College of Science and Engineering Learning and Teaching Plan 2014–15

1. Headline statement of strategic direction and context

The past year has suffered less from major disruption than recent years but three significant changes occurred during 2013–14:

- new system for room allocation and timetabling
- start of transnational Computing Science with Singapore Institute of Technology
- start of transnational Electronic and Electrical Engineering at the University of Electronic Science and Technology of China (UESTC), Chengdu; this is the university's first programme taught wholly at our international partner

2. Progress on previous year's objectives

The College identified the following strategic issues as of highest priority for 2013–14.

- **Efficiency** progress on identifying uneconomic courses was limited by lack of data. QlickView became available in early 2014–15 and will be used to carry this forward.
- **Recruitment** the standard academic entry requirements are now AAAA/AAABB (S5) or AAAAAB (S6). Overall recruitment was close to target with only Geography and Engineering a little under stated capacity; Physics and Astronomy, Earth Science and Psychology were over target. Recruitment to Psychology was nearly double the target but this is a considerable improvement over the previous year. The Engineering results conceal considerable imbalance between programmes.
- Internationalisation Schools have encouraged students to seek opportunities abroad. Erasmus agreements where few students go to our overseas partner have been discontinued. Two new transnational programmes started: Computing Science in Singapore and Electronics and Electrical Engineering at UESTC, Chengdu. Both have been successful (with inevitable teething problems, particularly in China).
- Student experience In NSS, the college average for Q22 'Overall, I am satisfied with the quality of the course' rose to 91.7%, a significant increase of 3.5% from last year. However, some subjects have persistently low results on this measure and the difference is much larger than might be expected from the responses to other questions. This may point to underlying problems such as personal interaction and staff : student ratios, which limit the range of options and pull the university down some league tables. Some league tables use averages of individual questions, on many of which performance has not risen so significantly.

Retention – progress limited by lack of data.

- 3. Priorities for the year ahead (numbered to match the University's L&T strategy)
 - Internationalisation Level 4 of Computing Science will be delivered for the first time in Singapore, including final year projects. Further action will be taken to reduce plagiarism in the engineering programmes in Singapore, which was a significant problem last year. The future of all programmes in Singapore is under review with SIT. The programme at UESTC enters its second year with new entry at the target of 240. Ongoing negotiations are addressing future expansion. Further TNE in China at BUCT (Chemistry and Engineering) and Nankai (GES) will also be explored. The availability of course information will be improved to improve accessibility for incoming study abroad and exchange students.

- 2. **PGT** Accreditation will be sought for applicable taught MSc programmes to enhance their value for potential applicants; a C grade for the project may be required.
- 3. Widening access and student retention When data become available, we will assess performance and take appropriate action towards meeting meet the institutional KPI (94% L1 to L2 progression).
- 4. **Staff skills** Staff will be encouraged to enter College and University Teaching Excellence Awards.
- 5. Assessment and Feedback Engineering will participate in the curriculum mapping project LEAF as part of preparation for accreditation, to evaluate the effectiveness of this process for a subject whose general ILOs are set nationally. The new university policy on feedback on summative assessment will be introduced, including generic guidelines on the marking of quantitative problems. Timetables for Assessment and Feedback will be published where possible to clarify student expectations.
- Efficiency Data from QlickView will be used to identify potentially uneconomic courses, whose future will be reviewed within the context of the overall provision. Administrative support for teaching across the College will be reviewed as part of TRM.
- 7. **Student-staff partnership model** We shall refine the interdisciplinary Science Skills (PHYS1011) course, which was developed in partnership with students, and explore possible extensions to other subjects.
- 8. **Empoyability skills** Discussions with the Writing Centre will take place to ensure that students across the College can improve this vital skill.
- **9.** Use of new technologies Schools are being encouraged to use EvaSys for student feedback and the use of Teleform for scanning assessments will be expanded.
- 10. **Recruitment** New approaches will be sought to control recruitment to subjects at (or over) capacity. We will investigate whether the current suite of offers encourages the best use of S6 for pupils who remain at school beyond their first attempt at Highers. The impact of Curriculum for Excellence will be monitored. Attempts will be made to direct applicants to Psychology, Geography and Mathematics into the appropriate programme.

4. Strategic, university-level issues (the College would wish ULTC to consider in support of the College strategy)

The College wishes ULTC to consider the following points.

- **Future of 'general faculty entry'** There is growing concern that the choice of courses and programmes offered to students is fracturing along college boundaries; desirable combinations of courses may be closed to students, with potential impact on progression.
- **Standard and provision of teaching accommodation** We welcome the proposal for the new Teaching Hub. Split classes need to be supported by appropriate video facilities. Increasing student numbers are putting pressure on laboratories within schools.
- **IT systems** MyCampus continues to absorb substantial resources that could be better used to support the student experience. We would like to see support for small-scale e-learning activities. Students increasingly use their own computing devices and require suitable informal study space with access to the internet and power.
- **Course information** The process for course revision in particular should be streamlined so that staff are encouraged to update documents. The documents themselves should be revised to make them more useful to users, potential students in particular.