

Faculty Education Committee

Faculty of Engineering

Wednesday 7 November 2018

15:00 – 17:00

Room 909B, 9th Floor, Electrical and Electronic Engineering Building

Unapproved Minutes

1 Welcome and Apologies

Dr Craig welcomed members to the meeting.

Present at the meeting were: Dr Lorraine Craig (Chair), Dr Phil Power, Komal Patel, Prof Yun Xu, Dr Errikos Levis, Prof Sergei Chernysenko, Prof Klaus Hellgardt, Prof Jason Hallett, Dr Mike Templeton, Dr Fariba Sadri, Dr Lorenzo Picinali, Andy Brand, Dr Mark Sutton, Prof Jason Riley, Dr Mike Bluck, Alex Luy, Amy Tall, Zixuan Wang, Lucy Heming, Dr Mark Pope, Dr Monika Pazio and Dr Tiffany Chiu.

Apologies were received from: Prof Nigel Brandon, Prof Omar Matar, Prof Richard Jardine, Richard Martin, Prof Martyn Boutelle, Dr Niamh Nowlan, Prof Bassam Izzuddin, Dr Tony Field, Prof Martin Blunt, Dr Kristel Fobelets, Prof Andrew Holmes, Dr Martyn McLachlan, Dr Ulrich Hansen, Joel Bildorfer, Dr Pavel Berloff, Prof Graham Hughes and Prof George Jackson.

Esther Perea attended on behalf of Dr Kristel Fobelets.

Martin Holloway and Dr Maria Parkes attended on behalf of Prof Martyn Boutelle.

Hailey Smith attended on behalf of the Education Office.

2 Minutes from the Previous Meeting

The Committee approved paper EEC.2018.037, the minutes from the meeting held on Wednesday 28 September 2018.

3 Matters Arising

Action Tracker

The Committee noted paper EEC.2018.038, the action tracker. Lorraine Craig noted that actions EEC 12/12 and EEC 12/14.2 were complete. As this FEC meeting was reserved for curriculum review business, it was noted that the remainder of the actions would be considered at the next FEC meeting on the 28 November 2018.

4 Curriculum Review draft paperwork

Lorraine Craig began the item by thanking those involved in curriculum review for all of their hard work so far and for submitting their draft paperwork to the Committee.

Lorraine provided the following high-level feedback to all departments for consideration:

- *Exit Awards*

It was noted that exit awards had been discussed at the Faculty Teaching Committee on Friday 2 November. Departments were reminded that it was expected that each undergraduate degree programme of study would normally make provision for exit awards within the programme structure. Lorraine highlighted the draft programme specification from Aeronautics as good example of how to approach this.

Lorraine further noted that learning outcomes should be distinguishable by exit award, similar to the format set out in the exemplar prepared by the Education Office. Some departments expressed concerns regarding the visibility this provided to exit awards which were not for entry. Lorraine encouraged departments to engage with the EDU and Quality Assurance representatives on their curriculum review reference panels where this was proving challenging. If a department did not wish to provide exit awards, they would need to explicitly state this and provide justification in their curriculum redesign proposal form.

- *I-Explore*

Lorraine noted that not all departments had stated in their programme specifications where they would be reserving 5 ECTS credits for the new I-Explore module, and in some instances the modules was described as an elective. Clarification was requested from Registry regarding whether the module should be listed as “core” or “compulsory” in the programme specification.

Action: Lucy Heming

It was further noted that if a department chose to include I-Explore in Year 4, they would need to ensure there were Level 7 modules available in Year 3 to enable students to meet the 60 ECTS credits requirement at Level 7 for MEng/MSci degrees.

- *Elective Rules*

Departments were asked to ensure their rules for choosing electives were clearly explained in the programme structure section of the programme specification, and state where there were electives in Year 3 that were Level 7 and in Year 4 that were Level 6.

- *Module Sizes*

Departments were reminded that 12.5 ECTS credits and 17.5 ECTS credits were not standard modules sizes allowable in the 2019-20 academic regulations, and any provision of this size should be reviewed.

- *Profession Skills and Research Skills*

Departments were encouraged to emphasise and/or strengthen how professional skills and research skills would be developed in all years of each programme.

- *Industry Engagement*

Departments were advised to outline how they had engaged with their industrial advisory board or equivalent, where applicable.

- *Module template excel form*

Departments were asked to avoid unhiding tabs and rows in the excel template.

Lorraine noted that each department would be provided with specific feedback on their paperwork. A summary of the feedback provided to each department is provided below:

4.1 Aeronautics

- *Draft curriculum redesign proposal form*

It was noted that the way in which inclusivity had been considered in the process was positive, and that the department had demonstrated good engagement with their students and industry. It was noted that the evaluation section still required consideration, and the department was advised to review the approaches outlined by Bioengineering, Electrical and Electronic Engineering, Design Engineering, and Civil and Environmental Engineering.

- *Draft programme specification*

It was noted that the department had included exit awards, although the learning outcomes had not been separated by exit award. The department was asked to reconsider the 12.5 and 35 ECTS credit modules.

- *Draft module outline*
It was noted that the approach to the module outline was sensible, and there were no further recommendations.

4.2 Bioengineering

- *Draft curriculum redesign proposal form*
It was noted that the way in which design and professional skills had been embedded through each year of the programme, the way in which students had been engaged in the process, and the department's proposed approach to evaluation were very positive. Lorraine asked whether the department had considered how to revise their 17.5 ECTS credit modules, as they had only referred to revisions to the 12.5 ECTS credit modules in the proposal form. Maria Parkes noted that the department would review the possibility of splitting this provision into 7.5 and 10 ECTS credit modules.
- *Draft programme specification*
The use of self-reflection as a method of feedback was highlighted as an example of good practice. The department was asked to review the statement "upon successful completion of the BEng programme" in the learning outcomes section as it did not refer to the MEng programme (which the programme specification was written for). The department was asked to liaise with the Departments of Mechanical Engineering, and Electrical and Electronic Engineering regarding their elective modules. The department was asked to review their statement on compensation in the progression and classification section for Year 1 and Year 2, where all the modules were core and therefore could not be compensated.
- *Draft module outline*
It was noted that the approach to the module outline was sensible, and there were no further recommendations.

4.3 Chemical Engineering

- *Draft curriculum redesign proposal form*
It was noted that the use of UROPs to engage students in the curriculum review process was very positive, and Alex Luy commended the department on their exemplary approach to student engagement. It was noted that the department would make provision for a BEng exit award, however this would be an Ordinary degree. Lucy Heming confirmed that offering an Ordinary degree was acceptable, and that this would be updated in the 2019-20 academic regulations.

Action: Lucy Heming

- *Draft programme specification*
It was noted that the department had clearly split out their learning outcomes by exit award. The department was asked to correct the number of ECTS credits for the BEng exit award from 150 to 180. Alex Luy asked the Committee whether there was any guidance on the recommended balance between exams and coursework, noting that there was considerable variation between departments. Klaus Hellgardt noted that the Department of Chemical Engineering had reviewed this and trialed different iterations in the past. It was felt that it was better to see what worked rather than using a formulaic approach. Hailey Smith noted that with respect to curriculum review it was important that the assessment delivered the learning outcomes, and therefore there was no mandated split between examinations and coursework.
- *Draft module outline*
The department was asked to review their module specification and strengthen the learning outcomes.

4.4 Civil and Environmental Engineering

- *Draft curriculum redesign proposal form*
It was noted that the department's approach to curriculum review had been well articulated in the proposal form, and there was clear progression from the work initiated in previous

years to curriculum review now. It was recommended that the department provide further details on how research skills were developed prior to Year 4.

- *Draft programme specification*

It was noted that the programme specification was very well written. The department was asked to review their Year 3 elective rules, as the proposed approach meant that it was possible for students to choose two non-Civil Engineering electives in addition to the I-Explore module. Mike Templeton noted that the department had stated their rules of supplementary qualifying tests (SQT) in the programme specific regulations section. Lucy Heming noted that SQTs would need to be discussed at the Regulations and Policy Review Group.

- *Draft module outline*

The department was asked to review and reduce the number of learning outcomes and make the language more concise by removing the phrase “the ability to” at the beginning of each one.

4.5 Computing

- *Draft curriculum redesign proposal form*

It was noted that the department had been making changes to its degree structure to enable curriculum review to happen more smoothly, and current students had benefitted from some immediate changes. It was noted that the evaluation section still required consideration, and the department was advised to review the approaches outlined by Bioengineering, Electrical and Electronic Engineering, Design Engineering, and Civil and Environmental Engineering. It was recommended that the department provide further details on how research skills were developed throughout the programme.

- *Draft programme specification*

It was noted that the theoretical and practical aspects of the degree were well described in the programme specification. The department was asked to list the placement in the module table under the programme structure section, instead of the heading, and to refer to Design Engineering’s programme specification as a guide. It was recommended that if the BEng programme was identical to the first three years of the MEng programme, both programmes could be included in the same programme specification by listing the BEng in the Award table and separating out the learning outcomes for Year 4.

- *Draft module outline*

It was noted that the approach to the module outline was sensible, and there were no further recommendations.

4.6 Design Engineering

- *Draft curriculum redesign proposal form*

It was noted that the department’s approach to curriculum review had been well articulated in the proposal form. The department was commended on its positive engagement and interactions with its students, especially given the number of new staff within the School.

- *Draft programme specification*

It was noted that the programme specification was very well written. It was recommended that the 12.5 ECTS credit modules be reconsidered. The department was also asked to confirm in their paperwork whether part two of their placement was Level 6 or Level 7.

- *Draft module outline*

It was noted that the approach to the module outline was sensible, and there were no further recommendations.

4.7 Earth Science and Engineering

- *Draft curriculum redesign proposal form*

It was noted that the department had put through structural changes to their programmes in 2017-18. Regarding the curriculum review paperwork, Mark Sutton noted that there was still work to be done on a number of areas.

- *Draft programme specification*

The department was asked to correct their exit awards from PGCert and PGDip to CertHE and DipHE. The department was asked to consider providing more detail to the programme overview section.

- *Draft module outline*

It was noted that the approach to the module outline was sensible, and there were no further recommendations.

4.8 Electrical and Electronic Engineering

- *Draft curriculum redesign proposal form*

It was noted that the department's approach to curriculum review had been well articulated in the proposal form and that the way in which students had been engaged in the process, and the department's proposed approach to evaluation were very positive.

- *Draft programme specification*

The department was commended on the clear representation of how the degree was structured and the use of graphics to enable students to understand how they progress from year to year. The department was asked to consider the credit total for Year 3 of the programme for students who do not choose to take the industrial placement as an elective. The department was asked to review the requirement to take I-Explore in the Spring term only as a number of Horizons modules run over two terms. The department was also asked to separate the personal portfolio from the I-Explore module. The department was asked to clarify the wording regarding progression to year 4 of the MEng degree.

- *Draft module outline*

The department was asked to consider reducing the amount of information included the details tab. The department was reminded that the Assessment tab needed to be completed for each module outline.

4.9 Materials

- *Draft curriculum redesign proposal form*

It was noted that the department had clearly outlined how research skills would be developed throughout the programme. The department was asked to provide more detail on the ways in which student had been engaged in the curriculum review process. The department was asked to review the section on engagement with the IOM3, which ended mid-sentence. The department was advised to revise the section on evaluation and consider the approaches outlined by Bioengineering, Electrical and Electronic Engineering, Design Engineering, and Civil and Environmental Engineering.

- *Draft programme specification*

It was noted that structure of the programme was well described. The department was asked to clearly state the elective options available, under the programme structure section of the programme specification, and allocate 5 ECTS credits for I-Explore. The department was asked to consider the naming convention of its modules, given that Year 1 and Year 2 modules were given the same name. The department was asked to consider strengthening the programme level learning outcomes. The department was asked to update the year weightings in the progression and classification section to reflect the 2019-20 academic regulations.

- *Draft module outline*
The department was asked to consider whether the length of the examination was appropriate for the Level of the module.

4.10 Mechanical Engineering

- *Draft curriculum redesign proposal form*
It was noted that the use of UROPs to engage students in the curriculum review process was very positive, as was the department's engagement with the Centre for Academic English. The department's use of tutorial support for technical modules was also highlighted. The department was advised to revise the section on evaluation and consider the approaches outlined by Bioengineering, Electrical and Electronic Engineering, Design Engineering, and Civil and Environmental Engineering.
- *Draft programme specification*
It was noted that learning outcomes were well developed and clearly stated for each year of the programme.
- *Draft module outline*
The department was asked to review the module content and learning outcomes sections, as there was duplicate information. The department was asked to ensure that it did not alter the module outline template.

Lorraine Craig invited Committee members to raise any outstanding issues or challenges in relation to curriculum review. The Committee requested further information on the timings for postgraduate curriculum review. Hailey Smith noted that it was expected that postgraduate curriculum review would roll out when the reviewed undergraduate programmes reached Year 4, although specific deadlines had not been set. Hailey further noted that the process overall would be similar to undergraduate curriculum review. Committee members asked for clarification regarding when the new academic regulations would apply to postgraduate programmes. Hailey and Lucy Heming confirmed that the regulations would not apply until after the programmes had been through curriculum review. The Committee requested clarification on the approach to new degree proposals where modules were shared between undergraduate programmes and postgraduate programmes. Lucy noted a communication would be circulated to clarify the process.

Action: Lucy Heming

Komal Patel concluded the item by confirming the FEC paperwork deadlines for each department, which were as follows:

- Thursday 3 January 2019 – for Civil and Environmental Engineering, Computing, Earth Science and Engineering, Materials, and Mechanical Engineering.
- Wednesday 16 January 2019 – for Aeronautics, Bioengineering, Design Engineering, and Electrical and Electronic Engineering.

It was noted that Chemical Engineering would be submitting their paperwork in December 2018, following the involvement in a curriculum review accelerator.

Departments were informed that their paperwork would need to be endorsed by their curriculum review reference panel (in the form of a cover note) ahead of submission to FEC. It was noted that Lorraine would write to the Chair of each department's reference panel to inform them of the relevant FEC deadlines for each department.

Action: Lorraine Craig

5 **Any other business**

There was one additional item of business:

- The Committee was asked to consider a request by the Department of Chemical Engineering for a one-off in-session major change to the MSc Advanced Chemical Engineering, as a

result of an error in the College prospectus. It was noted that the webpage for the programme listed a single core module (Advanced Process Design), whereas the associated programme specification listed two core modules. The department requested that the Advanced Process Design module be changed from core to elective for the 2018-19 cohort only. The Committee agreed to approve the change.

6 Dates of Future Meetings

Wednesday 28 November 2018

Wednesday 9 January 2019 (Curriculum Review proposals)

Wednesday 30 January 2019 (Curriculum Review proposals)

Wednesday 27 February 2019

Wednesday 1 May 2019