Panel Report Phase 2, Programmatic Review of Schools of Engineering,

School School of Building & Civil Engineering

Date 18 – 19 March 2014

Programmes Submitted for Review

Higher Certificate in Science in Construction
Bachelor of Science in Construction Management
Bachelor of Science (Honours) in Construction Management
Bachelor of Science in Quantity Surveying
Bachelor of Science (Honours) in Quantity Surveying
Postgraduate Diploma in Science in Construction Project Management
Master of Science in Construction Project Management

Department of Construction Sub-Panel

Chairperson: Mr. Tom Dunne,

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Panel Members

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Mr Kevin Coleman, Department of Construction

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Learner Representatives

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Tara O'Connor, Bachelor of Science (Honours) in Quantity Surveying, Year 1
Bill Cooper, Bachelor of Science in Construction Management, Year 2
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Caolan O'Donnell, Bachelor of Science (Honours) in Quantity Surveying, Year 4
Greg Hayes, Master of Science in Construction Project Management
Leoin Sexton, Master of Science in Construction Project Management

Graduate Representative

Jason Collins

Employer Representatives

Michael Barrett, Michael Barrett Partnership Declan O'Brien, PJ Hegarty & Sons Karl Slyne, Karl Slyne Quantity Surveyors Ltd. Frank Brennan, BAM Property Ltd.

Overall Recommendation on Revalidation

The Panel recommends continuing validation of the

- Higher Certificate in Science in Construction
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- Bachelor of Science (Honours) in Construction Management
- Bachelor of Science in Quantity Surveying
- Bachelor of Science (Honours) in Quantity Surveying
- Postgraduate Diploma in Science in Construction Project Management
- Master of Science in Construction Project Management

for a further period of five years, subject to the implementation of all requirements and ensuring the earliest possible implementation of the recommendations set out below.

Background

The Department of Construction comprises 11 whole-time academic staff, supplemented by staff from other departments as necessary. There are currently 124 full-time and 5 part time students engaged in a range of programmes.

The primary focus of the department is in undergraduate and postgraduate education in the construction professional disciplines of Construction Management, Quantity Surveying and Construction Project Management. Research in these areas is a developing area with the

development of final year undergraduate and postgraduate research dissertations as well as individual research interests.

The Department values its links with the relevant professional bodies and emphasises the importance of professional body accreditation of its programmes. Programmes offered by the Department are accredited by the Chartered Institute of Building, Society of Chartered Surveyors Ireland and the Chartered Institution of Civil Engineering Surveyors.

The most significant programme developments in the department since the previous Programmatic Review include:

- 1. The development of two Level 8 ab-initio honours degree programmes in Construction Management and Quantity Surveying that run concurrently with and complement the existing ladder route of Bachelor of Science + 1 year Bachelor of Science (Honours) add-on.
- The launch of Taught Masters and Postgraduate Diploma Programme in Construction Project Management. This development has been primarily driven by student demand to progress to postgraduate level studies and advance their skills and knowledge in specialist areas. It has provided the opportunity for students from both BSc Honours programmes to progress to Level 9 Masters Studies in CIT.
- 3. The development of a short part-time course in Mechanical and Electrical Quantity Surveying at NFQ Level 8. This development has been driven by an identified industry demand. Whilst there has been significant interest in the course from prospective students the current planned part time delivery is unsuitable, a more appropriate blended distance or online learning mode of delivery is currently being considered.

Challenges

Higher education Institutions in Ireland are generally experiencing a continued fall in demand for Construction-related programmes in recent years. Overall student numbers within the Department have fallen from a peak of 432 in 2009/2010 to a present number of 129 and expected to fall further. First year enrolments have similarly fallen from a peak of 133 in 2009/2010 to 32 in the current academic year spread across four programmes. In tandem, CAO points for programmes offered by the Department have fallen dramatically, in particular, for the Level 7 construction programmes falling from 300 points in 2007/2008 to 200 points in 2013/2014.

Programme Changes Proposed

Since the last Programmatic Review, the Department has availed of the module and programme amendment processes to regular review and update their offerings. The following are the changes proposed as part of this review

Higher Certificate in Science in Construction Bachelor of Science in Construction Management Bachelor of Science in Quantity Surveying

- 1. Additional electives added in areas such as languages.
- 2. Updating of module descriptors such as change to title; change to learning outcomes for clarity; updating indicative content for relevancy; learning resources checked and updated.

Bachelor of Science (Honours) in Construction Management

1. Additional electives added in areas such as languages.

- 2. Updating of module descriptors such as change to title; change to learning outcomes for clarity; updating indicative content for relevancy; learning resources checked and updated.
- 3. Additional 5 credit Work Placement elective added to Year 4. Students may undertake this placement during the preceding summer.

Bachelor of Science (Honours) in Quantity Surveying

- 1. Additional electives added in areas such as languages.
- 2. Updating of module descriptors such as change to title; change to learning outcomes for clarity; updating indicative content for relevancy; learning resources checked and updated.
- 3. Additional 5-credit Work Placement elective added to Year 4. Students may undertake this placement during the preceding summer.
- 4. Re-establishment, as a discrete entity in the final year, of the integrated, problem-based learning module Project Evaluation & Procurement (PEP). Previously embedded within a variety of related modules, it forms the key learning vehicle for students by integrating taught material from earlier modules with self-directed research to create a coherent entity, demonstrating the commercial management of a hypothetical development from inception to completion.

Postgraduate Diploma in Science in Construction Project Management Master of Science in Construction Project Management

- 1. Additional electives added.
- 2. Updating of module descriptors such as change to title; change to learning outcomes for clarity; updating indicative content for relevancy; learning resources checked and updated.

Finding

Due to the challenging external environment for construction related programmes, the sustainability of the present range of programmes is a cause of concern. The panel notes and supports the range of initiatives undertaken by the Department, School and Faculty to ensure the ongoing viability of their programmes in a number of thematic areas. These include:

Student Recruitment

- a) Initiatives to maintain and increase enrolments through the CAO system such as schools visits, careers guidance counsellors open days and the Faculty Engineering Roadshow.
- b) Investigating the potential of online and other flexible delivery methods to attract learners to the programmes

Student Retention and Engagement

c) Participating in Institute-wide retention and engagement initiatives such as the Good Start programme

Programme Development

d) Developing a range of proposals for funding under the Springboard initiative.

Requirement

The Department would complete the internal quality assurance in regard to module descriptors and programme schedules.

Recommendations

The panel recommend the following

- Building Information Modelling: In conjunction with the other departments within the School, the department should seek to develop a leadership position within the region in the area of Building Information Modelling. The department should incorporate BIM into the curriculum as soon as practicable, offer modules and/or special purpose awards in the area to be delivered in a flexible manner and organise CPD events such as seminars and conferences for local industry.
- 2. New Programme Development: The department should look at the feasibility of developing new programmes in areas such as Building Surveying, Real Estate, Property Development Management, Valuation etc. It may also wish to consider developing programmes in the area of Facilities Management in conjunction with colleagues in the Mechanical and Electrical Engineering departments.
- 3. Knowledge exchange with Industry: During conversations with employers and learners, it emerged that both parties were interested in developing the relationship between the workplace and the curriculum. Therefore the department should seek to further develop and enhance the opportunities for learners to interact with the workplace. This could be by increased use of site visits, industry guest lectures, industry based projects etc.