

Engineering Studies Committee

Wednesday 12 November 2014
3.00pm
Solar Room, 170 Queen's Gate
South Kensington Campus

Minutes

Present: Professor O Matar (Chairman), Dr L Craig, Dr C Ford, Mr J Fernando, Dr A Horsfield, Dr P Leever, Professor P Lindstedt, Mr P Loose, Dr P McBrien, Dr R Palacios Nieto, Dr A Phillips, Dr P Power, Dr E Price-Davies, Dr M Tang, Professor D Wright.

In attendance: Dr M Bluck, Dr A Phillips, Dr P Power, Mr D Surtees, Mr T Bailey (Secretary).

Apologies: Dr K Fobelets, Professor L Gardner, Dr M Jones, Mr D Pateman, Professor N Thornhill.

Agenda Item

1. Constitution and Terms of Reference

1.1 The Committee received the Constitution and Terms of Reference of the Committee for 2014-15 [**Paper A**].

1.2 It was reported that Professor Lindstedt will act as Deputy Chairman.

2. Minutes

2.1 The minutes of the meeting held on 21 May 2014 were confirmed.

3. Matters arising

3.1 There was one matter arising from Imperial College Business School (ICBS) Action Plan. Concerns existed in relation to the use of multiple choice questions (MCQ) in exams. The ICBS has addressed the issue by adding variety to papers in terms of assessment so that none of the papers are now solely assessed with MCQ. The ICBS is also dealing with high marks by scaling and taking action before marks reach the Board of Examiners of client departments. There had also been concern over new modules which had high marks, often correlated with the modules being run by new staff. To address this, the ICBS will try to keep staff the same whenever possible.

4. Chairman's Actions

4.1 It was noted that the Chairman recommended to Senate a proposal to establish a new four year degree programme: MEng Design Engineering, starting in October 2015. Following the last meeting of the Committee a sub group was established to consider the programme. A revised programme specification has subsequently been agreed by all the Directors of Undergraduate Studies within the Faculty of Engineering. It was noted that the curriculum will

continue to evolve, not only over the time period until October 2015 as staff are appointed, but also during the early years of the degree. This proposal has subsequently been approved by Senate.

4.2 It was noted that the Chairman approved a proposal to change the year weightings for undergraduate programmes in the Department of Bioengineering to bring this in line with the rest of the Faculty. The weightings for BEng will now be: 1-3-4 and for MEng 1-2-3-3.

4.3 It was noted that the Chairman approved a proposal from the Imperial College Business School for changes to the BEPS programme [**Paper B**].

4.4 It was noted that the Chairman approved a proposal from the Imperial College Business School to amend the spring term project module (BS0821) for BEPS [**Paper C**].

5. Representation on Senate

5.1 It was reported that the Committee is currently represented on Senate by the Chairman: Professor O K Matar. Other members of the Committee, Professor D Humphris, Professor L Gardner, Dr K Fobelets, Professor D Wright and Mr P Loose are also members of Senate.

6. Annual Monitoring Statements

6.1 The Committee received Annual Monitoring Reports from the Departments of: Aeronautics, Bioengineering, Civil Engineering, Computing, Earth Science and Engineering, Materials, Mechanical Engineering, Imperial College Business School and External Examiner reports for Ancillary Mathematics. Reports from Chemical Engineering and Electrical and Electronic Engineering will be considered at the next meeting of the Committee. The Committee still had concerns over the format and length of the annual monitoring statements.

ACTION: The Chair is to take this up with the Vice Provost (Education) and the Academic Registrar.

6.2 Department of Aeronautics [Paper E]

The Committee considered the Department's report and in particular noted the comments of the external examiners and the summary of the National Student Survey. The representative from the Department stated that there had been more failures in second year than usual and that the causes were being investigated. The representative also stated that the Department had introduced a MEng with a year in industry.

6.3 Department of Bioengineering [Paper F]

The Committee considered the Department's report and in particular noted the comments of the external examiners and the summary of the National Student Survey. The Department had been congratulated by its external examiners for offering a flagship UK programme with an NSS overall satisfaction rate of 92%. The failure rate is very low and the Department are looking at establishing an internal stream focusing on Biomedical engineering. The Department have introduced a new year in industry stream and a reading week. The Reading Week has been especially well received by students. The representative from the Department stated that they wished to change BEng to be an exit route only. The Committee advised the Department to think carefully about the consequences of this.

6.4 Department of Civil and Environmental Engineering [Paper H]

The Committee considered the Department's report and in particular noted the comments of the external examiners and the summary of the National Student Survey. The external examiners had been complementary of the course in terms of content and student experience. The examiners had made the comment that they had been under marking the final project, something that the Department are taking steps to address. The representative from the Department also stated that the Department have appointed someone to monitor

teaching quality and were considering using Teaching Fellows. Students have been experiencing trouble with classes timetabled outside of the Department, a problem which other representatives had also experienced.

ACTION: The Chair to highlight timetabling issues with Vice Provost (Education). Mechanical Engineering, Civil and Environmental Engineering, and Aeronautics were the Departments which had been most affected.

6.5 Department of Computing [Paper I]

The Committee considered the Department's report and in particular noted the comments of the external examiners and the summary of the National Student Survey. The representative from the Department stated that the NSS results and SOLE scores were largely in line with last year. The Department had made a major change in moving all third and fourth year exams to the end of each term. Students had been surveyed and were in favour of the move, both before and after the transition took place. The representative from the Department also stated that there had been an increase in the number of first class student and that the external examiners believed that this reflected the ability of students.

6.6 Department of Earth Science and Engineering [Paper K]

The Committee considered the Department's report and in particular noted the comments of the external examiners and the summary of the National Student Survey. The representative from the Department reported that one of the external examiners had questioned the marking of MSci projects. The Department had sent a paper back to the External Examiner explaining how the marking process worked.

6.7 Department of Materials [Paper L]

The Committee considered the Department's report and in particular noted the comments of the external examiners and the summary of the National Student Survey. The representative from the Department stated that there had been various innovations such as making use of Blackboard for all submissions of work and embedding both the NSS and SOLE in tutorial systems. The Department had been complemented on their comprehensive paper.

6.8 Department of Mechanical Engineering [Paper M]

The Committee considered the Department's report and in particular noted the comments of the external examiners and the summary of the National Student Survey. The failure rate of around 10% in first year was about the same as in the previous year. The representative from the Department stated that they were trying to keep failure down through various measures, including by improving tutorials. The representative from the Department also noted though that the Department did not want weak students to progress through the first year for them to then fail in the second year. The external examiners were broadly happy although there had been certain question over the marking of reports. The representative from the Department also stated that a number of new modules were starting. It had been noted in advance of the meeting that section 7.1 in the annual monitoring form was incomplete. However, the information could be found at:

http://wwwf.imperial.ac.uk/mechanicalengineering/webhelp/taught_courses_handbook/#topic/tch_defining_module_levels.html

6.9 Imperial College Business School [Paper N]

The Committee considered the report from the ICBS and in particular noted the comments of the external examiners and the summary of the National Student Survey. The representative from the ICBS stated that the feedback from SOLE respondents was very good. The feedback from the teaching team had been that they enjoyed teaching engineers.

6.10 Ancillary Mathematics (External Examiner Reports) [Paper O]

The Committee considered the Department's report and in particular noted the comments of the external examiners and the summary of the National Student Survey. External examiners had commented on the moderation process of marks from exams take in client departments. It was agreed that raw marks will be sent to client departments who can then perform the

necessary moderation according to their own algorithms. Mathematics have agreed to perform moderation should this be requested by client departments.

7. Reorganisation of Undergraduate Courses and Examinations

7.1 Department of Aeronautics

The Committee **approved** a proposal to renew an exchange agreement with the Universitat Politècnica de Catalunya, Spain [**Paper P**].

7.2 Department of Computing

The committee **approved** a proposal to change the requirements for the first and second years of the BEng and MEng degree programmes [**Paper Q**].

7.3 Department of Earth Science and Engineering

7.3.1 The Committee **approved** a proposal to change the Scheme for Award of Honours [Paper P].

7.3.2 The Committee noted the Department has approved a new optional module, *Fire and Ice*, which will be available to all third year students, except those on a year abroad programme [**Paper S**].

7.4 Department of Materials

7.4.1 The Committee noted that the Department has approved a proposal to move its Comprehensive Paper from the fourth year to the third year of study. Third year students will take this paper for the first time in 2014/2015, fourth year students will also take the paper this year as a transitional arrangement. Students and external examiners have been consulted on the proposal and are supportive.

7.4.2 The Committee noted that the Department has approved a proposal for second and fourth year Materials students to take BEPS courses instead of Business for Engineers courses. In year two they will take *BPES Project Management*, and in year 4 they will take *BPES Strategy Management*.

8. Appointment of Examiners

The Committee approved the appointment of External Examiners for first degrees in 2014-2015 [**Paper T**].

9. Summary of External Examiner Reports on Undergraduate Programmes 2013/2014

The Committee considered a paper summarising issues raised by external examiners during the 2012/2013 academic year. [**Paper U**]. The Committee agreed that the document was useful as a summary for all external examiners reports and would prefer this document was used with the main reports added as appendices.

ACTION: The Chair to contact the Assistant Registrar (Academic & Senate Review) on this issue.

10. Good Practice Highlighted During Periodic Reviews 2013/2014

The Committee noted a paper detailing examples of good practice highlighted within individual periodic reviews [**Paper V**].

11. Accreditation Report – Bioengineering

The Committee noted the accreditation report from the Institute of Engineering and Technology [**Paper W**].

12. Accreditation Report – Electrical and Electronic Engineering

The accreditation report from the Engineering Accreditation Board [**Paper X**] is to be considered at the next meeting.

13. Conduct of Oral Assessments

The Committee noted that the College has issued new guidance on the Conduct of Oral Assessments and *Viva Voce* Examinations for Undergraduate and Master's Level Programmes [**Paper Y**]. However, there was concern that viva should only be used for degree classification, not for the marking of projects with an oral assessment element. There was also agreement that it would be helpful if there could be greater flexibility in the wording so that it could be possible to have two external examiners for vivas.

ACTION: The Secretary to highlight the Committee's concerns to the Assistant Registrar (Quality Assurance & Enhancement) on the matter.

14. Roles and Responsibilities Documents

The Committee noted that the Quality Assurance & Enhancement Committee has revised the roles and responsibilities documents for key positions within the College. The revised documents can be found here:

<http://www3.imperial.ac.uk/registry/proceduresandregulations/qualityassurance/goodpractice/rolesandresponsibilities>

15. Senate Executive Summary

The Committee noted the Executive Summary of the meetings of Senate held on 14 May 2014 [**Paper Z**] and 18 June 2014 [**Paper AA**].

16. QAEC Report

The Committee noted Reports by the Quality Assurance and Enhancement Committee [**Papers AB & AC**].

17. Science Studies Committee Report

The Committee noted the Report by the Science Studies Committee [**Paper AD**].

18. Medical Studies Committee Report

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19. Dates of next meetings

Wednesday 11 March 2015
Wednesday 27 May 2015

20. Any other business

20.1 The Chair thanked Mr D Surtees for his work as Secretary for the Committee and wished him well for the future.