



## Report of External Peer Review Group for the Programmatic Review of:

<b>Named Award:</b>	Bachelor of Engineering
<b>Programme Title(s):</b>	Bachelor of Engineering (Hons) Energy Engineering L8 Bachelor of Engineering Energy Engineering L7 L8 (+1 year)
<b>Exit Award(s):</b>	Higher Certificate in Energy Engineering
<b>Award Type:</b>	Ordinary Degree Honours Degree
<b>Award Class:</b>	Major
<b>NFQ Level:</b>	Level 7 Level 8
<b>ECTS / ACCS Credits:</b>	180 240
<b>Minor Award(s):</b>	None
<b>Location:</b>	Galway

### Panel Members

Name	Position	Organisation
Dr Brendan McCormack	Chairperson	Institute of Technology Sligo
Dermot O'Donovan	Secretary	Galway-Mayo Institute of Technology, Letterfrack
Dr David Tormey	IOT Member	IT Sligo
Prof David Timony	University Member	University College Dublin
David Farrell	Professional Practitioner	ESB
Mark Gillan	Institute Graduate	Allergan Pharmaceuticals

### Programme Board Team

Paul Ryan	Evelyn Uí Eachteirn	James McGivern
Dr Patrick Delassus	Dr Carine Gachon	Seán Howe
Gerard MacMichael	Dr Oliver Mulryan	Dr Denis Ó Mahoney
Willie Geraghty	Elish Zaletel	Dr Kate Goggin
Dr PJ McAllen	Dr Liam Morris	Deirdre Quin
G O'Donnell	Dr John Lohan	Padraig Audley
Gabriel Ó' Costello	Dr Thomas Roche	Ed Dunbar
Vlad Teleanca	Laurentiu Dimache	

## 1 Introduction

The following report to Academic Council is a validation panel report from an expert panel of assessors on the approval of the above programme Bachelor of Engineering in Energy Engineering

The report is divided into the following sections:

- Background to Proposed Programme
- General Findings of the Validation Panel
- Programme-Level Findings
- Module-Level Findings

## 2 Background to Proposed Programme

This programme is a relatively new programme to GMT and has been offered since 2010. The programme is structured as a Level 8 ab-initio and Level 7 with a one year add-on option. There is also a Level 6 exit award. See Programme Self Evaluation Report (SER) for more detailed information.

## 3 General Findings of the External Peer Review Group

- The External Peer Review Group (EPRG) recommend the re-approval of the programme for the next five academic years or until the next programmatic review, whichever occurs sooner, subject to a number of recommendations.
- The EPRG feel that this programme should be given more time to establish its own identity as it only started 4 years ago. The Panel is satisfied that the discipline of energy engineering is a necessary specialisation for the future. There will be a definite market and need for greater management of energy and this programme can evolve to fulfil that need.
- The EPRG acknowledge that staff on this programme are well informed about research in this area.

Having considered the documentation provided and discussed it with the programme development team, the External Peer Review Group recommends the following:

### Bachelor of Engineering in Energy Engineering

*Place an x in the correct box.*

Accredited for the next five academic years or until the next programmatic review, whichever occurs sooner	
Accredited subject to recommendations	X
Re-designed and re-submitted to the same External Peer Review Group after additional developmental work	
Not Accredited	

#### Note:

Approval is conditional on the submission of a revised programme document that takes account of the conditions and recommendations outlined below and a response

document describing the actions of the Department to address the conditions and recommendations made by the External Peer Review Group (EPRG). In this report, the term Recommendation indicates an item to which the Programme Board should give serious consideration for implementation at an early stage and which should be the subject of on-going monitoring.

## 4 Programme-Level Findings

This section of the report addresses the following programme level considerations:

- Evidence of reflection by the programme board to include, where relevant evidence of collaboration and engagement with other programmes from a similar discipline area within GMIT
- Demand
- Award
- Entry requirements
- Access, transfer and progression
- Retention
- Standards and Outcomes
- Programme structure
- Learning and Teaching Strategies
- Assessment Strategy
- Resource requirements
- Research Activity
- Quality Assurance
- Internationalisation
- Professional Practice (Work Experience / Internship etc)

### 4.1 Reflection, including internal and external engagement

<i>Consideration for the panel:</i>	Is there evidence of reflection in the SER of how the programme performed since the last programmatic review.
<i>Overall Finding:</i>	Yes, to include 1 recommendation

#### **Commendation:**

- The EPRG commends the engagement of the programme board in this process.

#### **Recommendation:**

- The EPRG suggests that the programme board review the SER document to correct any errors and resubmit the amended document.

### 4.2 Demand

<i>Consideration for the panel:</i>	Is there a need for the programme and has evidence been provided to support it?
<i>Overall Finding:</i>	Yes

### 4.3 Award

<i>Consideration for the panel:</i>	Is the level and type of the award appropriate?
<i>Overall Finding:</i>	Yes, to include 1 recommendation

#### Recommendation:

- The EPRG recommends that the programme board realign the programme modules and programme learning outcomes in order to satisfy the accreditation standards of Engineers Ireland.

### 4.4 Entry Requirements

<i>Consideration for the panel:</i>	Are the entry requirements for the proposed programme clear and appropriate? Is there a relationship with this programme and further education?
<i>Overall Finding:</i>	Yes

### 4.5 Access, Transfer and Progression

<i>Consideration for the panel:</i>	Does the proposed programme incorporate the procedures for access, transfer and progression that have been established by the HEA and as contained in the Institute's Quality assurance Framework (QAF) COP No.4?
<i>Overall Finding:</i>	Yes

### 4.6 Retention

<i>Consideration for the panel:</i>	Does the proposed programme comply with the Institute norms for retention, both in first year and subsequent years? Are both elements of the First Year Experience {(i) Learning to Learn (now Learning and Skills Innovation) and (ii) PASS} embedded in this programme? Evidence of other retention initiatives?
<i>Overall Finding:</i>	Yes

### 4.7 Standards and Outcomes

<i>Consideration for the panel:</i>	Does the proposed programme meet the required award standards for programmes at the proposed NFQ level (i.e. conform to QQI Award Standards)?  For parent award? For exit award (if applicable)? For Minor Award (if applicable)?
-------------------------------------	---

	For Special Purpose Award (if applicable)?
<i>Overall Finding:</i>	Yes

The awards standards requirements for programmes on the NFQ Framework can be found at [http://www.hetac.ie/publications\\_pol01.htm](http://www.hetac.ie/publications_pol01.htm)

#### 4.8 Programme Structure

<i>Consideration for the panel:</i>	Is the programme structure logical and well designed and can the stated programme intended learning outcomes in terms of employment skills and career opportunities be met by this programme?
<i>Overall Finding:</i>	Yes

#### Commendation:

- The EPRG commend this programme and its relevancy to industry.

#### 4.9 Learning and Teaching Strategies

<i>Consideration for the panel:</i>	Have appropriate learning and teaching strategies been provided for the proposed programme that support Student Centred Learning (SCL)? Evidence of consideration of flexible delivery methods including eLearning?
<i>Overall Finding:</i>	Yes, to include 1 recommendation

#### Recommendation:

- The EPRG recommend that all staff are appropriately trained on Moodle and identify barriers to its utilisation across all modules as appropriate.

#### 4.10 Assessment Strategies

<i>Consideration for the panel:</i>	Have appropriate programme assessment strategies been provided for the proposed programme (as outlined in the QQI/HETAC Assessment and Guidelines, 2009)?
<i>Overall Finding:</i>	Yes

Assessment strategies are required in line with HETAC's Assessment and Standards and should be considered by the programme EPRG. See (HETAC (2009) Assessment and Standards, Section 4.6.1, page 33). Accordingly the assessment strategy should address the following (See (HETAC (2009) Assessment and Standards, Section 2.2.5, page 13) :

- Description and Rationale for the choice of assessment tasks, criteria and procedures. This should address fairness and consistency, specifically their validity, reliability and authenticity;
- Describe any special regulations;
- Regulate, build upon and integrate the module assessment strategies;

- Provide contingent strategy for cases where learners claim exemption from modules, including recognition of prior learning;
- Ensure the programme's continuous assessment workload is appropriately balanced;
- Relate to the learning and teaching strategy;
- Demonstrate how grading criteria will be developed to relate to the Institutional grading system.

#### 4.11 Resource Requirements

<i>Consideration for the panel:</i>	Does the Institute possess the resources and facilities necessary to deliver the proposed programme?
<i>Overall Finding:</i>	Yes, to include 1 recommendation

#### Recommendation:

- The EPRG recommends that the institute provides a resource room to allow access to software, systems and study facilities specific to students of this programme.

#### 4.12 Research Activity

<i>Consideration for the panel:</i>	Evidence that Learning & Teaching is informed by research? Number of staff engaged in institutional/pedagogical research?
<i>Overall Finding:</i>	Yes

#### 4.13 Quality Assurance

<i>Consideration for the panel:</i>	Does the proposed programme demonstrate how the Institute's quality assurance procedures (QAF) have been applied and that satisfactory procedures exist for the on-going monitoring and periodic review of programmes?
<i>Overall Finding:</i>	Yes

#### 4.14 Internationalisation

<i>Consideration for the panel:</i>	Does the proposed programme demonstrate how the syllabi represent an international dimension? Is there evidence of approaches to induct international students?
<i>Overall Finding:</i>	Yes

#### 4.15 Professional Practice (Work Experience / Internships etc)

<i>Consideration for the panel:</i>	Does the proposed programme incorporate professional practice as per the Institute's policy on professional practice (PP)? If not, is there evidence that PP is under consideration by the programme board?
<i>Overall Finding:</i>	Yes, to include 1 recommendation

**Recommendation:**

- The EPRG recommends that the programme board redesign the schedule to incorporate 6 months' work placement that is appropriately academically monitored and assessed. It is further recommended that this is implemented for the intake of 2015. The current 8 week module for 5 credits is not deemed sufficient.

**5.0 Module Assessment Strategies**

<i>Consideration for the panel:</i>	Have appropriate module assessment strategies been included in each Module Descriptor?
<i>Overall Finding:</i>	Yes

**6.0 Student Findings**

1 student attended the meeting. The student has recently completed his 3<sup>rd</sup> year of the programme.

He found that the course had a good focus on Energy Engineering. He did feel that there were more mechanical engineering aspects than he had anticipated but he understood the reason for it as there is always a need for mechanical engineers. He felt that the work placement was not long enough and a system should be put in place to help students find an appropriate work placement company. He had no contacts with industry so he completed a project instead of work placement. He also said that there was a need for a resource room where students could practice on the different software and systems.

**Commendation:**

- The EPRG found the student very impressive. He spoke well of the course and is an excellent ambassador for GMIT.

**7.0 Stakeholder Engagement**

**Recommendation:**

- As requested by the External Examiner and noted by the EPRG, the programme board needs to engage to a greater extent in dialogue with industry in order to provide a better understanding of skills and knowledge of the graduates and to identify the likely employment opportunities available, in order to cultivate a demand for graduates of the programme.

**8.0 Future Plans**


<i>Consideration for the panel:</i>	Evidence that the programme board considered and identified opportunities and signalled proposals for related new programme and award development.
<i>Overall Finding:</i>	Yes, to include 2 recommendations

**Recommendations:**

- Following engagement with industry, the EPRG recommend that the programme board review the appropriateness of the title. The panel also recommend that the programme board review the potential to combine the programme with other programmes on offer within the department and consider offering a reduced number of programmes (i.e. that would include various streams) in the future.
- The EPRG recommend that course promotional information and graduate profiles should be marketed together and this will help clearly identify the profile of graduates from this course for industry.

**Validation Panel Report Approved By:**

**Signed:**



\_\_\_\_\_  
**Dr Brendan McCormack**  
**Chairperson**

**Date:**

\_\_\_\_\_  
24/4/15