# Imperial College London

# GRADUATE SCHOOL MASTER'S QUALITY COMMITTEE (BUSINESS, ENGINEERING & PHYSICAL SCIENCES)

The minutes of the Graduate School Master's Quality Committee (Business, Engineering & Physical Sciences) held on Thursday 15<sup>th</sup> November 2012

#### Present:

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

Dr Tim Albrecht, Department of Chemistry

Professor Sergei Chernyshenko, Department of Aeronautics

Ms Margaret Cunningham, College Tutor

Professor Andrew George, Director Graduate School

Dr John Gibbons, Department of Mathematics

Professor Andrew Holmes, Department of Electrical and Electronic Engineering

Professor Debra Humphris, Pro Rector (Education)

Mr Doug Hunt, ICU Deputy President (Education)

Professor Bassam Izzuddin, Department of Civil & Environmental Engineering

Professor Howard Johnson, Department of Earth Science & Engineering

Dr Marco Mongiello, Business School

Mr Nicholas Ng, Student Representative for Engineering

Dr Fariba Sadri, Department of Computing

Professor Richard Thompson, Dean for Natural Sciences

Dr Nick Voulvoulis, Centre for Environmental Policy

Mr Ross Webster, Student Representative for Physical Sciences

Mr Nigel Wheatley, Academic Registrar

Professor Denis Wright, Dean of Students

#### In attendance:

Professor Gerry George, Business School (for item 5.1)

Ms Sophie White, Senior Assistant Registrar (Secretary)

#### **Apologies:**

Professor Lesley Cohen, Department of Physics

Dr Rob Dickinson, Department of Bioengineering

Professor Amparo Galindo, Department of Chemical Engineering

Ms Maryam Habibzay, GSA President

Professor Richard Jardine, Dean for Engineering & the Business School

Dr Pat Leevers, Department of Mechanical Engineering

Professor Kang Li, Department of Chemical Engineering

Mr Simon Schillebeeckx, Student Representative for the Business School

#### **Minutes**

#### 1. Welcome and Apologies

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

#### 2. Terms of Reference & Membership

Paper A

The Committee approved the terms of reference and membership for the Master's Quality Committee (Business, Engineering & Physical Sciences) for 2012-3.

- The Committee noted that the Management & Strategy Committee had been discontinued with the Master's Quality Committees taking on the Management & Strategy Committee responsibilities which related to Master's students and the Postgraduate Research Quality Committee taking on those responsibilities which related to research students. It was also noted that the Joint Research Degree Committee had also been disbanded with the Postgraduate Research Quality Committee taking on its terms of reference.
- 2.2 It was noted that Ms Margaret Cunningham had kindly agreed to stay on the Master's Quality Committee until Christmas after which a new College Tutor would take over.

#### 3. Committee Minutes

#### 3.1 Master's Quality Committee (Business, Engineering & Physical Sciences)

Paper B

The unconfirmed minutes from the Master's Quality Committee (Business, Engineering & Physical Sciences) held on 24<sup>th</sup> September 2012 were agreed.

#### 4. Matters arising from the minutes

Matters arising not appearing elsewhere on the agenda were discussed.

- 4.1 Further to minute 3.1, it was noted that Senate had now approved the MSc in Physics with Extended Research. It was noted that Council approval was not required. It was further noted that approval had been retrospective (with effect from October 2012) and there were 3 potential transfers on to the new programme from the existing MSc in Physics.
- **4.2** Further to minute 3.3, it was noted that Materials and Physics were yet to provide feedback to Betty Yue on the course costing spreadsheets.

Action: Materials/Physics

4.3 Further to minute 3.5 regarding the annual monitoring process, it was noted that this had not worked well and that it would make sense to continue with the established 3 yearly course review process. It was therefore noted that it was intended that the framework developed for the Master's annual monitoring form should be used as the course review template. The course review process should be aligned with the departmental periodic review process, which in turn was aligned to the department's external accreditation schedule, so that all courses in a department would be reviewed at the same time. The rating system of "GOOD", "SATISFACTORY" and "POOR" for course reviews would be maintained. Courses which received ratings of "GOOD" would be reviewed three years later (normally

around the time of their department's periodic review of postgraduate taught provision). Courses which received ratings of "POOR" or "SATISFACTORY" would have the timing and format of their next review(s) decided by the MQC.

4.3.1 There was some discussion whether courses which continually received a rating of "SATISFACTORY" required another mechanism for ensuring the course improved over time. It was agreed to raise this issue with the MQC (LSM) for their views.

**Action: SCW** 

- 4.3.2 It was noted that new courses would be asked to provide a short report (including a link to their student handbook) on their progress in the summer term of their first year, followed by a short report on their first student cohort's entry and exit qualifications and comment on the application numbers for their second year in the autumn/spring term of their second year of operation. This (or a mini-review as decided by the MQC) would continue until the course fell into line with the review schedule for their department.
- 4.3.3 It was noted that departments would be asked to ensure the following (QAA based) subjects were discussed on, at least, an annual basis at their course/departmental teaching committees:
  - What measures are being taken to ensure programmes remain current and valid in light of developing knowledge in the discipline, and practice in its application
  - An evaluation of the extent to which the intended learning outcomes are being attained by students
  - An evaluation of the continuing effectiveness of the curriculum and of assessment in relation to the intended learning outcomes
  - What measures are being taken to ensure that recommendations for appropriate actions are followed up to remedy any identified shortcomings.

The committee minutes would be collected as part of the course review process and these questions would then be considered in detail as part of the departmental periodic review.

- 4.3.4 It was noted that on an annual basis the MQC would continue to receive external examiners' reports for each course. It was further noted that, annually, all courses would be asked to submit a record of their minor course modifications to the MQC for recording.
- 4.3.5 It was further noted that the MQC would continue to receive on an annual basis details of applications and awards (normally in the spring term). MQC members would be asked to comment on their departmental statistics verbally when these reports are considered. In the summer term MQC members would also be asked to comment whether there were any significant themes/issues from staff/student committees in their department. Absent members would be asked to supply written reports.
- **4.3.6** It was noted that full details of the new process would be circulated.

**Action: SCW** 

**4.3.7** It was further noted that all Course Organisers with a course due for a review during the 2012-3 academic session had already been notified.

4.3.8 Professor Debra Humphris reported that it was highly likely that Key Information Sets (KIS)s for Master's programme would be introduced and suggested that the College/departments should start planning for their introduction. Mr Nigel Wheatley agreed that the Registry would consider what could be done easily straightaway.

**Action: NW** 

- 4.4 Further to minute 3.8, it was noted it would not be possible for courses to include their own questions in PG SOLE but if courses/departments wished to do so, they could carry out their own surveys incorporating the PG SOLE questions. However, if this were to be done the course/department must return the responses to the PG SOLE questions in the College's prescribed format.
- **4.5** Further to minute 3.8.1, it was noted that the collated ideas for improving participation rates in surveys had been circulated to all in-coming and out-going Committee members.
- **4.6** Further to minute 3.9, it was noted that QAAC's discussion of penalties for late submission had been postponed at their previous meeting, and that this issue was now due to be discussed at QAAC on 20<sup>th</sup> November 2012.
- 4.7 Further to minute 4.1 concerning the proposed MA/MSc in Global Innovation Design with the Royal College of Art, it was noted that Chair's Action had been taken to agree the extra 20 ECTS credits and also to agree a change to the additional entrance requirement (see Chair's Notes). It was noted that the proposal had been considered at Senate on 31<sup>st</sup> October and it had been approved, subject to a satisfactory Memorandum of Agreement being drawn up. It was further noted that the programme had been approved by the RCA. The RCA had had some concerns about the student workload related to the 180 ECTS but had agreed to keep this aspect of the award under review.
- 4.8 Further to minute 5.1 regarding amending minute 6.3 from the meeting of 31<sup>st</sup> May 2012 of the Joint Academic Advisory Board for the MA/MSc in Innovation Design Engineering, it was noted that this was in progress.

**Action: RP** 

- 4.9 Further to minute 5.3 regarding the role and responsibilities of the Joint Academic Advisory Board for the MA/MSc in Innovation Design Engineering, it was noted that the minutes had been fed back to the relevant parties and that the terms of reference for the Joint Academic Advisory Board for the MA/MSc in Global Innovation Design Engineering were being clearly defined in the Memorandum of Agreement. It was noted that it was likely that the Joint Academic Advisory Board for the IDE and GID programmes would be the same and it was intended that the terms of reference drawn up for GID would ultimately apply to both programmes.
- Further to minute 6.4, it was noted that both the IDE and GID programmes would be required to participate in PG SOLE. This was being written into the GID agreement. It was further noted that once the GID agreement was finalised, it was intended that the IDE agreement would be revisited to bring it into line with GID.

#### 5. New Course Proposal

## 5.1 MSc in Data Science & Management

Paper C

& Ci

The Committee considered a proposal from the Business School for a new course, MSc in Data Science & Management, with effect from October 2013.

- The proposal was presented by Professor Gerry George. It was noted that although the course would be owned and run by the Business School it would involve collaboration with the Department of Computing. The course would consist of a mixture of compulsory and optional modules plus a consulting project and management report or a project. It was noted that the first term would mainly consist of modules delivered by Computing, the second term of modules delivered by the Business School and the third term would be the project element.
- Dr Fariba Sadri confirmed that the Department of Computing were committed to the programme but that some of the computing modules listed in the proposal as available in the autumn term would not be available until the spring term. It was agreed that this was an operational issue which could be dealt with outside of the meeting.
- The Committee heard that the motivation behind the establishment of the course was that there was strong market demand. The course would combine the College's expertise in data science with opportunities to apply this in various finance, business and policy settings.
- 5.5 It was noted that students would be given the opportunity to take in-year re-sits in September for courses taught by the Business School. Re-sits for courses taught by the Department of Computing would take place the following academic year.
- 5.6 It was further noted that the course would be offered on a full-time basis only and it would attract a premium fee in line with the Business School's fee structure.
- 5.7 It was noted that the Business School hoped to recruit between 30-50 students to the course in its first year. The Business School had included the course in its planning round exercise and were working on ensuring the required addition resources (space, facilities, etc.,) were in place.
- The Committee approved the course with effect from October 2013 and agreed to recommend it for Senate approval.

#### 6. Follow up from Course Reviews

# 6.1 MSc in Risk Management & Financial Engineering

Paper D

The Committee considered a follow-up report from the Business School on the MSc in Risk Management & Financial Engineering which had received a rating of "SATISFACTORY" at its last course review.

6.1.1 Dr Marco Mongiello presented the report and explained that the scores for teaching from the lecturer evaluations were improved, there was now less use of Teaching Assistants (TAs) on the programme and measures had been put in place to improve the training of TAs and newly appointed lecturers. Dr Mongiello also reported that

the examination results for the last three years were now more typical of the Business School programmes.

- **6.1.2** It was agreed that the Business School had satisfactorily addressed the issues raised in the course review.
- **6.1.3** It was noted that the course would undergo a full course review this academic year.

#### 6.2 MSc in Actuarial Finance

Paper E

The Committee considered a follow-up report from the Business School on the MSc in Actuarial Finance which had received a rating of "GOOD" with the exception of examinations' at its last course review.

- 6.2.1 Dr Mongiello reported that the Business School had introduced several new mechanisms to improve the uniformity of standards and attendance at Examiners' Meetings. It was noted that the programme review meeting was now held at the same time as the Examiners' meeting and this had improved attendance.
- 6.2.2 It was suggested that, as the programme used a large number of external lecturers, the Business School might wish to consider appointing a module leader for each module who had overall responsibility for their module so that all lecturers would not have to attend the meetings. It was noted that this system worked well for the Centre for Environmental Policy.
- **6.2.3** It was agreed that the Business School had satisfactorily addressed the issues raised in the course review.
- **6.2.4** It was noted that the course would undergo a full course review this academic year.
- 6.3 MRes in Drug Discovery and Development: Multidisciplinary Science for Next Paper F Generation Therapies (2011-2)

The Committee considered a brief report on the new MRes in Drug Discovery and Development: Multidisciplinary Science for Next Generation Therapies (Department of Chemistry) on the results achieved by their first cohort of students (2011-2).

6.3.1 The Committee were pleased with the results noting that of the nine students on the course, three had achieved a distinction and five had achieved a merit. It was also noted that four students had gone on to do a PhD (two of these at Imperial).

#### 7. Course Modification

#### 7.1 MSc Finance and MSc Risk Management & Financial Engineering

Paper G

The Committee considered request from the Business School to change the assessment on the Advanced Options Theory elective on the MSc Finance and the MSc Risk Management & Financial Engineering with effect from October 2012.

- **7.1.1** It was noted that the students had been consulted and no objections had been raised.
- **7.1.2** The Committee approved the change with immediate effect and agreed to recommend it for Senate approval.

#### 8. Change of Award Title

# 8.1 MRes in Chemical Biology of Crop Sustainability & Protection

Paper H

The Committee considered a request from the Department of Chemistry to change the name of the MRes in Chemical Biology of Crop Sustainability & Protection to the MRes in Plant Chemical Biology: Multidisciplinary Research for Next Generation Agrisciences with effect from October 2013.

- 8.2 The Committee noted that the new name would better reflect the students' perception of the course and increase visibility and awareness of the programme to potential students.
- **8.3** The Committee approved the change with effect from October 2013 and agreed to recommend it for Senate approval.

#### 9. Course Suspensions

#### 9.1 MSc in Computing for Industry

Paper I

The Committee considered a request from the Department of Computing to suspend the MSc in Computing for Industry for one year (2013-14) whilst the department considered consolidating and restructuring their MSc courses.

**9.1.1** The Committee approved the suspension for 2013-4 and agreed to recommend it for Senate approval.

#### 9.2 MSc in Computing (Performance Modelling)

Paper J

The Committee considered a request from the Department of Computing to suspend the MSc in Computing (Performance Modelling) for one year (2013-14) whilst the department considered consolidating and restructuring their MSc courses.

**9.2.1** The Committee approved the suspension for 2013-4 and agreed to recommend it for Senate approval.

#### 10. Course Withdrawal

#### 10.1 Distance Learning MBA

Paper K

The Committee considered a request from Business School to withdraw the Distance Learning MBA with effect from October 2013.

- 10.1.1 The Committee noted that the Business School were intending to introduce a new programme to their MBA portfolio in October 2014 which would include flexible and blended learning.
- **10.1.2** The Committee approved the withdrawal of the Distance Learning MBA with effect from October 2013 and agreed to recommend the withdrawal to Senate.

#### 11. Draft Precepts for Master's Programmes

Paper L

The Committee considered the proposed draft precepts and supporting documentation for Master's level programmes and were asked give a view on whether these precepts should form part of the departmental periodic review for

postgraduate taught programmes.

- 11.1 It was noted that the College had recently agreed a set of precepts for MRes courses which were aligned to those previously approved for the College's research degree programmes. These were agreed to take effect from 2013-4. However, since the publication of chapter B11: Research Degrees, of the QAA's UK Quality Code, it had been decided that a separate set of precepts for MRes courses was not needed. It was therefore being proposed that the MRes precepts should be revised in order to make them applicable to all Master's level programmes (MSc, MRes, MBA, MPH, Postgraduate Certificate and Postgraduate Diploma). It was further noted that where relevant and practical, the indicators of the QAA's UK Code of Practice: Chapter B11: Research Degrees, had been adhered to for the research elements of the College's Master's level courses.
- 11.2 It was noted that the need for an external examiner on a viva for MRes students had been removed from the precept on assessment and this was being suggested as an instance of good practice instead. The Committee noted that QAA had found at their last audit that the College's assessment arrangements were "consonant with the section of the QAA Code of Practice relating to postgraduate research students" and therefore it was not necessary to impose this additional hurdle for MRes programmes. The Committee applied the same reasoning to the QAA's suggestion that there may be an independent chair appointed for the viva of research degree programmes and it was agreed that such an arrangement was neither desired nor practical.
- 11.3 The Committee approved the new precepts with effect from 2013-4, although it was noted that departments should be working towards compliance now. It was noted that the MQC (MLSPD) would also be asked to approve the precepts prior to endorsement by Senate.
- It was also agreed that the precepts should form part of a department's periodic review as well as part of the new course approval procedure, with departments being asked to confirm they understand their responsibilities and intend to comply with the precepts when establishing and organising a new course. It was noted that the MQC (MLSPD) would also be asked for their views.
- The Committee also considered the draft supporting document for the new precepts. It was agreed that it would be useful for departments to be supplied with the conversion rates for offers to admission for their courses and it was confirmed this information would be provided as a new ICA dashboard report.
- 11.6 Regarding the precept concerning offers, it was asked what recruitment and selection training course organisers should attend. Professor George explained that there was a short online course available and that he would circulate the details to Committee members.

**Action: AG** 

#### 12. Preparation of Model Answers to Examination Questions

Paper M

The Committee considered whether departments should provide their students with model outline answers and illustrative examples of how they might address examination questions.

12.1 It was noted that the Science Studies Committee had discussed the matter previously and had proposed that:

"As a minimum, departments should provide their students with outline answers to specimen questions and illustrative examples, where appropriate, of how students might address the question. Where students are required to undertake MCQ examinations, departments should provide examples of the format of such examinations and state whether the MCQ examination is negatively marked".

12.2 The Committee agreed the following slight amendment to the Science Studies Committee's text:

"As a minimum, departments should provide their students with outline answers to specimen questions <u>OR</u> illustrative examples, where appropriate, of how students might address the question. Where students are required to undertake MCQ examinations, departments should provide examples of the format of such examinations and state whether the MCQ examination is negatively marked".

- 12.3 It was also agreed that model outline answers could be given for past questions as well as "specimen" questions but that not all past questions should be made available as many of these were in use aids for teaching.
- 13. Discussion of Issues With the Peer Assessment of Coursework

Paper N

The Committee considered a discussion paper by Dr David McPhail on peer assessment of coursework.

- Dr Marco Mongiello explained the practices for peer assessment used in the Business School. The Committee also heard a description of an alternative method used in the Centre for Environmental Policy.
- Professor Debra Humphris directed the Committee to the HEA website which contained extensive literature on the subject and which contained many examples for different models of peer assessment.
- 13.3 It was agreed that it would be helpful for the College to have a clear assessment strategy or guidelines which laid out the parameters, safeguards and rationale for the use of peer assessment.
- Professor George agreed to produce a paper, with the Educational Development Unit (EDU), which would look at the information available and which would set out central guidelines for the use of peer assessment but which would allow individual courses flexibility in practice.

**Action: AG** 

## 14. Appointment of External Examiners

Paper O

The Committee approved the appointment of external examiners with exceptions: **Discussion reported in Appendix 1 [not published with the minutes]** 

15. Chair's Report

The Committee noted a report of actions taken since the last meeting

15.1 It was further noted that, since the report had been written, Dr McPhail had taken Chair's Action to approve a change to the additional entry requirements for the proposed MA/MSc in Global Innovation Design. It was noted that the entry requirement would now be "normally at least an upper second class honours degree" rather than a first as had originally been agreed by Senate.

#### 16. Schedule of course reviewers

Paper Q

Paper P

The Committee noted the allocation of course reviews for reviewing in 2012-3.

- 16.1 It was noted that due to the number of reviews scheduled for 2012-3 in may be necessary to schedule an additional MQC meeting in the spring or summer term to accommodate them.
- 16.2 It was also noted that alternate members of the Committee would be asked to carry out a review and departmental members were asked to confirm the name of their alternate.

**Action: All departmental members** 

#### **Post Meeting Note**

Following the meeting it was noted that Dr Axel Gandy would replace Professor Alessio Corti as the alternate for the Department of Mathematics and Dr Stavroula Kontoe would replace Dr Neil McIntyre as the alternate for the Department of Civil & Environmental Engineering.

17. Internal Moderator's Report for the MA/MSC in Innovation Design Engineering
The Committee received the Internal Moderator's Report for the MA/MSc in
Innovation Design Engineering.

Paper R

- 17.1 It was noted that the RCA use internal moderators on their Final Examination Boards and that in future the IDE Course Directors would be asked to submit these reports at the same time as their external examiner reports so that they could be considered together.
- 18. Postgraduate Surveys

Paper S

The Committee noted details of the Postgraduate Surveys planned for 2012-3 and noted that Autumn PG SOLE would open on 3<sup>rd</sup> December 2012.

19. Senate Executive Summary

It was noted that the latest executive summaries from Senate were available.

20. QAAC Executive Summary

It was noted that the latest executive summaries from QAAC were available.

21. Any Other Business

#### 21.1 Collaboration between the Department of Computing and the RCA

Paper T

The Committee considered a proposal from the Department of Computing for a collaboration with the MA in Service Design Programme at Royal College of Art.

- **21.1.1** It was noted that the paper erroneously referred to the collaboration involving the Business School.
- 21.1.2 It was noted that the proposal concerned offering joint group project work and selected taught modules to students on the Department of Computing's MSc in Computing Science, MSc in Computing Science (Creative Industries), MSc in Computing Science (Distributed Systems) and MSc in Computing Science (Software Engineering) and the RCA's MA in Service Design.
- 21.1.3 It was further noted that, for the joint projects, assessment would be made by a joint panel including the RCA and Imperial co-ordinators but that individual assessment of RCA and Imperial students would be made by the respective institutions in accordance with its assessment procedures. It was proposed to offer the joint projects with effect from 2012-3.
- 21.1.4 It was noted that up to 20 students from the Department of Computing would be invited to participate in specific lectures from the RCA's Service Design series including, Introduction to Service Design, Human Centred Design Practice, Human Computer Interaction, Service Mapping and Blueprinting with effect from 2012-3. It was further noted that up to 20 students from the RCA's MA in Service Design would be invited to participate in, either the Department of Computing's Introduction to Computing lectures, or alternatively, invited to participate in a bespoke short programme on computing from 2013-4.
- **21.1.5** The Committee approved the collaboration and agreed to recommend it for Senate approval.
- 21.2 Credit Transfer of Modules Change to the Regulations for the award of Taught Paper V Master's Degrees, Postgraduate Diplomas and Postgraduate Certificates

  The Committee received a late paper on the credit transfer of modules and agreed to recommend to Senate revisions to the Regulations.
- 21.2.1 The revisions would clarify (a) that students registered for an Imperial College award may not simultaneously undertake stand-alone modules from that course which may be available through the School of Professional Development for credit towards the Imperial College award and (b) that students who are granted credit towards an Imperial College award under College APL arrangements are not entitled to a pro rata reduced fee.
- 22. Dates of next meetings 2012-3
- 22.1 Master's Quality Committee (Business, Engineering & Physical Sciences)

Thursday 24<sup>th</sup> January 2013 at 2pm – 5pm, Billiard Room, 58 Prince's Gate Thursday 21<sup>st</sup> March 2013 at 2pm – 5pm, Room TBC, 170 Queen's Gate (NB Change of venue)

Thursday 23<sup>rd</sup> May 2013 at 2pm – 5pm, Council Room, 170 Queen's Gate Thursday 11<sup>th</sup> July 2013 at 2pm – 5pm, Ballroom Room, 58 Prince's Gate

**22.2** It was noted that the dates and deadlines for all other meetings could be found at:

 $\underline{http://www3.imperial.ac.uk/graduateschool/qualityassurance/graduateschoolcomm} \\ \underline{itteestructure}$ 

# 23. Reserved Areas of Business

# 23.1 Special Cases

The Special Cases for Admissions from April 2012 to November 2012 were noted.

Paper U