Letterkenny Institute of Technology

Report of the Panel of Assessors

PART 1 GENERAL INFORMATION

SCHOOL/DEPARTMENT:

Department of Civil Engineering and Construction

DATE OF VISITATION: 7 June 2017

PROGRAMMES EVALUATED:

BSc (Hons) in Construction Management

Embedded Exit Awards: BSc in Construction Management (level 7) and Higher Certificate in Science in Construction Technology with Building Information Modelling (BIM)

Minor Award Certificate in 4D BIM (Navisworks)

MEMBERS OF PANEL OF ASSESSORS:

Maria Kyne, Head of Faculty, School of Applied Science, Engineering & Technology Limerick IT

Selina Kavanagh, Chief Assistant Technical Services Officer, Health Service Executive

Dr Stephen Nash, Lecturer Civil Engineering, NUI Galway

Robert Gillan, Chief Engineer, Jennings O' Donovan & Partners Ltd, Sligo

George Brolly, Director, Hamilton Architects

Secretary to Panel: Dr Lynn Ramsey

INSTITUTE STAFF

Anne Boner, Tony Carr, Austin Sammon, Helena Quinn, Antoin Mac Gabhann, Anna Meehan, Patrick Mangan, Ronan Gallagher, David Wylde, Rory Mc Shane, Finbarr Dunwoody, Eleanor Diver, Marie Kelly, Paddy Lennon, Gerry Kelly, Noreen Durning, Attracta Mc Cay, Michael Carr, Brian Campbell, Catherine Lynch

PART 2 FINDINGS OF ASSESSORS

The Panel of Assessors is satisfied that the proposal adequately addresses the following criteria:

(1) Education and Training Requirements

The programme is consistent with the Institute's mission, avoids redundant provision and makes efficient use of resources (collaborating where this is beneficial). This is a new full-time, 240 credits, 4 year ab initio honours degree which may be offered part-time through ACCS. Existing level 6 and 7 programmes and minor awards are combined into this new programme. A five week work placement module is offered in semester 6.

(2) Unity

There is an underlying unifying theme and the modules are bonded by interactions which are either implicit or explicit. The proposal demonstrates how the standard (of knowledge, skill and competence), determined by QQI for the named award to which it is proposed the programme will lead, evolves throughout the programme as a whole.

(3) Teaching and Learning

The proposed approach to teaching and learning is clearly indicated and justified. Traditional delivery methods are proposed for this programme. A multi-disciplinary project with other disciplines in the Department of Civil Engineering and Construction is proposed as part of the programme.

(4) Learner Assessment

The learner assessment methods are fully elaborated and consistent with QQI's policy on fair and consistent assessment. The assessment methods are capable, among other things, of demonstrating attainment of the standards of knowledge, skill and competence, determined by QQI, for the related award. Coursework forms a large part of the assessment of the learning outcomes.

(5) Resources

The proposed staffing levels are appropriate and the levels of qualifications and competence of the staff is sufficient to deliver the programme. The necessary facilities available in terms of accommodation, equipment, library and information technology resources are satisfactory to support the proposed programme. It should be noted that if the Department of Civil Engineering and Construction is successful in attracting the proposed 24 students per year into the programme, then additional staffing and equipment may be required for successful delivery of the programme.

(6) Quality Assurance

The proposal demonstrates how the Institute's quality assurance procedures have been applied in the development of the proposed programme and that satisfactory procedures exist for the on-going monitoring and periodic review of programmes.

(7) Programme Title and Award Title

The award title is consistent with the named awards determined by QQI. The programme title is clear, accurate, succinct and fit for the purpose of informing prospective learners and other stakeholders.

(8) QQI Standards

The learning outcomes of the programme are stated in such a way that compliance with the appropriate QQI standard is demonstrated.

(9) Access Transfer and Progression

This programme incorporates the procedures for access transfer and progression that have been established by the NQAI and is consistent with QQI policy in accommodating a variety of access and entry requirements. Progression opportunities for graduates from the programme include Masters by research in the LYIT School of Engineering.

PART 3 RECOMMENDATIONS

(For the attention of the Academic Council)

The Panel of Assessors advises the Academic Council that approval of the programme is recommended. The Institute and the School/Department should take cognisance of the following Panel recommendations:

1. The programme team should consider increasing the mathematics content of the programme

Learners have modules Maths 1 & 2 which is deemed appropriate for a Higher Certificate in Science/BSc / BSc (Hons). The first year module Land Surveying is mathematics based and there is significant mathematical content in years 2 and 3 in the following modules: Surveying 1 & 2, Digital Land Surveying, Measurement & Construction Economics, Structural Design and Materials, Financial Management, Building Energy Management.

2. The programme team should review the programme and consider strengthening the project management content and its application using appropriate software packages.

Project Management theory will be introduced in Integrated BIM Project; the module content has been updated (as attached). Scheduling software is used in Technical Writing & Communications, Site Organisation, Digital Communications, and Professional Practice. Management theory is applied in BIM for VDC (Navisworks) & Construction Management 1 &2 (Microsoft Project).

3. The programme team should review the programme and consider strengthening the coverage of project risk assessment and building pathology.

Project Risk Assessment is included in Construction Management 2 and also in Measurement and Construction Economics. Building pathology is introduced in Construction Technology 1 and will be developed throughout technical modules such as the (retitled) Advanced Construction Technology (title deemed more appropriate than Construction Technology 3).

4. The programme team should consider the delivery of some modules using a blended learning model.

Blended learning models will be developed in line with School of Engineering policy and as resources allow. 85% of lecturers use the learning platform Blackboard that learners can access remotely. To cater for part-time learners a range of modules are offered in block as

- part of 10 credit certificates, e.g. Measurement & Construction Economics, Land Surveying, Financial Management & Building Energy Management.
- 5. As coursework forms a large part of the assessment of learning outcomes on the programme, the panel recommends that the coursework assessment elements are described in the module descriptors. This is particularly important for modules which are assessed 100% by coursework.
 - LYIT standard module descriptor template is followed giving indicative content. Assessment details are available on assessment schedules.
- 6. For modules which are 100% continuously assessed, the panel recommends re-assessment opportunity should be provided for the autumn examinations.
 - Currently provided.
- Assessments need to specifically state which learning outcomes they are addressing
 This will be considered in the coming academic year.
- 8. The panel notes that the programme contains embedded exit awards at levels 6 and 7, this should be included explicitly in the programme documentation.
 - Embedded awards are included in PPE Part B Review of programmes document, section 2.5, 2.8.4, 2.16.2 and 2.16.3 and appendices.

PART 4 PROPOSED PROGRAMME SCHEDULE(S) Please attach when submitting the response to the report to the Chair.

3.5 Programme Schedule

Title of Award

BSc (Hons) in Construction Management

Area Of Specialisation:

BIM, Contracts Management, Dispute Resolution

Learning Mode Offered:

Fulltime and/or Part-time

Date Effective:

September 2017

Stage 1 Semester 1

nber		Title of examination	status	cre			ntact h			Alloc	ation o	of mark	(S	
Module number	Semester	module	Module sta	Level	Number	Lecture	Tutorial	Practical	Total	CA	Project	Practical	Final	Max
1	1	Construction Technology 1	М	6	5	3		1	4	25			75	100
2	1	Building Services 1	М	6	5	3	1		4	25			75	100
3	1	Elementary CAD	М	6	5			4	4			100		100
4	1	Mathematics 1	М	6	5	3	1		4	25			75	100
5	1	Physics 1	М	6	5	2		2	4	25			75	100
6	1	Technical Writing and Communication*	Ε	6	5			3	3	100				100
7	1	Land Surveying*	Е	6	5	1		3	4			100		100

^{*}Technical Writing & Communication or Land Surveying may be offered in semester 1 or 2

Stage 1 Semester 2

				ACC	CS	Con	tact h	ours		Allos	ation .	of marl		
nber		Title of examination	tus	cre	dits	(pe	week	:)		Alloc	ation	OI IIIdii	(5	
Module number	Semester	module	Module status	Level	Number	Lecture	Tutorial	Practical	Total	CA	Project	Practical	Final	Max
1	2	Construction Technology 2	М	6	5	3		1	4	25			75	100
2	2	Fire Technology 2	М	6	5	2		2	4	25			75	100
3	2	BIM Graphic Communications	М	6	5			4	4			100		100
4	2	Mathematics 2	М	6	5	3	1		4	25			75	100
5	2	Physics 2	М	6	5	2		2	4	25			75	100
6	2	Land Surveying*	Е	6	5			4	4			100		100
7	2	Technical Writing and Communication*	Е	6	5			3	3	100				100

^{*}Technical Writing & Communication or Land Surveying may be offered in semester 1 or 2

Stage 2 Semester 3

mber		Title of examination	status	ACCS credi			act ho	urs		Alloc	ation o	of mar	ks	
Module number	Semester	module	Module sta	Level	Number	Lecture	Tutorial	Practical	Fotal	CA	Project	Practical	Final	Мах
1	3	Architectural History and Conservation	М	6	5	2		2	4	40			60	100
2	3	Engineering Method and Electro Mechanical Drafting	М	6	5	2		2	4	100			100	100

3	3	Surveying 1	M	6	5	2		2	4	40		60	100
4	3	Advanced Construction Technology	М	6	5	3	1		4	25		75	100
5	3	Structural Design and Materials	М	6	5	3		1	4	25		75	100
6	3	Measurement & Construction Economics	М	6	5	2		2	4	25		75	100

Stage 2 Semester 4

mber		Title of examination	tus	ACCS			act hou	urs		Alloc	ation o	of mark	(S	
Module number	Semester	module	Module status	Level	Number	Lecture	Tutorial	Practical	Total	S	Project	Practical	Final	Max
1	4	Integrated BIM Project	М	6	10			6	6		100			100
2	4	Surveying 2	М	6	5	2		2	4	25			75	100
3	4	Renewable Energy Resources	М	7	5			4	4	25			75	100
4	4	Building Services 2	М	6	5	3	1		4	25			75	100
5	4	Site Organisation	М	6	5	3	1		4	100				100

Stage 3 Semester 5

mber		Title of examination	tus	ACCS			ect hou week)			Alloc	ation o	f mark	(S	
Module nur	Semester	module	Module sta	Level	Number	Lecture	Tutorial	Practical	Total	CA	Project	Practical	Final	Max

1	5	BIM for VDC	М	7	10			6	6		100			100
2	5	Financial Management	М	7	10	5	1		6	25			75	100
3	5	Digital communications	М	7	5			4	4			100		100
4	5	Statutory Approvals	М	7	5			3	3	40			60	100

Stage 3 Semester 6

mber		Title of examination	tus	ACCS credi			act ho	urs		Alloc	ation o	of marl	ks	
Module number	Semester	module	Module status	Level	Number	Lecture	Tutorial	Practical	Total	CA	Project	Practical	Final	Max
1	6	Document Control & Public Procurement	М	7	5	1	1	2	4	40			60	100
2	6	Building Energy Management	М	8	5	2		2	4	25			75	100
3	6	Digital Land Surveying	М	7	5			4	4	60			40	100
4	6	Professional Practice	М	7	5	3		1	4	40			60	100
5	6	Work Placement	М	7	10		2		2	100				100

Stage 4 Semester 7

<u>e</u>	ter	Title of	e	ACCS	Contact hours	Allocation of marks
Modu	Semes	examination	Modu	credits	(per week)	Allocation of marks

		module		Level	Number	Lecture	Tutorial	Practical	Total	CA	Project	Practical	Final	Max
1	8	Construction Management 1	М	8	10	2		4	6	100				100
3	5	Sustainable Construction Methods	М	8	10	3		2	6	40			60	100
3	8	Construction Law and Professional Ethics	М	8	5	3	1		4	25			75	100
4	8	Dissertation Proposal	М	8	5	1		2	3		100			100

Stage 4 Semester 8

mber		Title of examination	status	ACCS			act hou	ırs		Alloc	ation c	of mark	(S	
Module number	Semester	module	Module sta	Level	Number	Lecture	Tutorial	Practical	Total	S	Project	Practical	Final	Max
1	8	Construction Management 2	М	8	10		6		6	100				100
2	8	Financial Information & Decision Making in Construction	М	8	5	3	1		4	25			75	100
3	8	Dispute Resolution and Mitigation	М	8	5	2	1		3	100				100
4	8	Dissertation	М	8	10		2	2	4		100			100

Programme Evaluation Report Approved by:

Maria Kyne Kyn **Chair to Panel**

(Head of Faculty, Limerick IT, (Chair))
Date 3006/17

(Registrar, Letterkenny IT)
Date $\frac{10/7/17}{}$.