage – ✓*one or more as appropriate.*	**Continuous Assessment**			**Invigilated Exam – in person**			**Proctored Exam - online**			**Project**		**Practical Skills Demonstration**		**Work Based**
	✓			✓			✓			✓		✓		✓
Modules in this stage (add rows as required)														
				Total Student Effort Module (hours)						**Assessment – Allocation of Marks** *(from the module assessment strategy)*					
Module Title	**Semester**	**Mandatory (M) or Elective (E)**	**Credits (ECTS)**	**Total Hours**	**On-site Face-to-Face**	**Synchronous**	**Asynchronous**	**Independent**	**Work Based**	**Continuous Assessment %**	**Invigilated Exam – in person %**	**Proctored Exam – online %**	**Project**	**Practical Skills Demonstration %**	**Work Based %**
Cybersecurity	9	M	10	250	30			220		80%			20%		

Data Mining & Big Data Analytics	9	M	10	250	30			220		50%			50%		
Enterprise Data Analytics	9	M	10	250	30			220		100%					
Project	10	M	30	750		30		720					100%		