

**Institiúid Teicneolaíochta Luimnigh
Limerick Institute of Technology**

Dámh, Eolaíocht Fheidhmeach, Innealtóireacht agus
Teicneolaíocht
Faculty, Applied Science, Engineering and Technology

Roinn na Timpealachta Tógtha
Department of Built Environment

Report of Peer Review Panel

Programmatic Review

of the

Department of Built Environment

May 2016

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1. INTRODUCTION

This report outlines, in summary form, the proceedings of the Department of the Built Environment programmatic review in the Faculty of Applied Science, Engineering and Technology and the findings of the External Peer Review Group in May 2016. The programmatic review was undertaken in accordance with Section 3.8 of the LIT document '*Academic Council Regulations and Procedures for Taught Programmes: Academic Year 2015/2016: Part 1*' (ACRP). The report of the Programmatic Review Panel is the academic judgement of a peer group on the academic standard and quality of the programmes of the Faculty. It confirms to the Institute the standard of the programmes in a publicly accountable manner.

2. GENERAL INFORMATION

2.1 Higher Education Provider

Institute:	Limerick Institute of Technology
Faculty:	Faculty of Applied Science, Engineering and Technology
Department:	Built Environment
Date of Review/Visit:	May, 4 th and 5 th 2016
Venues:	Board Room, Moylish Park Campus HEAC Board Room, Moylish Park Campus

2.2 Programmes Evaluated

Department of Built Environment

Masters of Science in Quantity Surveying (Level 9)
Bachelor of Science (Honours) in Quantity Surveying (Level 8)
Bachelor of Science (Honours) in Property Valuation & Management (Level 8)
Higher Certificate in Property Valuation & Management (Level 6)

Bachelor of Engineering in Civil Engineering (Level 7)
Bachelor of Science (Honours) in Civil Engineering Management (Level 8)
Bachelor of Science (Honours) in Construction Management (Level 8)
Built Environment – Undenominated

Higher Certificate in Construction (Level 6)
Bachelor of Science in Site Management (Level 7)
Bachelor of Science in Health & Safety (Level 7)
Higher Certificate in Construction Practice (Level 6)
Bachelor of Science in Management (Craft) (Level 7)

Bachelor of Arts in Interior Design & Technology (Level 7)
Higher Certificate in Sustainable Building & Energy Engineering (Level 6)
Bachelor of Science in Sustainable Building & Energy Engineering (Level 7)
Bachelor of Science (Honours) in Energy Management (Built Environment) (Level 8)
Lifelong Learning Programmes

2.3 External Programmatic Review Panel of Expert Assessors

Mr. Billy Bennett,
Letterkenny Institute of Technology (Chairperson)
Mr. John Buckley,
DTZ Limerick
Mr. Des Walsh,
Cork Institute of Technology
Mr. Sean Carroll,
John Paul Construction
Mr. Thomas Murray,
Cork Institute of Technology
Mr. Chris Hannevig,
Sure Engineering
Mr. Michael Pledge,
Thompson Architects & Designers
Mr. John Scahill,
Galway/Mayo Institute of Technology

2.4 Institute Staff

Mr. Terry Twomey, President
Mr. Paschal Meehan, Head of Faculty, Applied Science, Engineering and Technology
Ms. Maria Kyne, Vice-President of Academic Affairs and Registrar
Mr. Pat Gill, Head of Department of Built Environment
Mr. Seamus Hoyne, Head of Department of Flexible Learning
Ms. Frances O'Connell, Assistant Registrar

Department of Built Environment

Mr. Peter Armstrong	Mr. Niall McPartlin
Mr. Shane Barron	Mr. Gerard Moore
Mr. Michael Beasley	Mr. Michael James Mooring
Mr. Dermot Canavan	Mr. John O'Brien
Mr. Alan Carr	Mr. Aidan O'Connor
Mr. Redmond Condon	Ms. Maria O'Kelly
Mr. John Gabriel Corcoran	Ms. Nora O'Mahony
Ms. Sue Corcoran	Mr. Eamonn O'Riordan
Mr. John Costigan	Mr. Kevin O'Riordan
Ms. Máire Daly	Mr. Michael O'Shea
Mr. Liam Daly	Mr. Seumas B. O'Sullivan
Mr. Pat Gill	Mr. Peter Ronan
Mr. Paul Greaney	Mr. Gerry Ryan
Ms. Siobhan Guinane	Mr. Sajjad Sajjadi
Mr. Ger Harty	Dr. Rita Scully
Mr. David Honan	Mr. Paul Sharpe
Mr. Greg Irwin	Mr. Paul Vesey
Mr. Noel Kenny	Mr. Anthony Wallace
Mr. Oliver Kirwan	Mr. Brian Wallace
Mr. Con Lucey	Ms. Rosarii Whelan
Ms. Katherine Maughan	Mr. Ger Hartigan
Mr. John McDonald	Ms. Dawn Kennedy

Mr. Ailbe McDonnell
Mr. Michael McGuire

Mr. Fergal Hennessy

Padraig Kirby, Librarian

2.5 Selected Stakeholders

2.5.1 Employers/Industry & Alumni Representatives

Mr. Graham Ahern	Roadselm Construction
Mr. Gus Ahern	Self Employed
Mr. Richard Brown	L&M Keating Ltd.
Mr. Jonathan Cronin	CuddyQS
Mr. John Dee	Roche Ireland
Mr. Conor McBrearty	AECOM
Ms. Emma McKendrick	Punch Consulting Engineers

2.5.2 Current Students

Ms. Eunice Bonina	2 nd	Interior Design & Technology
Ms. Claire Corbett	2 nd	Interior Design & Technology
Ms. Patricia Curtin	1 st	Interior Design & Technology
Ms. Chloe Danforth	1 st	Interior Design & Technology
Mr. Ian Fox	3 rd	Quantity Surveying
Mr. John Galvin	2 nd	Construction Management
Mr. Sean Hartnett	3 rd	Interior Design & Technology
Mr. Paddy Healy	1 st	Quantity Surveying
Ms. Patricia Horan	2 nd	Interior Design & Technology
Ms. Koay Jin June	3 rd	Quantity Surveying
Ms. Katelyn McDonnell	1 st	Interior Design & Technology
Mr. Johnathan Moloney	2 nd	Construction Management
Mr. Tony Murphy	3 rd	Quantity Surveying
Ms. Sinéad McGillacuddy	2 nd	Interior Design & Technology
Ms. Laura O'Donnell	4 th	Property Valuation and Management
Mr. Michéal O'Flaherty	4 th	Energy Management
Ms. Theodora Ruseva	2 nd	Interior Design & Technology
Ms. Marie Somers	3 rd	Interior Design & Technology
Mr. Killian Swift O'Halloran	2 nd	Construction Management

2.6 Documentation

2.6.1 Critical Self-Study - Faculty of Applied Science, Engineering and Technology

2.6.2 Critical Self-Study - Department of Built Environment

2.6.3 Masters of Science in Quantity Surveying (Sustainable Public Building) (Level 9)
Masters of Science in Quantity Surveying (Sustainable Civil Engineering) (Level 9)
Masters of Science in Quantity Surveying (Sustainable M&E Engineering) (Level 9)

2.6.4 Bachelor of Science (Honours) in Quantity Surveying (Level 8)

- 2.6.5 Bachelor of Science (Honours) in Property Valuation & Management (Level 8)
Higher Certificate in Property Valuation & Management (Level 6)
- 2.6.6 Bachelor of Engineering in Civil Engineering (Level 7)
Bachelor of Engineering in Civil Engineering (add-on) (Level 7)
Higher Certificate in Engineering in Civil and Environmental Engineering (Level 6)
- 2.6.7 Bachelor of Science (Honours) in Civil Engineering Management (Level 8)
- 2.6.8 Bachelor of Science (Honours) in Construction Management (Level 8)
- 2.6.9 Built Environment - Undenominated
- 2.6.10 Bachelor of Arts in Interior Design & Technology (Level 7)
Higher Certificate in Interior Design & Technology (Level 6)
- 2.6.11 Bachelor of Science (Honours) in Energy Management (Built Environment) (Level 8)
Bachelor of Science in Sustainable Building & Energy Engineering (Level 7)
Higher Certificate in Sustainable Building & Energy Engineering (Level 6)
- 2.6.12 Lifelong Learning Programmes
- 2.6.13 Curriculum Vitae of Staff

3. FINDINGS AND RECOMMENDATIONS OF EXTERNAL PROGRAMMATIC REVIEW PANEL

3.1 Main Findings

The External Validation Panel of Assessors recommends the on-going approval and re-validation for a further five years of the submitted programmes and associated amendments in the Department of the Built Environment, Faculty of Applied Science, Engineering and Technology, subject to the following condition and recommendations.

3.2 Condition

3.2.1 The programme learning outcomes and the module learning outcomes for all programmes should be revised to ensure that they are at the appropriate NQF level and are written using measurable and assessable active verbs. Training workshops on writing learning outcomes should be offered for staff.

Mapping of the programme learning outcomes and module learning outcomes should be revised to ensure the mapping relates to relevant modules and module learning outcomes only. The programme learning outcomes should be aligned with the appropriate QQI award standards.

The necessity for failed elements should be reviewed in the programmes. Failed elements may be necessary in exceptional circumstances (e.g. where there is a mandatory H&S requirement). If retained, the failed element requirement should be appropriately recorded in the module descriptor and on the Approved Programme Schedule.

This condition should be completed within twelve months from the date of this report.

3.3 Recommendations

3.3.1 The programmatic review process of the Institute should be revised to increase the allocated time for faculty, department and programme reviews. The external panel should include a learner representative. International input in the programmatic review panel should be considered. Appropriate orientation/briefings should be provided for panel members who do not have experience of the programmatic review process. An executive summary of the substantial documentation should also be provided.

3.3.2 The Department should reconsider the year-long module structure with a view to moving to a semesterised system for the next programmatic review. This will require significant planning to address the challenges associated with a semesterised system and to capitalise fully on the benefits of such a system.

3.3.3 The Department should develop a life-long learning strategy. Opportunities should be identified for part-time, flexible and online delivery of programmes for industry and part-time students. (e.g. Some industry needs could be identified via the Limerick for Engineering initiative.)

3.3.4 Building on LIT's Research Strategy and collaborative cluster activity (e.g. Structured PhD Programme), a Departmental Research Strategy should be developed with realistic objectives (including research Masters for students, publications, staff PhDs).

- 3.3.5 The Departmental SWOT analysis should be revised to reflect strategic opportunities and threats facing the Department and to generate a clear vision for the Department for the next five years.
- 3.3.6 The panel noted that significant changes to programmes since the last programmatic review were not strongly in evidence in the self-evaluation documentation. Using the formal LIT programme revision process, the Department should revise, review and record changes in the programmes and modules on an ongoing basis to reflect changes in the external environment.
- 3.3.7 Subject to resources, the Department should work toward the provision of individual work spaces for students on the interior design programme. An internal review of the interior design programme should be conducted, in light of the student feedback received during the panel visit.
- 3.3.8 Student recruitment activities should be further developed at Departmental level, including using current students, recent graduates and industry representatives to promote the programmes.
- 3.3.9 Building on current initiatives, such as Maths Boot-Camp, the Department should develop targeted retention initiatives to address programmes and modules with lower pass rates. An accredited peer-assisted learning programme would provide significant benefits.
- 3.3.10 Staff should be supported and encouraged in pursuing further study and CPD opportunities, including doctoral studies. Further activity at PhD level should form part of the Department's research strategy; it is particularly important in the context of delivering level-9 programmes. The Institute and Faculty should consider appropriate incentives including teaching allocation concessions.
- 3.3.11 A structured accredited work placement module should be included on the level-7 programmes. Semesterisation would facilitate shorter work placements on these programmes. Students and industry representatives endorsed the provision of work placements during the panel visit.

In addition, all student work placement activities (e.g. three-month block, post-finals work placement) should be re-organised via accredited work placement modules. Supplemental or special purpose awards may be useful in this regard.

Students should be adequately prepared for work placements (e.g. advance site visits).

This recommendation was strongly recommended by the external panel.

- 3.3.12 Module resources (e.g. books, journals) should be updated to ensure that all resources are current in all modules.
- 3.3.13 All programme reviews should include direct input from industry, graduates and learners, as indicated in the Institute's regulations and procedures. This input was not evident in a number of the programmes presented. Review processes should be formally recorded and reported on the SER report.
- 3.3.14 Module descriptors should be sufficiently detailed and specific in content, while retaining the flexibility to allow for new technology, legislation, etc.
- 3.3.15 The existing provision on BIM in the Built Environment programmes should be enhanced and adequately addressed, perhaps as additional or separate modules. Excel should also be adequately addressed across a range of programmes.

This recommendation was strongly recommended by the external panel, employers/industry & alumni representatives

3.3.16 A plan should be put in place to guide students in course/stream selection in respect of the Higher Certificate and common entry programmes.

This recommendation was strongly recommended by the external panel, employers/industry & alumni representatives

3.3.17 The mathematics components in the civil engineering and construction practice programmes should be strengthened.

3.3.18 The feedback received by the programmatic review panel from students should be reviewed with a view to addressing the issues raised, including the following:

Ensure access to up-to-date appropriately specified computers

Ensure students are not over-assessed

Offer integrated assignments

Provide timely feedback on assignments and tests

Ensure timely support and feedback to students on all aspects of work associated with the current year-long industry placement. This aspect of the course delivery may currently be under-resourced.

Include work placements (even of short duration) on level-6 and level-7 programmes, and appropriate preparation for all placements.

Ensure all students get assessment schedules at the beginning of the academic year

Include Excel training in a range of programmes

Review the organisation of the interior design programme. (A number of significant issues were raised by students with the panel.)

Provide an option to submit work online electronically

Increase the provision of necessary e-books

Address the cost of assignment printing and binding: some hardcopies of course materials may be provided by lecturers

Ensure students have some face-to-face contact while pursuing remote modules. (Interaction with a lecturer should be arranged.)

3.3.19 The feedback received by the programmatic review panel from the industry representatives should be reviewed with a view to addressing the issues raised, including the following:

Increase the weighting of the Building Services module in the QS programme

Include a range of software packages in the QS programme (e.g. Primavera, MS Project)

Provide opportunities for developing M&E expertise (e.g. special-purpose awards, CPD)

Offer a part-time programme in building surveying (e.g. block delivery over a couple of years)

Enhance use of IT packages among students (e.g. Excel, Powerpoint)

Train students in report writing and presentation skills

Enhance mathematics in civil engineering programmes and in entry requirements

Enhance BIM and Revit training for students

Increase level-6 and level-7 technician output (Reduce the emphasis on level-8.)

Focus on engineering fundamentals, with less emphasis on niche areas

Foster work placements (Work placement makes an 'enormous difference' to the employability of a graduate.)

3.3.20 The panel expressed significant concern in relation to the BSc in Management (Craft). The panel noted that LIT proposes to revisit this programme as a potential new apprenticeship programme. The panel recommend that the programme should go through a separate review and revalidation process before running again. The panel were particularly concerned about the current progression options and entry requirements for the programme.

3.4 Commendations and Observations

3.4.1 The panel commended the Faculty and Department on the Critical Self-Study documents, which were received by the panel well in advance of the panel visit.

3.4.2 The panel commended the Faculty on setting out six key requirements of the programmatic review process, namely:

- (i) programme structure
- (ii) assessment
- (iii) work placement
- (iv) resource neutral changes
- (v) transition
- (vi) regional cluster programme portfolio

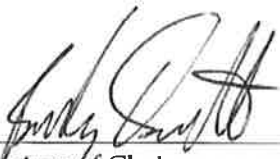
3.4.3 The panel commended the commitment demonstrated by the staff and the positive engagement of staff with the panel. The exchanges were open, courteous and frank.

3.4.4 The panel commended the links with professional bodies and industry, and the positive feedback from industry representatives, who met with the panel (e.g. Limerick for Engineering).

3.4.5 The panel commended the positive feedback from students on the support available to students, including mature students (e.g. maths grinds via the Learning Support Unit (LSU)).

3.4.6 The panel acknowledged the constraints due to the economic downturn, the state of the public finances and the Employment Control Framework (ECF). The dearth of adequate accommodation within the LIT Moylish campus was also recognised. The potential of the Coonagh addition was referenced.

- 3.4.7 The panel noted the links within the Shannon Consortium. The local cluster (LIT, UL, MIC) was acknowledged.
- 3.4.8 The panel noted the importance of research output and staff development for the sector in the current dynamic and changing environment.
- 3.4.9 The panel thanked the President for the opportunity to participate in the programmatic review and for the hospitality.
- 3.4.10 The panel were very supportive of the inclusion of existing work placements in the academic programmes.
- 3.4.11 The panel lauded the ongoing professional accreditation of programmes within the Department.
- 3.4.12 The panel stated that the absence of the architectural technician programme had left a 'huge hole' in the region.
- 3.4.13 During the panel visit, many students mentioned the extra one-on-one support provided outside of class time by members of the academic staff. The panel warmly welcomed this excellent commitment and student-centred approach by the staff.
- 3.4.14 While recognising the importance of CAD today, the panel noted the continuing importance of accurate sketching, particularly on-site.
- 3.4.15 The panel noted the removal of student choice in the removal of electives. The panel concurred with the proposed changes.
- 3.4.16 The panel observed that there was an absence of gender balance in the external panel.
- 3.4.17 The panel noted the importance of registration for sixty credits for full-time student funding.
- 3.4.18 The panel raised the possibility of accrediting the 'year out' in progression arrangements.
- 3.4.19 During the panel visit, the panel requested the provision of external examiner reports and programme board reports as these are relevant under the LIT programmatic review process.
- 3.4.20 The panel were impressed by attendance levels in a mathematics class: it is timetabled to occur after a practical class.
- 3.4.21 The panel commended the Department on arranging site visits. They represent a valuable experience and motivator for the students and a real engagement with industry.



Signature of Chairperson and Date

June 2, 2016.