

# External Peer Review Group Report



## 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 in Computer & Electronic Engineering L7 (3 years), L8 (+2 years)
<b>Exit Award(s):</b>	Level 6
<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 Campus

### Panel Members

Name	Position	Organisation
Dr Brendan McCormack	Chairperson	Institute of Technology Sligo
Dr Des Foley	Secretary	Galway-Mayo Institute of Technology
Dr Daniel O'Brien	IOT Member	Dundalk Institute of Technology
Dr Padraig Kirk	University Member	JCT
Dr Maeve Duffy	University Member	National University of Ireland Galway
Ciaran Kelly	Professional Practitioner	HP Galway Ltd
Andrew McGlynn	Institute Graduate	Cisco

### Programme Board Team

Des O'Reilly	Tony O'Leary
Gerard MacMichael	Michael Murray
Natasha Rohan	Paul Dunne
Emer Cahill	Michelle Lynch
Claire Lundon	George Anderson
Niall O'Keeffe	James Nevin
Jim O'Donoghoe	Sean Coffey

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Michel Fitzgerald	Rachel Gargan
Marto Hoary	

## 1 Introduction

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

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 reapproval of these programmes for the next five academic years or until the next programmatic review, whichever occurs sooner, subject to one condition and a number of recommendations.
- The EPRG felt that the absence of suggested changes to the existing programme was highly unusual and that this significantly limited the capacity of the EPRG to conduct a proper review, given the issues presented in the SER document. It is understood that a new programme is in design and, if nothing else, a review of the existing programme would have contributed to this new programme development and would provide a justification for the future validity of the programme.
- Current retention rates are obviously a concern and a more co-ordinated approach is required.
- The EPRG commend the level of engagement the programme board has with stakeholders especially with local community and schools.
- The EPRG commented that industry had great respect for the graduates of the honours degree programme.

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 Computer & Electronic Engineering**

*Place an x in the correct box.*

Accredited for the next five academic years or until the next programmatic review,	
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whichever occurs sooner	
Accredited subject to 1 condition and 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 Condition is used to indicate an action or amendment which in the view of the EPRG must be undertaken prior to the commencement of the programme. Conditions are mandatory if the programme is to be approved. 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>	To include 1 recommendation

The EPRG noted that it was surprising and somewhat disappointing that there were no changes to the programme recommended arising from the SER. It is clear from the data presented that the programme continues to have ongoing issues with student retention and this is likely to continue. The programme board had focused primarily on the proposed new Level 8 ab initio programme but this does not address the cohort of students entering the

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existing programme whilst the new programme is being developed and being prepared for approval.

### Recommendation:

- The EPRG recommend that the programme board review the SER document and the external examiner feedback and generate a set of criteria and actions for the new level 8 programme.

### 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

### Commendation:

- The EPRG commend the 1<sup>st</sup> year intake of students which has remained high for the period under review relative to other similar programmes in the country.

### Recommendation:

- The programme documentation should include a profile of the graduate.

### 4.3 Award

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

### 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>	To include 2 recommendations

### Recommendations:

- The EPRG recommend that consideration should be given to review student performance against their leaving certificate results with a view to providing an evidence-based rationale for the proposed entry requirements. (Careful consideration should be given to the entry requirements, and especially whether the minimum requirement for a D3 in pass maths is sufficient.)
- They also recommend that the programme board widen the links with further education Institutes including Galway Technical Institute.

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### 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

#### Commendation:

- The EPRG acknowledge that the 2 year add on programme is of a very high standard, with good retention rates and is highly regarded by industry as evidenced by placement and graduate destinations.

#### Comment:

- The EPRG supports the move to a 4 year ab initio as discussed by the programme board. It is not within its scope to make recommendations regarding the proposed 3+2 model, but it suggests that the programme board should revisit its proposed structure for progression of Level 7 graduates onto the Level 8 programme.

### 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 to include 1 Condition and 1 recommendation

The EPRG fully endorse the PASS and Learning to Learn modules as do the programme board, but they feel more can be done to increase the retention rates. It is clear that individual lecturers have attempted various initiatives in relation to retention, but there is an impression that a fully integrated approach is lacking. It might also be appropriate to enlist some assistance and expertise from sources outside of the department.

#### Condition:

- The EPRG propose the development of a coherent achievable retention plan which addresses a common and integrated approach across all modules in the programme, entry requirements, attendance monitoring, assessments (including a clear, integrated programme attendance schedule for the students at the beginning of the academic year or semester), how repeat assessments are handled and how/when feedback of results is provided, with specific attention to maths and literacy. The plan should also include coordinating an early feedback mechanism to students on their progress (an early

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warning system). It is expected that this written plan will be presented as a matter of priority, especially in the light of no suggested changes to the programme.

### Recommendation:

- They also recommend that the programme board pursue more rigorously an exit interview with students who drop out, and surveys of all students. This could contribute to learning why they are withdrawing from the programme or failing and what changes need to be made in the future to prevent this occurring.

### 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 to include 1 recommendation

### Recommendation:

- The programme board should develop a matrix of programme learning outcomes against module learning outcomes indicating that assessments are aligned with the learning outcomes stated.

### 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 4 recommendations

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The EPRG noted that, ideally Wi-Fi access should be available across all labs. Given the nature of this programme, it could lead the way in emerging use of tablets and various media as the new teaching methods for the future. The EPRG noted the comments in the SER regarding the increase in group size for practical sessions but did not feel that conclusive evidence was presented by the programme board that this affected overall quality of the learning experience.

## Recommendations:

- The EPRG recommends that the programme board ensure greater department level participation in collaborative learning & teaching initiatives.
- In relation to group size, a suggestion is to run shorter labs with smaller student numbers.
- The EPRG recommend that the programme board must address the problems identified in the SER document to ensure greater access to Moodle for mature students, repeating students and part time students.
- The EPRG recommend that all staff are fully trained in the use of Moodle and encouraged to use it where applicable.

## 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 QCI/HETAC Assessment and Guidelines, 2009)?
<i>Overall Finding:</i>	Yes to include 1 recommendation

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.

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## Recommendation:

- The EPRG recommend that the programme board develop a centralised matrix to include a schedule of programme assessments and due dates for assignments for each student at the start of the year.

## 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

## 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 to include 1 recommendation

## Recommendation:

- The EPRG noted that the level of research and research output is low in this department. They recommend the programme board develop and implement a plan to build greater research capacity and activity within the school.

## 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)



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<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

### Commendation:

- The EPRG commends the work placement in the add-on honours degree. They commented that it was a very good module and well organised and was also well respected within industry.

## 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 to include 1 recommendation

### Recommendation:

- The EPRG recommend that the programme board should ensure that continuous assessment (CA) is evaluated by external examiners in conformity with the Institute's code of practices.

## 6.0 Student Findings

There were **no** students available at the time of the visit for the panel to meet. This was a significant omission in the process, as it would have been beneficial to hear students' perspectives on the issues which formed the basis of discussion with the programme board.

## 7.0 Stakeholder Engagement

### Commendation:

The EPRG commend the level of engagement the programme board had with stakeholders including local community schools and colleges of further education.

## 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
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	award development.
<i>Overall Finding:</i>	Yes

The programme board have proposed a 4 year Level 8 ab initio programme as a fast track to achieve the honours degree. They believe there are students out there who want to sign up for a 4 year Honours Degree course in Computer & Electronic Engineering.

It was noted that the EPRG commented on the lack of a Level 9 award in this area and think that this should be considered at some stage in the future.

### Validation Panel Report Approved By:

Signed:



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**Dr Brendan McCormack**  
**Chairperson**

Date:

24/4/15