

## UNIVERSITY OF GLASGOW

### Academic Standards Committee – Friday 23 May 2014

#### Periodic Subject Review: Responses to the Recommendations arising from the Periodic Subject Review of School of Engineering held on 28 and 29 January 2013

Mrs Jackie McCluskey, Clerk to the Review Panel

#### Conclusions

The Review Panel concluded that the School of Engineering's provision was of a high quality overall.

The students who met with the Panel were articulate and their satisfaction with the quality of their educational experience, the support of the staff and with the standard of programmes and courses offered by the School was evident. The School has an integrated team of staff, fully committed to the provision of high quality research-informed programmes and courses.

The Panel was particularly impressed by the standard of its facilities, student support of the feedback systems, particularly the SSLCs; the Industrial Liaison Committee and the use of the Teaching Office which it felt had not been demonstrated fully in the SER.

#### Recommendations

The recommendations interspersed in the preceding report are summarised below. The recommendations have been cross-referenced to the corresponding sections of the report and are ranked in order of priority.

##### *Recommendation 1*

With a view to ensuring high level of student satisfaction and thus avoiding any potential reputational issues, the Review Panel **recommends** that additional resources are identified to support the overseas developments in the short term both to address the concerns about the impact on staff workload in Glasgow and the other operational issues relating to UGS highlighted throughout the report. In addition, the Panel recommends that the Head of College be invited to clearly identify the benefits of the collaboration to the School. (Paragraph 4.8.4) (See also Recommendations 2 – 4)

**Action: Head of College**

##### **Response:**

Resourcing of the TNE programmes has been and continues to be as agreed in the Business Cases developed in collaboration with the School.

Over the last two years there has been strong investment in the School of Engineering, primarily on the back of an improving research picture and the success of its TNE programmes. Thus the School has enjoyed more leadership appointments than in the original College plan and generous dowries have been made to attract good candidates and to ensure that they are well

resourced to make a positive contribution in the shortest possible time. When investment is made it is rarely possible or desirable to attribute it to a single source, the reality being that we are a broad based University intent on excelling at both research and teaching and keen to enhance our international presence.

Since the review took place there has been further growth of TNE programmes within the School with a further programme in China launched. This differs from that in Singapore in that the staff are almost exclusively Glasgow-based, flying to Chengdu to deliver their teaching. Thus we now have a complex picture where those leading on TNE spend more time in Glasgow than abroad. Realistically this will mean that more will develop their research careers here than in China. Hence the School has an opportunity to develop its Glasgow-research base by between 10 and 20 staff members, the higher number assuming that a further China programme is launched in 2015. This in turn will allow critical research mass to be realised in a larger number of areas much faster than would otherwise be possible and this is one of the School's objectives. College is working closely with the HoS on the financial and operational sides of this plan.

Whilst the above discussion shows how Glasgow-based Engineering activities benefit from TNE, the advantages of overseas hubs created by Engineers allows the School to spearhead aspects of the University internationalisation agenda. Attracting good overseas students at all levels and developing meaningful research partnerships with leaders in SE and East Asia are both boosted by a permanent regional presence allowing time for relations to be fully developed.

### *Recommendation 2*

The Review Panel **recommends** that the School considers ways to strengthen the sense of identify with the University felt by Singapore students, including additional teaching sessions by UoG staff in Singapore. One further suggestion from Singapore staff would be to consider providing a University of Glasgow T-shirt with student induction packs. Similarly, the School should consider introducing the opportunity for additional social interaction while the UGS students are in Glasgow for the Overseas Immersion Programme with local Glasgow students or students working in Glasgow during the summer. (Paragraph 4.7.5)

**Action: Head of School**

### ***Response:***

The School has not been able to increase the number of teaching sessions by UoG staff in Singapore, as there is a practical limit on how many academics can go for a week during the semester without major disruption to their other teaching and research activities. However, the School is grateful to, and will continue to support, those staff who wish to deliver some teaching in Singapore. The School has made a case for more Glasgow-based staff to support TNE and, if the case is supported by the University, more resource will be available to enable to support overseas teaching.

In addition to the T-shirts in induction packs which was implemented following the Periodic Subject Review meetings, the School is reviewing the content of the welcome packs at OIP. Two possibilities might be including UoG hoodies and umbrellas.

There will be some UoG student helpers at the OIP Ceilidh, and all Science without Borders students will be invited to participate too in order to give the opportunity for UGS students to interact with more UoG students. The GSA/SIT students will also be at the OIP Ceilidh.

### *Recommendation 3*

The Review Panel **recommends** that the School considers providing further guidance to students, in particular the students in Singapore, on what constitutes assessment feedback. The School should also consider adopting the procedure used in the School of Law whereby they outline clearly in writing when feedback is being provided. (Paragraph 4.3.7)

**Action: Head of School**

### ***Response:***

The School of Engineering has introduced a standard submission form for all coursework which provides the basis for feedback to students on their performance. This has been adopted across the School of Engineering both in Glasgow and Singapore. In addition, Undergraduate Student Handbooks will be updated with increased guidance on what constitutes assessment feedback and the ways in which feedback is given to students at different levels of the course.

### *Recommendation 4*

The Review Panel **recommends** that the School reviews its induction arrangements, in particular for UGS and PGT students, to ensure that they are fulfilling the requirements of the different student bodies. (Paragraph 4.6.3)

**Action: Head of School**

### ***Response:***

The PGT induction sessions in September 2013 and in January 2014 introduced the members of each programme to one another (or at least those that had arrived in Glasgow). It is not practical to arrange anything before the induction because often students only arrive shortly before the event. The Inductions also included talks from SRC representatives and, for the first time in January 2014, a representative from the Business School. Separate inductions were also arranged for students following the Structural Engineering & Mechanics programme and the Product Design Engineering programme, since these are both taught in conjunction with other institutions.

In UGS the students have 20 hours of pre-session bridging courses in Maths & Physics. For aero students, the pre-session maths was increased to 3 weeks (instead of 2 weeks), with tutorials alongside formal lectures. Also as part of the pre-session courses is the 'effective writing skills' course. This helps the students cope with the writing of reports which they have to prepare over the year for courses, such as, Propulsion and Communication Systems.

As for feedback, UGS have indicated to the students what constitutes feedback. Students initially felt that feedback was only when they received something officially written on their returned lab reports; however they are now aware that other forms of informal and formal feedback should be considered as well, such as tutorials. UGS will highlight this in the Moodle portal "Information for Students".

### *Recommendation 5*

Given the diversity of needs within the School of Engineering for the PgCAP, the mixed feedback about the quality of the teaching within the First Year Student Experience Survey and

some misinformation about the PgCAP and PgCLTHE aims, content and requirements, the Review Panel **recommends** that the Head of School meets with a representative from the Learning and Teaching Centre to discuss any possible adaptations that can be made to the University's compulsory PgCert provision to better suit the needs of the School and its overseas provision. (Paragraph 4.8.5)

**Action: Head of School**

**For the Attention of the Learning and Teaching Centre**

***Response:***

The School of Engineering, in conjunction with Computing Science, has met with representatives of the Learning and Teaching Centre and HR to discuss the PGgCAP provision for UGS staff based in Singapore. Initially the agreed solution was to offer the PgCLTHE more flexibly, allowing the total programme to be undertaken over 2-3 years rather than one, which had proved too intensive for UGS staff. Since these discussions the PgCLTHE is not currently running, therefore the Learning and Teaching Centre, in consultation with Engineering and Computing Science, have determined a new and revised programme to deliver 40 credits of Teaching and Supervision Courses (40TSC) and Fellowship of the Higher Education Academy. The 40TSC forms the first 40 credits of the new Postgraduate Certificate in Academic Practice which is to be offered from September 2014 across the University of Glasgow. The 40TSC is made up of 2 courses: 'Learning and teaching in higher education' (30 credits) and 'Developing effective supervision practices' (10 credits). Staff from the Learning and Teaching centre are delivering this in a tailored format specific for UGS staff.

UGS staff will complete the first 30 credits of the 40TSC course between June 2014 and August 2015, with an introductory session for staff in Glasgow in June, followed by a one week face-to-face programme in Singapore in week -1 (8th Sept – 12th Sept 2014). Staff would then complete the 10 credit supervision course to complete the programme. The format of the 10 credit supervision course is still under consideration, it would either be offered in June 2015 when staff are in Glasgow and online or in another format, following further consultation. There is the option to for UGS staff to undertake an additional 20 credits to obtain the full PGgCAP qualification should they wish.

***Recommendation 6***

With a view to increasing the level of support provided to the GTAs, the Review Panel **recommends** that the School promotes the School's GTA management structure and provides further support in the areas of marking and feedback and supporting GTAs to evaluate their teaching; as well as emphasising the GTA statutory training and GTA professional development sessions provided by the Learning and Teaching Centre to support their development. The School should also consider appointing a senior GTA to convene regular meetings of GTAs providing a forum for concerns or suggestions for enhancements to be raised. (Paragraph 4.8.8)

**Action: Head of School**

**For the Attention of the Learning and Teaching Centre**

**Response:**

This is an area where there has not been much progress. The major issue is that the School faces a shortage of GTAs and the number of hours that they can work. GTAs do undertake a number of courses organised by the Learning and Teaching Centre. The use, allocation and training of GTAs is a major issue that the School will address over the summer.

*Recommendation 7*

The Review Panel **recommends** that the School reviews its process for the allocation of project teams with a view to ensuring, as far as possible, diversity and balance and that the School considers introducing a structure of greater monitoring of how the teams are operating (Paragraph 4.4.5)

**Action: Head of School**

**Response:**

As the final version of the PSR report was not received before the beginning of this academic year, the School has not implemented this recommendation this academic year. This recommendation will be taken forward by the Head of Discipline for the two Integrated System Design Courses, Professor Scott Roy, for implementation next academic year.

*Recommendation 8*

As no discretion is possible in relation to the duration of examinations, the Review Panel **recommends** that the School liaise with the Senate Office on any proposed changes to the duration to ensure that they comply with the regulations set down by Senate. (Paragraph 4.3.4)

**Action: Head of School**

**Response:**

Within the Senate Office guidelines for the duration of examinations in the University Calendar (Section 16.19, Page Gen.10) there is provision for an additional 30 minutes in cases where this is justified by the nature and content of the examination. The School of Engineering considers that, in many cases, the content and nature of the examinations in Engineering do justify such an extension and this provision in the University Calendar is made use of. The School therefore remains compliant with the regulations set down by Senate.

*Recommendation 9*

The Panel **commends** the work the School is undertaking to achieve, as far as possible, consistent School-wide procedures and documentation and **recommends** that it continues to progress this work. (Paragraph 4.7.2)

**Action: Head of School**

**Response:**

*Areas in which the School has continued to apply consistent procedures are as follows:*

- 1) *Introduction of the second year of the common structure*
- 2) *Working towards a common format for examinations across the School*

- 3) *Developing guidelines for the provision of labs associated with taught courses*
- 4) *Reviewing the allocation of GTAs to courses to ensure that common practice is achieved across the School*
- 5) *Consistent approach to coursework feedback - each student submits a proforma with any coursework and staff are encourage to write comments and a grade/mark for feeding back to the students.*
- 6) *A standard assessment label was added to submitted lab books so that a grade could be circled and the descriptor informed the student*
- 7) *EvaSys is used to evaluate all courses/lecturers in the School and JEP institutions. Three standard evaluation questionnaires were designed by the Convenor of L&T and QA officer. The successful implementation of this in 103/2014 has been hampered by the transfer of the software to the University server which has resulted in many technical issues.*
- 8) *All final year projects are submitted to Turnitin*
- 9) *Professor Tanner is currently leading a working party on the standardization on MEng and BEng projects across the School which will result in standard procedures for allocating projects, interim reports, risk assessment and overall assessments of the final grade.*
- 10) *The first school wide exam board took place in June 2013.*
- 11) *A new electronic exam paper submission procedure has been implemented all papers and moderated internally and viewed by the external examiners. This allows UGS to view and comment on the papers online without the need to resort to courier which introduces a significant time delay.*

#### *Recommendation 10*

The Review Panel welcomes the establishment of a Working Group to review the issue of placements and **recommends** that, taking cognisance of the University's new Work Based and Placement Learning Code of Practice due to be approved by the Learning and Teaching Committee in May 2013, the Working Group should consider the introduction of a similar structure across the School to that within Electronic and Electrical Engineering. The Panel also **recommends** that the Working Group liaises with Mr Jonathan Culley, the University's Work Related Learning Development Adviser based in the Careers Service. (Paragraph 4.4.7)

**Action: Head of School**

#### **Response:**

Two working groups were set up: one for student placements, led by Professor Liz Tanner, and another for cross-school interdisciplinary design projects. They made initial reports to the Industrial Liaison Committee on 12<sup>th</sup> April 2014.

The feedback from the Industrial Liaison Committee will be incorporated into a report that Professor Liz Tanner is putting together on student placements, which will be discussed at the School Learning and Teaching Committee on 26<sup>th</sup> March 2014. The report will propose standardised protocols for student placements across all the engineering degree programmes. The procedures and requirements for individual projects are currently being revised with a view to implementing common requirements for the 2014/15 academic year. This will include ensuring that the requirements of the University policy in this area are met.

### *Recommendation 11*

Although it recognises the difficulties associated with the low number of Glasgow-based students engaging in a student exchange arrangement, the Review Panel **recommends** that the School adopts a more proactive approach in encouraging students to undertake a period of study abroad, particularly in light of the increasing number of Engineering programmes being taught in English at overseas institutions and the already established international collaborations within the School. (Paragraph 4.7.3)

**Action: Head of School**

#### ***Response:***

In terms of the ERASMUS scheme, the School undertook a review of all exchange agreements in December 2013. At this time, the issue of lack of engagement by engineering students in the ERASMUS scheme was raised at the School Learning and Teaching Committee. Dr Marco Vezza has been tasked with improving the communication of the opportunities for students relating to EU and as a consequence he has contacted RIO to arrange a meeting to discuss how they can help the School promote specific opportunities to the students. This is an issue that will continue to be a focus for attention by the School Learning and Teaching Committee.

There are possible exchange opportunities with SIT and UESTC. Regarding SIT, the School has agreed the mechanics of the exchange and has produced an exchange agreement with input from UoG and SIT. This is pending final feedback from SIT before the agreement can be signed and implemented. It is anticipated that the exchange programme will commence in the 2014/15 academic session.

With UESTC, the mechanics of the exchange of JEP students is still under consideration to determine when it would be appropriate from an academic perspective for the JEP students to visit Glasgow. The School is working on finalising a paper for approval at the next UoG-UESTC Joint Management Board covering all study abroad and cultural experience opportunities for JEP students in Glasgow.

### ***Recommendation 12***

The Review Panel **recommends** that the outstanding maintenance issues in the Rankine Building be undertaken as a priority and the system of providing information on computer accessibility currently available in the reception of the Rankine Building should also be established in the James Watt Building (South). (Paragraph 4.8.9)

**Action: Head of Estates and Buildings and Head of School**

#### ***Response: Head of Estates and Buildings***

We are currently on the case on a number of fronts:-

- Ceilings have been repainted where required throughout office and lab accommodation;
- A scheme to carry out modest improvements to corridors where required including replacing ceilings, life expired fire doors and decoration is currently being costed;
- Surveys are underway currently to review faulty and inoperable windows with proposed repairs programmed thereafter;

- Water ingress issues on basement/lower levels have been surveyed with repair needs established relating to sections of flat roofing and drainage.
- Lecture theatre seating will be replaced with reconditioned seating reclaimed from elsewhere. Redecoration and carpeting will be undertaken at the same time to improve the student learning environment.

All of the above is anticipated to be undertaken in the next 4-6 months. I'm mindful of anticipated lifespan of building and the above solutions are to facilitate a continued use of the building in its present form for a further (circa) 5 years.

*Response: Head of School*

The maintenance issue referred to ceilings in the Rankine Building where old light fittings had been replaced with smaller more energy efficient versions and this had left marks around all of the new fittings. E&B had painters in the building in January/February and all affected laboratory (and office) ceilings are now freshly painted over. The agreed approach for corridors was to fit new suspended ceiling grids and replace all ceiling tiles but so far only level 5 has been completed.

The computer usage display which runs in the Rankine Building is also replicated in the James Watt South Building.

Additionally, the School is actively working on a space strategy in conjunction with various stakeholders including E&B and the College of Science and Engineering. The School hopes that this strategy will be supported by the University and the space in both the Rankine Building and James Watt South Building will be improved for both research and teaching over the next 5 years.

*Recommendation 13*

The Review Panel **recommends** that the School increases its schools liaison activity by utilising the services of female students to speak to school pupils about their experiences with a view to encouraging more females to take up the study of Engineering. (Paragraph 4.5.1)

**Action: Head of School**

***Response:***

The Schools' Liaison Administrator actively seeks female students to accompany her on visits to local schools. However, this is very dependent on the students' availability.