

(Author)

Academic Development and Standards Committee

(Title of Item)

Framework for Integrated Masters in UCC

Action requested approve

Background rationale

For some professions such as Engineering and Pharmacy, the regulatory bodies have changed the academic qualifications required. Thus UCC now offers a BPharm/MPharm degree route to ensure that students have the academic qualifications to practice.

In the case of Engineering the accrediting body, Engineers Ireland, have changed the academic requirements for Chartered Engineer status. In response to this change, NUIG, UCD and TCD have introduced new course structures in Engineering to provide students with the necessary academic qualification to ensure Chartered Status.

In NUIG they have introduced a ME degree of 60 credits. This is a follow on from the 4 year (240 credit) BE degree and could be classified as a 4+1 model. This provides a 5th year pathway to a level 9 qualification that satisfies the educational requirement for Chartered Engineer status in Engineers Ireland. In some disciplines (Electrical and Electronic Engineering for example) there has been insufficient demand for this ME course and although approved, has not run. In other engineering disciplines the main market for the courses have been graduates of IOTs rather than BE graduates of NUIG. The 4 year BE programmes and the 1 year ME programmes are both accredited by Engineers Ireland, but to meet the Chartered Engineer educational requirements an accredited Bachelors degree (BE) is required in addition to the ME. The ME from NUIG is not sufficient on its own.

In UCD they have introduced an integrated 5 year ME programme of 300 credits. The students decide at the end of 3rd year after taking 180 credits whether they wish to choose a 4 year 240 credit BE programme or a 5 year 300 credit ME programme. This could be classified as a 3+2 and

3+1 model. In order to undertake the ME programme students need to achieve a set academic standard in years 2 and 3 (equivalent to a 2H2). The students graduate with a level 8 BSc (Hons) based on years 1-3 and an ME level 9 based on years 4 & 5. When the 5 year programme was first introduced, very few students choose the ME, but over time the number taking the ME route has increased to over 60%, with higher participation in some disciplines where Chartered Engineering status is required for employment. Both the BE and ME awards are accredited by Engineers Ireland, and the ME meets the educational requirements for Chartered Engineer in its own right. In other words the full 5 year 300 credit programme is accredited. Any students wishing to enter the ME programme can only do so in year 4. These students then undertake a 2 year 120 credit programme.

In TCD they have introduced an Integrated 5 year 300 credit, BAI/MAI programme. At the end of year 2 the students indicate whether they wish to undertake a 4 or 5 year programme. However the decision point is at the end of year 3 where a 2H2 must be achieved in order to continue to year 5. Likewise at the end of year 4 the student must also achieve a 2H2 to continue to year 5. On successful completion of the 5 year programme, the students, at present, graduate with a BA (level 7)/BAI (Level 8)/MAI(Level 9), although there are plans to change that to BA (Level 7)/MAI (Level 9). At present 60% and more of students (depending on engineering discipline) take the 5 year programme. At present the 4 year BAI programme is accredited, but TCD plan to apply for accreditation for the integrated 5 year programme and for it to meet the educational requirements for Chartered Engineer. Only TCD students can undertake the 5 year programme, there are no entry mechanisms during years 2-4.

Alignment to Strategic Objectives/External Policy Driver Increasing the educational requirements for membership to Level 9 by external regulatory bodies.

Resource Implications Although 60 credit Masters Awards are allowed at level 9 of the NFQ, the block grant from the HEA for 90 credit Masters Awards is higher than a 60 credit award. Thus UCC has a policy that all level 9 programmes should be 90 credits and should contain a substantial research element of at least 30 credits.

Introducing 60 credit Masters award will result in reduced funding from the HEA for our Masters programmes. In addition the NUIG experience would indicate that the continuation of students to the 5th year is low. On the other hand the experience of TCD and UCD, where an Integrated approach is adopted, and the student is faced with a decision (and a hurdle) would indicate a great progression of students to the 5th year.

Brief description / summary of the item

The following structure for an integrated Masters should be adopted for Engineering courses in the first instance, but may be applicable to others (architecture, computer science, etc) in time.

- A 300 credit level 9 Masters course is allowed in UCC.
- A decision point should be included at the end of year 3, on whether a student wishes or is allowed to progress to a 5 years Masters. If not the students continues on the 4 year level 8 programme.
- This decision point would include the requirement to achieve at least a 2H2.
- Given the NFQ requirements the final year (5) of the course must contain at 60 credits at level 9 standard.
- Overlap between Year 4 of any level 8 programme and year 4 of the level 9 programme is allowed.
- In order to reduce the financial risk to the University direct entry into year 5 of the integrated Masters programme is not allowed, however taught modules in Year 5 of the integrated Masters programme may form part of a 90 credit direct entry level 9 programme.
- As the primary reason for introducing this integrated Masters in the case of Engineering, is to meet the educational requirements for Chartered Engineer, then one of the external assessors for the Programme Approval Panels should be an academic with experience of the Engineers Ireland accreditation process.
- Sufficient engineering modules at Level 9 should be delivered to ensure the quality of the Masters is appropriate to the level of an Engineering level 9 award.