

Engineering Studies Committee

Wednesday 22 May 2013
3.00pm
Solar Room, 170 Queen's Gate
South Kensington Campus

Minutes

Present: Professor O Matar (Chairman), Dr L Craig, Dr A Field, Dr L Gardner, Professor T Green, Dr A Horsfield, Mr D Hunt, Dr M Jones, Dr P Leever, Dr R Palacios Nieto, Professor M Sloman, Dr M Tang, Professor A Walden, Mr N Wheatley.

In attendance: Mr J Ashley [for item 3], Mr R Ferguson [for item 4], Professor C Brinson, Mr D Surtees (Secretary), Professor R Thompson [for item 3], Professor M Warner [for items 3 & 4].

Apologies: Professor R Jardine, Dr E Price-Davies, Professor D Wright.

Agenda Item

1. Minutes

1.1 The minutes of the meeting held on 13 March 2013 were confirmed.

2. Matters arising

2.1 There were no matters arising.

3. Periodic Review of Undergraduate Teaching in the Department of Earth Science and Engineering

3.1 In its review of undergraduate teaching in the Department of Earth Science and Engineering the Engineering Studies Committee was advised by four assessors who visited the Department on 13 December 2012. The current *Procedures for the Approval and Review of Undergraduate Programmes* state that for Departments with accredited courses, "the periodic review panel will normally comprise an internal Chairman, from a different Faculty to the Department under review, plus two other internal assessors: typically these will be from the same Faculty as the Department under review and would normally include one Senior Tutor and one Director of Undergraduate Studies (DUGS). There will also be one external assessor from another higher education institution within the UK".

3.2 The assessors for the review were Professor Richard Thompson (College Consul, Faculty of Natural Sciences; internal Chairman), Dr Tony Field (Director of Undergraduate Studies, Department of Computing, Imperial College), Professor Stephen Robert (external reviewer, University of Southampton), Dr Nicholas White

(external reviewer University of Cambridge), Mr Doug Hunt (ICU Deputy President (Education)) The reports of the assessors, including the internal Chairman's summary report were presented to the Committee [Paper A].

3.3 The Committee congratulated the Department on the outcome of its review. The reviewers' reports are, in general, very positive and commend the administration for providing a complete and timely set of documentation for the review which allowed the reviewers to obtain a good understanding of the department and the degree programmes before the review took place.

3.4 The Committee noted that the review panel was very impressed by the overall quality of the degree programmes, the achievement of the students, the engagement of staff and the collaborative ethos in the department. The clearly-articulated educational objectives of the programmes are appropriate and are being achieved very well. It is clear that the department is committed to continuing review and development of its undergraduate degree provision. In turn the staff are engaged and committed to the delivery of the degree programme. Students appreciate the focus on the importance of teaching which runs throughout the department.

3.5 The Committee noted that the degree programme had undergone extensive review since the last Periodic Review in 2008. The panel had been impressed with the structure and content of the curriculum including the continuing emphasis on solid foundations in the first two years (including a firm mathematical preparation) and on field work. The 4th year MSci projects had been modified so that they include one term of full-time work, thus giving students an excellent introduction to the research environment. The review panel had found the full complement of 270 ECTS for the whole MSci programme to be justified, but there were small anomalies in the allocation of the extra summer ECTS credits to years 3 and 4 of the programme. The Department confirmed that these would be resolved soon.

3.6 The review had found that the Department continues to attract students of high quality. Students appreciate the personal treatment that they receive at Open Days and after interviews. Good provision is made for students who do not have A Level Mathematics. The review also noted that dropout rates were low and that the profile of degrees awarded was very good.

3.7 The review found that the most distinctive aspect of the way that the undergraduate programme is organised is the role of the Academic Tutor, Dr Lorraine Craig. Her role encompasses five traditional positions: Admissions Tutor, Senior Tutor, Director of Undergraduate Studies, Disabilities Officer and Careers Adviser. Her excellent interaction with the whole student body is key to the atmosphere in the department. However, one important consequence of this is the risk associated with her not being able to continue in that role for an extended period for any reason. The panel was pleased to hear that the department has deputies in place for all these roles, though they felt that this arrangement could be formalised more than it is at present.

3.8 The reviewers were impressed with ESESIS, the Department's course management and e-learning system. The panel thought that this may be useful to other departments in the College.

3.9 The Committee noted that the review panel found the students they met to be very articulate and spoke highly of the Department and of their interactions with staff. In particular, they praised the Academic Tutor for her approachability and her ability to sort out problems. They appreciated the Department's pledge to return all coursework with feedback within ten days of submission. Students see the quality of teaching as high and the assessment regime as demanding but fair.

3.10 The review panel found that the Department had strong links with industry, which has resulted in industrial support for bursaries and for one of the Teaching Fellows. It is clear that employers value the Department's graduates as employment rates are very high.

3.11 It was agreed that the Committee would review progress on the action taken by the Department with regard to points 3.5 and 3.7 at its meeting to be held in May 2014.

4. Reorganisation of Undergraduate Courses and Examinations

4.1 Department of Bioengineering

4.1.1 The Committee **approved** a proposal to award ECTS for summer work placements and UROP projects [Paper B].

4.2 Department of Civil and Environmental Engineering

4.2.1 The Committee **approved** a proposal to reduce the number of optional modules fourth year students take in their first term from six to five [Paper C].

4.3 Department of Computing

4.3.1 The Committee **approved** a proposal to adjust the distribution of marks in the second year of the BEng and MEng Computing degree programmes [Paper D].

4.3.2 The Committee **approved** a proposal to restructure the third year of the BEng and third and fourth year of the MEng Computing degree programmes [Paper E].

4.4 Department of Earth Science and Engineering

4.4.1 The Committee **approved** a proposal to amend the Scheme for Award of Honours [Paper F], which reflects changes made in the structure of the undergraduate degree programmes over the last few years.

4.5 Department of Materials

4.5.1 The Committee **approved** a proposal to establish an exchange programme agreement with the Massachusetts Institute of Technology [Paper G].

4.6 Department of Aeronautics

4.6.1 The Committee noted that the Department has approved a new optional module *Separated Flows and Fluid-Structure Interaction* to be offered to fourth year students on the MEng degree programmes [Paper P].

4.6.2 The Department reported that they would no longer be offering Humanities programmes for credit following the introduction of the *Horizons* programme. However, there was confusion among Committee members as to whether *Horizons* programme modules could be taken for credit. The Chairman said he would investigate the matter further.

5. Integrated Master's Degrees

5.1 The Committee further considered a paper previously tabled by the Academic Registrar [Paper H], following an inconclusive discussion at the last meeting of the Science Studies Committee. The Committee supported the proposal of awarding an unclassified Bachelors degree to students who had completed a MEng degree

programme. The proposal is to be fully considered at the next meeting of QAEC.

6. Conduct of Boards of Examiner meetings

6.1 The Committee considered a paper outlining the Faculty of Engineering's principles regarding the conduct of Boards of Examiners meetings [Paper I]. The Committee asked that the first line stating that 'all 9 departments in the Faculty of Engineering unanimously support the following principles on the conduct of examination boards for UG degree programmes', be amended but accepted the proposals set out in this paper. The Chairman said he would update the document to more accurately reflect the views of the Committee.

7. Annual Report on Degree Classifications

7.1 The Committee considered the annual report on degree classifications and noted that all departments within the Faculty were over the target of 70% combined first class and second class (upper division) target [Paper J].

8. Annual Report by Student Representatives

8.1 The Committee considered a report from the student representatives [Paper K]. The Chairman thanked both the ICU Deputy President (Education) and CGCU Representative, who was not present, for their contributions over the last year.

9. Scholarships and Prizes

9.1 Cadzow Smith Prize

The Committee noted that the College's nomination for the Cadzow Smith award, Matthew Wood (Civil and Environmental Engineering), has been awarded the Cadzow Smith Prize by the Worshipful Company of Engineers. The Committee congratulated Mr Wood on his award.

10. Fellowships Awarded by City and Guilds Institute of London

10.1 The Committee noted that the City and Guilds Institute of London has awarded fellowships to three members of staff at Imperial College: Professor Jan Cilliers, Professor Guang-Zhong Yang and Professor Peter Cawley [Paper L].

11. Senate Executive Summary

11.1 The Committee noted the Executive Summary of the meeting of Senate held on 27 February 2013 [Paper M].

12. QAEC Report

12.1 The Committee noted the Report by the Quality Assurance and Enhancement Committee [Paper N].

13. Science Studies Committee Executive Summary

13.1 The Committee noted the Executive summary of the meeting of the Science Studies Committee held on 13 February 2012 [Paper O].

14. Dates of next meetings

Wednesday 13 November 2013

Wednesday 12 March 2014
Wednesday 21 May 2014

15. Any other business

15.1 The representative from Computing informed the Committee that his department were considering applying to become part of the Erasmus Industrial Placement scheme. A proposal would be forwarded for Chairman's action in the coming weeks.