#### **ULSTER UNIVERSITY**

REPORT OF A MEETING OF THE REVALIDATION PANEL UNIT 16G5: FdSc COMPUTING (SERC)

22 January 2019

### PANEL:

Professor Una McMahon-Beattie, Department Head of Hospitality and Tourism Management, Ulster University Business School (Chair)
Dr Syed Naqvi, Senior Lecturer/Programme Leader, Birmingham City University
Professor Algirdas Pakštas, Professor Vilnius Gediminas Technical University
Professor Chris Nugent, Head of School of Computing, Ulster University
Ms Deborah Sloan, Academic Programme Leader, Flexible Education, Ulster University

### **REVALIDATION UNIT CO-ORDINATOR:**

Mrs Gary Ritchie, Course Director, South Eastern Regional College

#### IN ATTENDANCE:

Mrs Ayla Guarino, Academic Policy and Standards Officer, Academic Office, Ulster University

Mrs Maeve Paris, Faculty Partnership Manager, Faculty of Computing, Engineering and the Built Environment, Ulster University

## 1 INTRODUCTION/BACKGROUND

The Panel was convened to consider the following provision:

Foundation Degree in Science in Computing, with a CertHE exit award (Bangor / Downpatrick / Lisburn [FT/PT])

The provision is a level 5 award comprising of six compulsory level 4 modules (20 credit points each), one compulsory and three optional level 5 modules (20 credit points each) and a compulsory level 5 work-based learning module (40 credit points). A CertHE exit award is available for those exiting after successfully completing the six level 4 modules. The provision would be offered in full-time mode over two academic years and in part-time mode over three academic years in both Bangor and Downpatrick. The College was also seeking approval to run the provision in Lisburn.

Graduates of the programme are eligible to be considered to progress to the following Ulster University courses:

- BSc Hons Computing Science (Full-time: Jordanstown)
- BEng Hons Software Engineering (Full-time: Jordanstown)
- BSc Hons Computing Systems (Part-time: Jordanstown)

## 2 DOCUMENTATION

The Panel received the following documentation:

- Agenda and programme of the meeting;
- Guidelines for Revalidation Panels:
- QAA subject benchmark statement for Computing, 2016:
- QAA Characteristics Statement, Foundation Degree, 2015;
- Preliminary comments from the Faculty Partnership Manager (Form CA4);
- External Examiners' reports for the last two years;
- Preliminary comments from panel members; and
- Course submission.

#### 3 MEETING WITH SENIOR MANAGEMENT TEAM

# 3.1 Background and Rationale

The Senior Team provided the Panel with some background information in relation to the provision and how it sits within the College's strategy. The Senior Team explained that the foundation degree sits alongside other programmes offered at similar level and is a key part of the overall College provision which focuses on both a close partnership with industry as well as providing opportunities for academic progression.

The Senior Team described the expansion of the computing and IT sector in Northern Ireland and explained that by cultivating close links with local industry they ensured delivery of demand-based courses while maintaining the academic level taught.

# 3.2 Falling Recruitment Levels

The Senior Team assured the Panel that there were mechanisms in place to remedy the falling recruitment numbers. They explained that as currently the majority of their students are A Level graduates (75%), however moving forward they would focus on actively promoting the programme with their existing Level 3 students to counterbalance the reduction in numbers. The Senior Team acknowledged that there was room for improvement in respect to the marketing of the programme and described the new marketing strategy they have devised going forward. This would include holding various events and outreach activities around local schools as well as the use of testimonials of ex-students, parents of students, and employers both online and via external press. The Panel were given the names of the main relevant feeder schools in which the College plans to promote the provision, noting that this would depend on the schools' willingness to collaborate.

## 3.3 Projected Intake

The Panel asked for clarification on the proposed student intake referring to the projected intake table provided in the document. The Senior Team noted that 15 students would be the minimum viable cohort size to ensure a quality student experience and for the ability to execute productive group work. They further noted that the maximum student numbers were to be dictated by the level of resources available for the provision.

It was agreed with the Senior Team to have a minimum enrolment of 15 and a maximum of 24 students per class (for the full-time and part-time provision combined), with one cohort of maximum 24 students in each Lisburn and Downpatrick, and two classes with a maximum cohort of 48 in Bangor.

#### 3.4 Additional Location

The Senior Team explained their rationale for delivering the provision in the Lisburn campus alongside the existing HND provision. As both provisions have different entry requirements, by offering both, the College would be able to cater for a wider range of students in line with their widening access ethos. In addition, the benefit of work-placement, which was only offered in the FdSc, was discussed. The Senior Team reassured the Panel that the College has close ties with local industry and there would be abundant placement opportunities for this location going forward.

The Chair explained that the provision in Lisburn (FT and PT), although reviewed by the Panel, could only be validated subject to approval by APAG. Accordingly, a CA3 form for the additional location would need to be submitted.

## 3.5 Articulation to Ulster University

The Senior Team described the historical breakdown of progression after graduation from the provision. On average, 33% of students have progressed directly to employment, 20% articulated to Ulster University, and the remaining 47% have progressed to other UK institutions. The Senior Team noted that a higher level of articulation (50% target) to Ulster University was desired.

# 3.6 Optional Modules

Due to the small cohort size at the Downpatrick and Lisburn campuses, the Senior Team agreed that optional modules would only be offered at Bangor campus, and that the Downpatrick and Lisburn provisions would be fully compulsory. Accordingly, the Senior Team agreed, for each semester, to pick one of the optional modules offered in Bangor to be delivered as compulsory at both Downpatrick and Lisburn. The Faculty Partnership Manager highlighted that in subsequent years the College would be able to change the optional modules chosen by submitting a CA3 form.

The Panel expressed concern that the marketing provision may be misleading as not all optional modules would be offered on all the three campuses. The Senior Team noted the importance of complete accuracy in advertisement under the Competition and Markets Authority (CMA) regulations, and agreed that the programme structure on each campus be clearly presented in the course document and that all promotional material would reflect this revised structure.

## 3.7 Staff Development

The Senior Team advised the Panel of the College's comprehensive staff development opportunities, mentioning specifically the support given to new staff with industry background who receive support during their induction and throughout. The support was exemplified by the mentoring scheme which was in place.

In response to the Panel's query, the Senior Team confirmed that most members of staff hold a recognised teaching qualification, as this was a requirement for all permanent staff members involved in teaching. The Senior Team explained that the staff members who do not currently hold such a qualification were new hires and would achieve this during the current or the following academic year.

The Senior Team described the comprehensive and varied staff development opportunities, many of which were offered by Ulster University. The Faculty Partnership Manager would update the College on relevant Ulster University staff development events, which were then communicated to staff via email.

The Senior Team acknowledged that there were no formal mechanisms in place to encourage staff to pursue higher level qualifications. However, the College would provide support for staff interested in pursuing such degrees.

#### 4 MEETING WITH STUDENTS

The Panel met with a group of students from the existing provision.

The Chair welcomed the students noting that they are an important part of the quality assurance process, helping in assessing the quality of their experiences and to identify areas where improvement can be made.

## 4.1 Student Support

The students praised the high level of support they received from staff easing them with the transition into the programme. They all benefited from the initial induction which covered a range of concepts and skills required to successfully advance in the programme. The students added that they found the additional support offered throughout the year, and coming up to exam time, helped them both with their confidence and academically.

# 4.2 Work-Based Learning

The students reported no issues relating to placement and felt that, although they were expected to source the placement themselves, there was ample support in place. The benefits of the College's Business Engagement and Student Tracking (BEST) system was discussed.

# 4.3 Employability

The students were satisfied with the employability skills acquired. Many opportunities to enhance their 'soft skills', such as time management and group work, were mentioned. The Panel noted examples such as the Personal Development Plan process they underwent through during their first year, the experience gained from their placement, as well as the support and resources provided by the College. Specifically, the students highlighted the encouragement they receive from the staff to partake in the various City & Guilds schemes, which provided them with additional certificates, much valued in the workplace.

# 4.4 Progression to University

The students assured the Panel that they had a clear understanding of all the various progression routes and opportunities available to them after graduation, including advancing to higher education at Ulster University. The students explained that this knowledge was clearly articulated from the very beginning of their studies, highlighting that although many of the graduates opt for employment, some will continue to further education either at Ulster University or other HE institutions such as Edinburgh Napier University.

# 4.5 Student Representation

The Panel asked if the students were given an opportunity to raise any issues they had with the programme or other related matters in general and specifically prior to the revalidation process. The Panel noted that the students were thoroughly consulted during this process and any changes planned by the course team were discussed with them. The students assured the Panel that from their experience, and difficulties or issues raised with the Course Team had been promptly addressed.

The Panel thanked the students for their engagement and speaking openly and honestly about their experiences and wished them well for their studies and future careers.

## 5 MEETING WITH THE COURSE TEAM

## 5.1 Curriculum Design Principles

The Panel asked how the Team, in developing the provision, had taken account of the University policies and principles in areas such as curriculum design, learning and teaching, assessment and feedback, graduate qualities and employability. The Team replied that they had thoroughly engaged with these principles while working closely with the Faculty Partnership Manager. Programme and individual modules had been reviewed to ensure compliance with the University's curriculum design principles, to include reducing assessment and the number of module learning outcomes and overall structure of the provision to include 20 credit point modules as opposed to the previous 10 credit point ones. The Team reiterated the students view on how employability was an integral part of the programme design, giving the example of the weekly 2.5 hours students are encouraged to partake in the City & Guilds schemes, explaining that these certificates were highly valued by employers and give their graduates "the edge".

The Team described how they consulted stakeholders when redesigning the provision, fully taking on board local industry needs and feedback provided by the students. The modular content was informed by employers' feedback as well as the Employers Forum (comprised of nine companies) which advised of the skills and knowledge required by local industry. Changes to the content included currency of the material as well as focus on professional transferable skills. Staff also consulted students and class representatives, taking their feedback on the existing provision on board when redesigning the programme.

# 5.2 Assessment Strategy

The Panel was assured that the assessment strategy was fully informed by the curriculum design principles and the University's guidelines. The Team reviewed all assessment items to ensure they measure the intended learning outcomes while using a range of assessment techniques to accommodate the wide range of learner types on their provision, such as producing reports, practical assessments as well as group work. The Panel requested the Team review if indeed the most contemporary assessment methods were used, asking them to consider introducing alternative assessments, such as Vodcasts.

### 5.3 Work-Based Learning

The Panel asked the senior team to outline the structure of the work-based learning module. The senior team explained that students were provided support from the initial stages of preparation for placement. Once the students secured their placement, tracking and support was provided using the SPICE system (formally named BEST), which proved an invaluable tool for monitoring students' activity, offering further assistance where required. During the placement, students complete a workplace journal which functions as the base of their final reports. College tutors conducted one site visit meeting both the employers and the students. A weekly tutorial session helps with tracking progress and further visits are conducted if required.

# 5.4 Employability

The Panel were assured that "soft skills", such as time management, teamwork, communication skills etc., were addressed in all modules, as they all incorporate elements which require group work, presentation and time management. The panel noted that, in addition, Personal Qualities in an IT Context module would specifically focus on such skills raising awareness of the skills, knowledge and work-based activities that are essential when working within an IT environment.

#### 5.5 Staff

In response to the Panel's query if any individuals from industry teach on the programme, the Team explained that currently there are no industry professionals teaching, although two members of staff who recently joined the team came from an industry background. Having said that, the Team assured the Panel that if a demand arises, an industry professional would be sourced.

#### 5.6 Internationalisation

Although currently no international placement opportunities were offered to students on the programme, the Team explained that they were looking at expanding existing links the College has with Malta, currently utilised by the Level 3 students. International and cultural awareness was communicated to the students within the modular content, by the use of worldwide examples and case studies, and the understanding that legal and ethical aspects differ around the world.

# 5.7 Student Support

The Panel queried how the Team would provide support to students with diverse backgrounds, such as those coming from an industry background, specifically mature students, who might lack the study skills required. The Team assured the Panel that, although mature students, on average, form a very small part of the student cohort (each year around 3 students), they would have robust mechanisms in place to support students having difficulties with their studies, explaining that following the induction, each student would have access to pastoral care and access to weekly guidance and support on a one to one bases.

The Team, aware that mathematics would have the potential to pose a challenge to many students, assured the Panel that in relation to Computational Mathematics module, additional support would be provided. An additional timetabled lab hour each week was offered as well as other techniques such as homework and flipped classes, all of which have already proven successful with previous cohorts.

#### 5.8 Content

The Panel discussed the content of various modules with the Team. The Panel felt that module description and syllabi should be revised to clearly reflect the topics covered. The Panel also felt that the reading list in each module should be reviewed and updated where necessary.

- Cyber Security The Team assured the Panel that the comments detailed in their CA7 forms were addressed and the module content was revised accordingly.
- Computational Mathematics and Computer Systems Following a discussion about the content covered, the Panel asked the Team to include a more detailed description of the topics covered in both module descriptions.
- Network Technology Panel requested the module content include "new modern technologies" to allow for adaptability in this rapidly changing field.
- Introduction to Programming The Panel asked that the module description would specify that C Sharp was the language of choice for this module, and suggested the Team consider incorporating also Python.

#### 5.9 Group Work

The Team assured the Panel that they ensure group work is progressing smoothly and that all members of the team have contributed by conducting weekly meetings as well as reviewing minutes detailing each member's contribution. This ensures that if issues arise they are identified and addressed at an early stage. Groups are encouraged to use Discord and utilised the shared drive for smooth communication and progress. The panel noted that although peer assessment might be used, it would not be part of the formal assessment.

## 6 CONCLUSIONS

The Panel commended the team on the following aspects evident from the validation:

- A well prepared set of documents with detailed commentaries provided for review.
- The course team is composed of academics who have a balanced mix of appropriate qualifications and professional background. The course team received very positive feedback from QAA in 2018.
- The students noted the good level of support afforded by the course team.
- The programme provides very clear pathways towards BSc/BEng to enable students to progress their education to the second year of Ulster University programmes.
- Work-based learning provides real-world experience to the students and enhances their employability. This is well complemented with the BEST/SPICE system for placement management.
- Engagement with the FPM is a major strength of the course and its course team.

The Panel agreed to recommend to the Academic Standards and Quality Enhancement Committee that the programme be approved for a period of five years (intakes 2019/20 to 2023/24 inclusive) subject to the conditions and recommendations of the Panel being addressed and a satisfactory response and a revised submission being forwarded to the Academic Office **by 5 March 2019** for approval by the Chair of the Panel.

## Conditions

- That matters of detail and clarification as identified in the notes by Academic Office to the Panel are addressed;
- That optional modules would only be offered at the Bangor campus, and that the Downpatrick and Lisburn provision would be fully compulsory. This must be clearly presented in the course document and in promotion of the course, in line with CMA regulations; and
- ii) That the document and module descriptors be updated in line with the discussion with the panel.

## Recommendations

- i) That the assessment strategy be reviewed to incorporate appropriate contemporary approaches;
- ii) That details of stakeholder engagement in the revalidation process and employer engagement in the delivery be provided;
- iii) That the currency of the reading list in all modules be reviewed;
- iv) That details of marketing strategy at the programme level be provided;

- v) That a description of the approaches to effective management of group work be included;
- vi) That the level of the module learning outcomes be reviewed to ensure appropriateness of level; and
- vii) That the assessment of the work-based learning module aligns with Ulster University's workload equivalence (refer to the University template).

## 7 APPRECIATION

The Chair thanked the Panel members and, in particular, the external members, for their valuable contribution to the validation process.

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