

Faculty of Engineering & Design

Meeting: FACULTY BOARD OF STUDIES
Date and Time: Wednesday 10 October 2018 at 2.15 pm
Venue: 2 East 3.4

Present:

Prof Gary Hawley	Dean (<i>Chair</i>)
Dr John Chew	Dept. of Chemical Engineering
Dr Sally Clift	Dept. of Mechanical Eng., Director of Doctoral Studies
Dr Marianne Ellis	Associate Dean L&T, Dept. of Chemical Eng.
Prof. Stephen Emmitt	Dept. of Architecture & Civil Engineering
Dr Adrian Evans	Dept. of Electronic & Electrical Engineering
Dr Vaggelis Giannikas	School of Management
Mr Raj Haria	UG Student Representative
Mr Jack Kitchen	Students' Union Education Officer
Prof. Davide Mattia	Associate Dean Research Dept. of Chemical Eng.
Prof Tim Mays	Dept. of Chemical Engineering
Dr Francis Robinson	Dept. of Electronic & Electrical Engineering
Dr Maria Valero	Dept. of Electronic & Electrical Engineering

In Attendance: Mrs Rachel Summers Faculty Assistant Registrar

Apologies: Apologies for absence were received from Dr Florin Bisset, Dr Kirill Cherednichenko, Dr Andrew Cookson, Dr Jos Darling, Prof. Gary Lock, Mr David Stacey, Dr Mike Wilson & Mr Daniel Wong

ACTION**1542 WELCOME & APOLOGIES**

The Chair welcomed student representatives to the Board. Apologies as detailed above were noted.

1543 MINUTES OF THE PREVIOUS MEETINGS (FE2018-19/010)

The unreserved minutes of the meeting of the Board of Studies held on 25 April 2018 were approved as a correct record of the proceedings.

1544 CHAIR'S ACTION

The Board noted Chair's actions as detailed in paper FE2018-19/012.

1545 **DEAN'S BUSINESS**

The Dean reported that the Faculty's student competition teams (Team Bath Racing) had competed in a number of prestigious events over the summer. There had been a major incident for the zero emissions TT group (motorbike) whilst they were preparing for an event held on the Isle of Man. An electrical fire had broken out whilst the batteries were charging, which had destroyed the team's van, equipment and personal belongings. The students' safety plan had kicked in and they were back in Bath in less than 24 hours. Naturally, lessons had been learned and in consultation with the University's Health & Safety team 'build and charge' facilities are being developed in a safe space on campus. Students are fully engaged with the project and will ultimately have responsibility for managing the space.

1546 **RESEARCH EXCELLENCE FRAMEWORK (REF)**

Professor Mattia reported that a Research Excellence Framework (REF) Delivery Group had been established to coordinate REF activities in the Faculty. The key difference between REF in 2021 and previous cycles is that there are no longer separate units of assessment for engineering – all disciplines apart from Architecture will be considered under the general engineering unit of assessment. REF readiness exercise 3 is now underway, running until March 2019, looking at publications, impact studies and the environment etc. Support from Academic Departments will be critical to the effectiveness of the exercise.

1547 **NATIONAL STUDENT SURVEY**

The Chair invited Heads of Department to comment on their analysis of the 2018 National Student Survey (NSS) and their action plans over the coming year.

a) Architecture & Civil Engineering– Professor Emmitt noted that both disciplines (architecture and civil engineering) had seen a dip in their performance in the 2018 NSS compared to previous years. The final year cohort of Architecture students had experienced a number of issues, which the Dept. believes have now been addressed. It was difficult to quantify but the civil engineering finalists may have felt some impact arising from industrial action and the Dept. acknowledged that it could have provided clearer advice, support and guidance during the strike period. Group meetings have been held to look at the NSS results and derive action plans. Professor Heath is leading the Dept.'s activities for civil engineering and Directors of Teaching have been tasked, in due course, with promoting the NSS to the final year cohort and encouraging students to complete the survey. Other issues that had emerged from the NSS concerned teaching space e.g. lecture rooms not big enough to accommodate the cohort and timetabling problems. Whilst the 'new' Architecture building has addressed some of the Dept.'s historic space issues, the building was designed for a maximum cohort of 110 students and recent intakes have exceeded this number which has inevitably placed a strain on student access to design studio space. The Dept. has raised these matters with the relevant central services as they are largely outside of the Dept.'s control.

The Chair queried whether the Students' Union (SU) had actively promoted the NSS in 2018. Mr Kitchen advised that in the previous NSS cycle (2017) the SU had formally agreed to support the boycott but that this year (2018) it had neither promoted nor boycotted the survey. The SU has not yet made a statement

regarding its likely position for the 2019 survey.

Professor Emmitt commented that clearer, more effective communication from the Dept. to its students, across the academic year, would be a key focus for the Dept. in 2018-19.

Dr Ellis commented that there was potential for a repeat of industrial action in 2018-19 and that Departments could think about how this year's experiences might inform forward planning. The Dean asked student representatives if they had any suggestions for how Departments might better mitigate any effects of industrial action. Mr Kitchen commented that the disruption caused a lot of anxiety and stress for final year students particular with supervision. Departments could provided clearer guidance and information in advance of any industrial action as to how they would support their students.

b) Mechanical Engineering Dr Clift reported on behalf of Professor Lock. The Department had seen strong results for mechanical engineering (2nd nationally, up from 5th in 2017) but had had less positive feedback for aerospace engineering 14th nationally, down from 10th in 2017. Only 59% of aerospace students had completed the survey, which was amongst the lowest population sample for any programme surveyed across the University. Principal themes from student open comments:

- a. Placements received universal approval
- b. Competition projects are praised and no apparent resentment from students outside of this activity
- c. The full-time projects in years 3 and 4 were praised
- d. Industrial engagement is appreciated
- e. Friendly and helpful academic and technical staff are appreciated
- f. Overcrowding is criticised
- g. Poor department infrastructure
- h. Lack of study space was a common theme

The Department has introduced a number of measures to address the particular concerns of aerospace students for example the Aerospace Theme Leader and Director of Teaching are focussing on the strengths and weaknesses of programme compared to the mechanical engineering degree, revised unit descriptions are in preparation for reinstatement of suspended Aerospace Structures II final year unit for 2019 (RAeS accreditation requirement) with probable name change ("advanced composite structures") to appeal to Mechanical as well as Aero cohorts and the Group Business and Design (GBDP) unit convenors are more closely aligning the operation of Aero Group Business Design Project (GBDP) with Mechanical GBDP. The Department will also be scheduling a weekly meeting period in the semester 2 timetable to encourage more regular, structured meetings between final year project students and their supervisor.

c) Electronic & Electrical Engineering Dr Evans noted that the Department's 2018 NSS was down 9% on the previous year but was nevertheless still the 6th best performance across the University. MEng Electronic & Electrical Engineering students had scored 88% satisfaction whereas the BEng cohort was lower. The Department felt this could in part be attributed to problems this cohort of students experienced with their GBDP in 2016/17 which had then rolled forward into the 2017/18 academic cycle. Dr Evans noted those students who had been affected in 2016/17 were still raising concerns about this in the first meetings of their SSLC in 2017/18. He noted that these issues had been addressed in 17/18 so this year's cohort should not be affected. The Department felt that the departure of the Director of Studies mid-year might also have had an impact. The survey's open comments

suggested that students would like a wider range of options specific to individual programmes e.g. more computer science related options for the computing degree. Student had also been dissatisfied with their level of access to the Group Project spaces and the Department will be working closely with the Dept. of Mechanical Engineering to coordinate shared access. Students were particularly positive about the mentoring provided for the competition teams

d) Chemical Engineering. Professor Mays reported significant improvements in both its overall teaching quality score (92%) and response rate (79%) in the 2018 National Student Survey. This now ranks the Department 2nd on campus, and also in the UK Chemical Engineering sector, for student satisfaction. This success appears to be partly due to an action plan agreed at Faculty level to deal with the disappointing NSS outcomes in 2017. The action plan following from the 2018 results will include:

- (i) improving the timeliness and quality of feedback to students on coursework,
- (ii) a strong focus on the regularisation of supervision of Year 3 MEng research projects, and
- (iii) improving the response rate from BEng students.

Mr Kitchen asked whether student representatives might have the opportunity to see the Departmental Action Plans before they are formally submitted to the Pro Vice Chancellor for Learning & Teaching. The Dean proposed that Departments present their draft plans to their SSLCs prior to submission to him. Dr Ellis (AD L&T) invited HoDs to contact her for support on improving student feedback and that she would be interested to find out from Departments their strategies for improving student engagement with NSS.

The Dean asked student representatives if they had any immediate concerns; Mr Haria said that space issues were still a real problem for example there were still occasions where students were sitting on steps in lecture theatres. The Dean advised that he would ensure that this matter was drawn to the attention of the PVC L&T.

1548 STUDENT RECRUITMENT & ADMISSIONS

The Dean briefed the Board on the Faculty's 2018 admissions figures. At Undergraduate level, the Faculty exceeded its Home/EU target of 583 with an actual intake of 588, but did not meet its overseas target of 171 (actual recruitment 155). The Dean commented that the overseas recruitment market is becoming increasingly competitive. Civil Engineering met both its Home/EU and Overseas target numbers and Chemical Engineering recruited exceptionally well despite its performance in NSS over recent years. Constraints on laboratory and teaching space are such that it is important for the Faculty not to exceed target numbers. The Dean noted that the first cohort of 16 students on the new UG programmes in Robotic Engineering had been admitted in September; this was a very promising start.

At PGT level the Faculty had recruited 202 students against a target of 287. The Faculty has brought on new MSc programmes which will take time to grow but the standout new programme was Engineering & Business Management which had recruited 39 students against a target of 20. Further new programmes in Environmental Engineering (Chem Eng.) and Automotive (Mech Eng.) are on stream for 2019 and 2020/21.

1549 CURRICULUM TRANSFORMATION

Dr Ellis updated the Board on progress and developments within the Faculty as part of the Curriculum Transformation (CT) process. The new MSc Engineering Business Management (known as the vanguard vanguard as it has been designed for the current structure but is able to be easily transformed to the new structure), has recruited 38 students in its first year. Chemical Engineering has successfully passed Phase 2 with 'minor corrections'. The new course MEng Chemical Engineering with Environmental Engineering, which was identified as an opportunity for the department during Phase 1 and has been designed alongside the transformed MEng Chemical Engineering and BEng Chemical Engineering, is due to go to Senate for final approval this month. Dr Ellis commended Dr Chew for his efforts in driving forward CT in Chemical Engineering.

The cross-faculty change management training for all members of the course development teams (CDTs), run by Sally Palethorpe was a very worthwhile exercise with about half the CDT members attending. The day covered practical advice to manage change using curriculum transformation as the case study. The follow up half-day department-level sessions are being planned for November 2018 and early 2019.

Jane Phippen is leading a cross-faculty project to analyse learning and teaching workflow, for academics and Faculty Student Centre staff. This is an 18-month project and the aim is to revise our approach to processes to better utilise time and skill sets.

At university level, the Centre for Learning & Teaching (CLT) has been tasked with preparing a 'beginners guide to Curriculum Transformation', with timelines and frameworks. The latest advice is that PGT *standalone* programmes will need to complete Phase 1 by Jan 19; Phase 2 by Jul 19. UG and cross-department/faculty PGT programmes will aim for Phase 1 Jul by 19; Phase 2 by Jan 2020.

For the vanguard courses we were working towards synoptic (cross-unit) assessment with separate assessment blocks (that were credit bearing) and study blocks (which were time-based). Discussions with HESA about how to report this are still on going and the University has had to make a decision on how to proceed. The decision is to *not* implement splitting of study blocks and assessment blocks, as the risk to the financial support we receive is deemed too great. Therefore, we will have assessment directly linked to units (but bigger units, which could include the whole year as the whole unit). This has not had significant effect on the design on the Chem Eng vanguard and the new course design is on time for 2019 delivery.

1550 VACATION AND CHAIR'S POWERS (FE2018-19/014)

APPROVED: Powers for the Dean to take Chair's Action on behalf of the Board and vacation powers for the Dean during the 2018-19 academic year.

1551 BOARD OF STUDIES MEMBERSHIP (FE2018-19/015)

The Board noted the Board of Studies membership for 2017-18. The Students' Union is currently finalising the election of a postgraduate taught (PGT) student representative and it is hoped s/he will be able to attend the next meeting of the Board.

1552 FACULTY COMMITTEE MEMBERSHIP 2018-19 (FE2018-19/0165)

The Board noted the composition and membership of Faculty Committees as detailed in paper FE2018-19/016.

1553 FACULTY LEARNING TEACHING & QUALITY COMMITTEE MINUTES (FE2018-19/019, 21, 23)

The unreserved minutes of the Faculty Learning Teaching & Quality Committee meetings held on 2 May, 27 June and 19 September 2018 were received and noted.

1554 FACULTY RESEARCH STUDIES COMMITTEE MINUTES (FE2018-19/027-28)

The unreserved minutes of the Faculty Research Studies Committee meetings held on 4 July and 1 August 2018 were received and noted.

1555 BOARD OF STUDIES (DOCTORAL) MINUTES (FE2018-19/029)

The unreserved minutes of the Board of Studies (Doctoral) meeting held on 21 March 2018 were received and noted.

1556 REPORTS FROM ASSOCIATE DEANS & DEPARTMENTS

- a) Prof Mays (HoD Chemical Engineering) reported that three staff in the Department had successfully completed their academic probation stages in the last round including Dr Carmelo Herdes who completed his full, three year term. The Department is currently involved in bidding for four EPSRC Centres for Doctoral Training (three renewals, one new). This is in addition to the existing "water" CDT funded by NERC. He was pleased to report that the Department had been ranked 4th in the recent *The Times / Sunday Times* University Good University Guide for Chemical Engineering.
- b) Prof Emmitt (HoD Architecture & Civil Engineering) was pleased to report that the Department had been ranked 1st for Architecture and joint 4th for civil Eng. in *The Times / Sunday Times* University Good University Guide. It was the 10th consecutive year in which Architecture had been ranked 1st in 1 of the 3 University Guides/league table and an achievement that he believed no other architecture school could claim. Work on curriculum transformation is progressing well and the Dept.'s summer away day, which had focussed on CT, had been very productive. About staffing, two new Prize Fellows had recently started in the Department, Dan Maskell had been appointed as a Lecture (formerly a Prize Fellow) and Professor Tim Ibell has re-joined the Department. In other matters the Department is in the process of finalising its Athena Swan draft silver submission.
- c) Dr Clift reported on behalf of the HoD of Mechanical Engineering. The Department had been ranked in the top 10 for mechanical engineering in all of the leading League Tables. With regards to staffing she was pleased to report that Marcelle McManus had been promoted to a personal chair and three new academic staff had joined the Dept. over the summer, Mauro Carnevale, James Roscow & Zhongue Wu. The Department has a number of lecturer positions to which recruitment is ongoing. Professor Richard

Butler and Dr Andy Rhead had recently been awarded £6.7M Programme Grant (£1.4M to Bath) from the EPSRC “Certification for design - Reshaping the test pyramid”. The programme collaborates with the universities of Southampton, Bristol and Exeter. Professor McManus had been awarded funding worth £5.9m as part of the Supergen Bioenergy Hub, of which £558k (FEC) comes to Bath. Dr Clift was pleased to report that the Department had recently been awarded Athena Swan silver.

- d) Dr Adrian Evans (HoD Electronic & Electrical Eng.) reported that the Department is very pleased with the refurbishment of laboratories on level 2 of 2 East; this work, including the installation of climate control, was carried out over the summer period. The Departments undergraduate Team Bath Racing Electric (TBRe) will be the first UK E-Formula Student team to compete internationally when it attends the FS China event in Shanghai in November. The team is being sponsored by SAIC Motor UK Technical Centre Ltd (Shanghai Automotive) and will also attend alumni events in Hong Kong.
- e) Dr Sally Clift (Faculty Director of Doctoral Studies) – Details of the format of the PGR studentship competition have now been announced. One aim is to shorten the time taken for decisions on individual candidates, particularly for candidates where the supervisor is in the early career research (ECR) priority. She pointed out that at because the Faculty has been successful in recruiting ECRs it is unlikely that there will be studentships available for other academic staff.

1557 LIBRARY MATTERS

There were no library matters to report.

1558 ANY OTHER BUSINESS

There were no other items of business.