Imperial College London

Master's Quality Committee

(Business, Engineering & Physical Sciences)

Confirmed Minutes of the meeting held on Friday 11 July 2014

Present:

Dr David McPhail, Graduate School Deputy Director & Department of Materials (Chair)

Professor Alessio Corti, Department of Mathematics

Mr Max Boleininger, Student Representative for Physical Sciences

Professor Sergei Chernyshenko, Department of Aeronautics

Professor Lesley Cohen, Department of Physics

Ms Boshuo Guo, GSU Deputy President

Professor Andrew Holmes, Department of Electrical and Electronic Engineering

Professor Bassam Izzuddin, Department of Civil & Environmental Engineering

Professor Richard Jardine, College Consul for Engineering & the Business School

Ms Nat Kempston, ICU Deputy President (Education)

Professor Kang Li, Department of Chemical Engineering

Dr Marco Mongiello, Business School

Dr Darryl Overby, Department of Bioengineering

Dr Fariba Sadri, Department of Computing

Ms Sophie White, Senior Assistant Registrar (Quality Assurance)

In attendance:

Mr Daniel Smith, Assistant Registrar (secretary)

Apologies:

Mr Hassan Ahmadzadeh, Student Representative for Engineering

Dr Simon Archer, College Tutor

Dr Laura Barter, Department of Chemistry

Dr John Gibbons, Department of Mathematics

Professor Sue Gibson, Director Graduate School

Professor Debra Humphris, Vice Provost (Education)

Professor Howard Johnson, Department of Earth Science & Engineering

Dr Pat Leevers, Department of Mechanical Engineering

Ms Ruxandra Luca, Student Representative for the Business School

Professor Stefan Maier, Department of Physics

Mr Dean Pateman, Academic Registrar

Mr Andreas Thomik, GSU President

Professor Richard Thompson, College Consul for Natural Sciences

Dr Nick Voulvoulis, Centre for Environmental Policy

Professor Denis Wright, Director of Student Support

1. Welcome and Apologies

Dr David McPhail welcomed members to the meeting and apologies, as listed above, were noted.

- 1.1 Dr McPhail thanked the following Committee Members, who are stepping down from their current roles, for their contributions and efforts.
 - Mr Mohammad Ahmadzadeh
 - Professor Lesley Cohen
 - Ms Natalie Kempston
 - Ms Ruxandra Luca
 - Mr Andrea Thomik

2. Minutes Paper A

The Committee approved the minutes from the Master's Quality Committee (Business, Engineering & Physical Sciences) held on Friday 16 May 2014.

3. Matters arising from the Minutes

Further to Minute 4.1.9, it was reported by Professor Andrew Holmes that the review of ECTS credit allocated to Master's level programmes in the Department of Electrical and Electronic Engineering would be completed before the start of the academic year 2014/15.

4. Major Modifications

4.1 Global MBA (Business School)

Paper B

The Committee considered a proposal from the Business School to restructure the Global MBA programme in line with the Executive MBA programme model. The Committee agreed the proposed modifications and agreed to recommend them for Senate approval. It was noted that the Business School were currently revising the assessment arrangements for the new programme and these would be presented for consideration by the MQC in due course. The programme is scheduled to start in January 2015.

Action: Business School

4.2 MSc in Strategic marketing (Business School)

Paper C

The Committee considered a proposal from the Business School to change the learning objectives for the MSc in Strategic Marketing. The Committee agreed the proposed modifications and agreed to recommend them for Senate approval with effect from September 2014.

4.3 MSc in Finance (suite of programmes) (Business School)

Paper D

The Committee considered a proposal from the Business School to adjust the weighting of the assessments for the September Foundation modules on the MSc in Finance (suite of programmes). The Committee agreed the proposed modifications and agreed to recommend them for Senate approval with effect from September 2014.

4.4 MSc in Nuclear Energy (Department of Materials)

Paper E

The Committee considered a proposal from the Department of Materials to introduce a new collaborative optional module in "Nuclear Energy Policy" on the MSc in Nuclear Energy. The module would be delivered and assessed by The Open University. It was noted that the MSc in Nuclear Energy was offered as the first year of an integrated

Master's-PhD (1+3) programme via the IOC CDT in Nuclear Engineering, a collaboration between Imperial, The Open University and University of Cambridge. The Committee approved the collaboration and agreed to recommend it for Senate approval.

Post Meeting Note

It was confirmed by the Department that a module agreement was not needed as the collaboration with The Open University was covered by the IOC CDT agreement.

4.5 MSc in Advanced Materials Science & Engineering (Department of Materials)

Paper F

The Committee considered a proposal from the Department of Materials to adjust the weighting of assessments for the MSc in Advanced Materials Science & Engineering. The Committee agreed the proposed modifications and agreed to recommend them for Senate approval with effect from October 2014.

4.6 MRes in Mathematics of Planet Earth

Paper Q

The Committee considered a proposal from the Department of Mathematics to introduce a new Imperial-owned, elective module to the joint MRes in Mathematics of Planet Earth with the University of Reading. The Committee agreed the proposed modifications and agreed to recommend them for Senate approval with effect from September 2014.

5. Programme Reviews

5.1 MSc in Communication & Signal Processing (Department of Electric & Electronic Engineering)

Paper G

The Committee considered the programme review of the MSc in Communication & Signal Processing for 2012/13. The programme was reviewed by Dr David McPhail and received a rating of 'GOOD'.

- 5.1.1 Dr McPhail considered the integration of the programme administration with other MSc programmes in the department as well as the engagement with industry and associated knowledge transfer to be examples of good practice. Dr McPhail also praised the Programme Handbook as exemplary.
- **5.1.2** Dr McPhail did not recommend any follow up action.
- 5.1.3 The Committee endorsed the rating of 'GOOD' and it was agreed the programme would next be reviewed, according to the College's procedures for the regular monitoring and periodic review of programmes.

6. External Examiners

6.1 External Examiners reports for 2012-3

Paper H

The Committee considered reports from External Examiners for the academic year 2012/13.

6.1.1 The Committee noted that three external examiners reports were still outstanding and agreed that external examiners with outstanding reports should not be reappointed for the academic year 2014/15.

6.1.2 MSc in Plasmonics and Metamaterials

The Committee noted the report from Professor Anatoloy Zayats. Professor Zayats was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

- **6.1.2.1** Professor Zayats considered the Computer Lab module to be a sophisticated and demanding programme and an example of good practice. Professor Zyats congratulated the lecturers involved in this module.
- **6.1.2.2** The Committee agreed that they were satisfied with the Department's response.

6.1.3 MSc in Soil Mechanics & Engineering Seismology and MSc in Soil Mechanics & Environmental Geotechnics

The Committee noted the report from Professor David Toll. Professor Toll was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

6.1.3.1 The Committee agreed that they were satisfied with the Department's response.

6.1.4 MSc Soil Mechanics & Environmental Geotechnics

The Committee noted the report from Dr Peter Cleall. Dr Cleall was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

- **6.1.4.1** Dr Cleall considered the practical field work, in both the UK and overseas and the use of well-targeted feedback in fieldwork notebooks to be examples of good practice.
- 6.1.4.2 Dr Cleall noted that two of the research projects were outside the specialism of the programmes and was supportive of initiatives to ensure dissertation topics are in-line with the programme's specialism. The Department commented that whilst they encourage students to develop research topics within the programme's specialist area that this is difficult to enforce. The Committee was satisfied with the department's response

6.1.5 MSc in Soil Mechanics & Engineering Seismology

The Committee noted the report from Dr Iain Tromans. Dr Tromans was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

- **6.1.5.1** Dr Tromans considered the balance between examinations, coursework and the research project to be a strength of the programme and noted that the combination of laboratory work, fieldwork and coursework provided a well-rounded learning experience with strong industry relevance.
- **6.1.5.2** The Committee agreed that they were satisfied with the Department's response.

6.1.6 MSc in Systems Engineering and Innovation

The Committee noted a report from Professor Geoffrey Levermore. Professor Levermore was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

- **6.1.6.1** Professor Levermore considered the advanced nature of the research projects a credit to the scheme.
- **6.1.6.2** Professor Levermore noted that although the modules were of a high quality that some of the syllabi had no references for text books or papers for further reading.
- **6.1.6.3** The Committee agreed that they were satisfied with the Department's response.

6.1.7 MSc in Earthquake Engineering and MSc in Structural Steel Design

The Committee noted the report from Professor Brian Broderick. Professor Broderick was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

- **6.1.7.1** Professor Broderick was impressed that students were allowed to complete either a structural design project or a research dissertation as a final project and noted that this allowed students to build upon and develop their own particular interests and strengths.
- **6.1.7.2** The Committee agreed that they were satisfied with the Department's response.

6.1.8 MSc in Structural Engineering

The Committee noted the report from Dr Christopher Burgoyne. Dr Burgoyne was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

- 6.1.8.1 Dr Burgoyne was concerned that the large percentage of students who were awarded distinction had the effect of devaluing the degree. The Committee considered the current marking scheme and noted that the 50-70 marking band does not provide sufficient range to match the distribution of talent at Imperial. The Committee considered whether these problems could be eased by, for example, expanding the merit grade boundary or introducing an additional grade above distinction.
- 6.1.8.2 The Committee agreed that it would be impractical to make any fundamental changes to the Master's level marking scheme but that there should be a way for the College to systematically recognise the best students within each cohort. The Committee recommended that the Registry develop a mechanism through which this could be achieved and submit this to the Master's Quality Committees (MQCs) for consideration in the next academic year.

Action: Registry

6.1.9 MBA and Executive MBA

The Committee noted the report from Professor Margaret Bruce. Professor Bruce was content that the examination process, including the overall quality of assessments, was

appropriate and that the academic standards achieved by students were comparable with other institutions.

- **6.1.9.1** Professor Bruce considered the transparency of procedure to be commendable and an example of good practice. Professor Bruce further commended the projects which she considered to be challenging and topical.
- **6.1.9.2** The Committee agreed that they were satisfied with the Department's response.

6.1.10 MSc in Management

The Committee noted the report from Dr Gianvito Lanzolla. Dr Lanzolla was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

- **6.1.10.1** Dr Lanzolla noted that the merit grade did not allow for sufficient distinction between students at the lower and upper end of the band. The Department noted Dr Lanzolla's comments but felt that the grade distribution appropriately reflected the ability of students.
- **6.1.10.2** Dr Lanzolla further noted that the manner in which marks were re-scaled did not meet the standards of external validity that was expected of a leading institution. The department was grateful for Dr Lanzolla's comments and agreed to follow the suggestions in future years.
- **6.1.10.3** The Committee agreed that they were satisfied with the Department's response.

6.1.11 MSc in Economics & Strategy for Business

The Committee noted the report from Professor Michael Mayer. Professor Mayer was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

6.1.11.1 The Committee agreed that they were satisfied with the Department's response.

6.1.12 MSc in Applied Mathematics

The Committee noted the report from Professor Alan Champneys. Professor Champneys was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

- 6.1.12.1 Professor Champneys was concerned with the moderation of project marks which he considered to be inadequate and unfair to students. Professor Champney recommended that each project be marked by two independent assessors and that the department consider whether the project supervisor should be one of the assessors. The Department agreed to hold a separate moderation meeting for the research project but due to the large number of students was not confident that they could implement a system whereby the supervisor was not an assessor.
- **6.1.12.2** The Committee agreed that they were satisfied with the Department's response.

6.1.13 MSc in Transport

Paper R

The Committee noted the report from Professor Stephen Potter. Professor Potter was content that the examination process, including the overall quality of assessments, was appropriate and that the academic standards achieved by students were comparable with other institutions.

- **6.1.13.1** Professor Potter considered the practice-based coursework, range of elective modules and the involvement of practitioners to be excellent practice and encouraged the department to continue making further developments.
- 6.1.13.2 Professor Potter was concerned with the quality of exam papers which he received for comment as well as the marking schemes and model answers for some of the modules. The Department confirmed that they would increase their efforts to provide marking guides for all modules and has introduced an internal process to quality check exam papers before they are submitted to the External Examiner.
- **6.1.13.3** The Committee agreed that they were satisfied with the Department's response.

6.2 Summary of External Examiner Reports

Paper I

The Committee considered the annual Summary of External Examiner Reports for the academic year 2012/13 and noted that QAEC had asked for the summary to be distributed to Programme Directors.

6.2.1 It was agreed that before the report was circulated further it should be amended to include the number of programmes in the College (in order to provide a sense of scale) and that the introduction should be enhanced to include a description of the purpose of the external examining system and that responses to issues have been addressed by the department in their individual reports.

It was also noted that the final report would be presented to Senate in October and would be made available on the website at:

http://www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance/externalexamining.

Post Meeting Note

The Summary of Master's Level External Examiners Reports is due to be discussed by Programme Directors at the Master's Programme Organisers' Meeting.

6.3 Nomination of External Examiners for 2014-5

Paper J

The Committee agreed to appoint the nominated chairs and external examiners for the departments of Aeronautics and Bioengineering for 2014-5.

7. MA/MSc in Global Innovation Design

7.1 Second Stage Review of MA/MSc in Global Innovation Design

Paper K

The Committee considered the Second Stage review of the MA/MSc in Global Innovation Design, a joint programme with the Royal College of Art (RCA) and were satisfied with student progression. As the first cohort will not complete the programme for a further year the Committee recommended that a further second stage review be carried out at the end of the academic year 2014/15 and the review should include the

grades students achieved at their previous institution.

Action: Professor Peter Childs/RCA

7.2 PTES 2014 GID/IDE Programme Results

Paper L

The Committee noted the 2014 Postgraduate Taught Experience Survey (PTES) results for the MA/MSc in Global Innovation Design and the MA/MSc in Innovation Design Engineering. The Committee noted that the results were supplied by the Royal College of Art and were therefore benchmarked against the results of the Royal College of Art and not Imperial College London.

7.2.1 The Committee were concerned with comments made by a number of students regarding work load and equal opportunities and recommended that the Department provide a response to the PTES results for the next meeting. It was further noted that the response should clarify the numbers of students who participated in the survey.

Action: Professor Peter Childs/RCA

7.3 Review of Student Workload

Paper M

The Committee considered a review of the student workload for the GID programme carried out by the Department of Mechanical Engineering and RCA and were satisfied that the workload was appropriate. In light of comments in the PTES results the Committee agreed to look in more detail at this issue during the second stage review at the end of the academic year 2014/15.

7.4 Review of GID & IDE Memorandum of Agreements

The Committee noted that the Memorandum of Agreement for the MA/MSc in Global Innovation Design (GID) with the Royal College of Art had now been signed and that work was in progress for the agreement for the MA/MSc in Innovation Design Engineering (IDE) with the Royal College of Art to be revised along the same lines.

8. Research Integrity

Paper N

The Committee considered a proposal from the Graduate School's Research Integrity Working Party to implement an on-line, plagiarism awareness course for Master's level students. The Committee agreed to implement the compulsory course for the academic year 2014/15.

8.1 The working party proposal had made provision for the Business School to be exempt from the requirement to complete this course as they currently ran their own plagiarism awareness course. The Business School however requested that they should not be exempt and that all Master's level students within the College should be required to complete the same course. Dr Marco Mongiello agreed to discuss this with the Business School.

Action: Dr Marco Mongiello

8.2 The Committee also sought reassurance that the course included details of issues associated with team/group working and explained how students could avoid charges of plagiarism when presenting group work. It was agreed that if this detail was not already covered on the course, it should be added, perhaps in the form of a case study.

Action: Graduate School

9. Chair's Report

Paper O

The Committee noted actions taken by the Chair since the last meeting.

9.1 Requests for Dispensation from Anonymity

The Committee considered the fact that programmes which had been given dispensation from anonymity had been asked to work towards anonymity. The Committee felt that this was not what had been agreed when introducing the new procedure and that moving towards anonymous boards for all programmes was at odds with the academic community. Dr McPhail agreed to clarify the position with QAEC and report back to the Committee.

Action: Dr David McPhail

10. Minor Programme Modifications

The Committee noted minor modifications to Master's level programmes which had been approved at departmental level during the academic year 2013/14.

11. Senate Executive Summary

The Committee noted that the latest executive summaries from Senate were available at: Senate Executive Summary.

12. QAEC Summary Reports

The Committee noted that the latest Senate reports from QAEC were available at: QAEC Executive Summary.

13. Dates for meetings in 2014/15 are as follows:

Tuesday 04 November 2014, 10:00-13:00, Council Room, 170 Queen's Gate Tuesday 13 January 2015, 10:00-13:00, Ballroom, 58 Prince's Gate Tuesday 24 March 2015, 10:00-13:00, Council Room, 170 Queen's Gate Tuesday 26 May 2015, 10:00-13:00, Ballroom, 58 Prince's Gate Tuesday 30 June 2015, 10:00-13:00, Council Room, 170 Queen's Gate

14. Reserved Areas of Business

There were no Reserved Areas of Business