Level 8 CONVERSION PANEL REPORT
EVALUATION OF PROPOSALS

FOR THE ESTABLISHMENT OF AB-INITIO OPTIONS IN

1. BUILDING ENERGY SYSTEMS (L8)
2. ELECTRICAL POWER SYSTEMS (L8)

Friday 17th June 2011

Panel Members:

Dr Eamonn Cashell, Dean of Graduate Studies CIT (Chair)

Mr Tony Dunne, Supervisory Design Engineer, Jacobs Engineering

Mr Edmond Riordan
Deputy Registrar & Head of Academic Quality, CIT

Summary

The Panel was convened in order to consider proposals to convert "ladder" (3+1) structures into ab-initio honours degrees. In each of the cases presented the existing 3-year programme will be retained as a separate offering on the CAO level 6/7/ list. In each case, the existing approved fourth year programme is being retained unmodified.

The Panel members discussed and noted the various aspects of the CIT Conversion Policy, and considered the detailed written submissions from the two Departments.

Building Energy Systems Proposal.

This proposal establishes a 30-credit differential between the Level 7 degree and the first three years of the new ab-initio structure. The differentiated modules (3 x 5 credits) are existing approved modules, and will introduce a theme of sustainability and energy optimisation. A further differentiation is the introduction of a work placement in year 3, in common with the other engineering ab-initio programmes in CIT.

The Panel and the proposers (led by Head of Department Mr Daithi Fallon) engaged in a detailed study of the proposal. The Panel concluded that it was well-thought out and compliant with CIT policy and with the required award standards.

The Panel **recommends** that the importance of health and safety and the professional responsibilities of designers are emphasised in the relevant modules. The principal legislation is now the *Safety, Health and Welfare at Work Act 2005*, and all relevant syllabi should refer to this Act. The 2006 Construction regulations (incorporating 2010 amendments) should also be referenced where applicable. The graduates should be familiar with concepts and practices of doing risk assessment for their designs. The use of real-world case studies is emphasised.

The Panel recommends to Academic Council that the ab-initio programme Bachelor of Engineering (Honours) in Building Energy Systems be approved.

Electrical Power Systems Proposal

The approach taken in the Electrical Power Systems proposal was to create enhanced versions of six existing modules from the Level 7 programme, (B Eng in Electrical Engineering). The

"upgraded" versions of these modules have somewhat more demanding learning outcomes and will be delivered in a manner which challenges the abilities of the ab-initio stream. The differentiated modules are:

Electrical Science S2_L8 (Draft)

Electrical Circuit Analysis_L8 (Draft)

Electrical Inst. Project_L8 (Draft)

Electrical Utility and Power_L8 (Draft)

Electrical Control Engineering_L8 (Draft)

Electrical Project Realization (Draft).

The Panel **recommends** that the titles of these revised draft modules be revised to avoid confusion; in particular the designation "_L8" should be removed. There should also be a final check of module content versus the reports of the external assessors.

The panel noted that the differentiated modules will be delivered separately as far as the theory element is concerned, while there may be some sharing of laboratories with the level 7 stream.

Again in this programme, the Panel noted some out-of-date references to legislation. The panel **recommends** that the importance of health and safety and the professional responsibilities of designers are emphasised in the relevant modules. The principal legislation is now the *Safety, Health and Welfare at Work Act 2005*, and all relevant syllabi should refer to this Act. The 2006 Construction regulations (incorporating 2010 amendments) should also be referenced where applicable. The graduates should be familiar with concepts and practices of doing risk assessment for their designs.

The Panel noted that the two project modules in the final year (Level 8) are incomplete as regards indicative content, assessment and resources. It is **recommended** that these be finalised immediately.

The Panel recommends to Academic Council that the ab-initio programme Bachelor of Engineering (Honours) in Electrical Power Systems be approved.