Summary report on completion of recommendations from previous Informatics TPR/PPR
M Rovatsos, I Stark, K Weston, 3rd November 2014 (draft version)

Outline
This document provides a preliminary report on the completion of recommendations from the previous Informatics TPR and PPR, both conducted in 2008. We include the original recommendations, the School response in italics, and a report on completion in blue text. The report deals with items from the TPR and PPR in two separate sections.

1. Taught undergraduate provision (TPR 2008)
(key elements of recommendations highlighted in bold face)
6.18 It was noted that domestic students are declining in proportion and the review team recommends that the School investigate the possible reasons for this (para 3.6).
Home student numbers are stable or slightly rising. Our policy is to increase the international profile of the school in order to build an international centre of excellence in UG informatics. In this context it is inevitable that UK student numbers will decline as a proportion of the total.
Due to the recent in the fees landscape, four-year Scottish degrees would be expected to lead to a decline in RUK students. Numbers of Scottish students are low across the University – efforts are underway to increase our schools outreach activities in order to attract more Scottish students. Our overall student numbers continue to increase, and we are maintaining both a healthy level of international diversity and a very high academic standard.

6.19 It is recommended that Informatics review its current practice in regard to induction and mentoring of new lecturing staff to ensure that all new staff involved in teaching receives the appropriate training and mentoring (para 3.7).
This has been reviewed and stronger support and mentoring is being implemented.
We have introduced induction sessions for new lecturing staff which are delivered twice a year, and materials for these sessions are available online throughout the year. An extensive “Frequently Asked Questions” web page has been created which is being collaboratively populated with information by all teaching staff and the ITO, and contains pointers to all relevant online documentation. Directors of Teaching have individual meetings with all new lecturing staff. We are also engaging with the University's Institute for Academic Development to create training opportunities for teaching staff, and have organised joint workshops on specific themes with them.

6.20 It is recommended that the School consider a more systematic approach to training and mentoring of teaching support providers (para 3.8).
We are introducing compulsory training and have stronger support mechanisms in place to ensure we have timely feedback mechanisms to deal with issues raised by teaching support providers.
Compulsory training has been provided at the start of each semester for several years now. A new comprehensive policy to support this group is being developed, which will involve the definition of roles and responsibilities, including training and mentoring responsibilities of teaching staff toward their support staff. We are establishing a peer support network for teaching support providers, and the new role of Personal Tutor for PhD students (the vast majority of our teaching support providers) acts as an impartial point of contact for feedback and complaints.
6.21 The team recommends that the School reviews and identifies the **gaps in the management structure to ensure** that clear lines of responsibility exist to oversee induction into teaching and deal promptly with any personnel issues arising from teaching reviews such as student feedback (para 3.9).

*Academic management in the School is under review and clearer lines of responsibility and systematic review are being introduced over the next year. Teaching and Learning performance will be included in the review process.*

A full review of the School’s management structure took place as a result of our International Review in 2010. With curriculum and QA-related tasks devolved to the Deputy Director of Teaching, the Director of Teaching is now better able to focus on day-to-day monitoring and problem resolution. We have created an informal Teaching Executive committee (with Year Organisers, Directors of Teaching, and the ITO as its members) which meets regularly and helps deal with issues in a timely fashion while maintaining oversight across programmes and years.

6.22 It is recommended that the School consider the following **elements of the DoS system** (para 3.10):

i. Review DoS training and induction, ensuring that newly appointed DoSs are fully aware of the School/College and University regulations and requirements.

ii. The DoSs take advantage of having a lower student load and encourage/instigate more informal meetings with their directees during the academic year to help build relationships.

iii. Review the personnel management structure to ensure that there were clear and effective roles and responsibilities for dealing promptly with the occasional instances where the performance of a DoS was less than satisfactory.

   *i. We have strengthened the DoS training session to ensure new DoSs are thoroughly introduced to the organisational structure. We will revisit this when the university review of student support is published this autumn.*

   *ii. DoSs are encouraged to have more informal contact with their DoSs. At the moment we feel students do have good informal contact with staff.*

   *iii. We agree that we need a mechanism to de-risk the potential for failure of the relationship between student and DoS. We do this via a variety of mechanisms including the ITO support form, more effective class reps and the weekly reps meeting. In addition we are discussing including DoS performance in the review process for academic staff that is being rolled out at the moment.*

The University has completely overhauled the DoS system, introducing instead Personal Tutors. All teaching staff in Informatics act as Personal Tutors and we have extended student contact considerably, with additional individual and group meetings between PTs and students. New central University information systems carry records from both staff and students on activity through the year.

We have adapted and strengthened our training provision, introduced monitoring of engagement with students (through the Senior Tutor), and are experiencing very low levels of performance problems (e.g. one instance in the 2013/14 academic year). We are looking into the possibility of including Personal Tutor performance formally in the review process for academic staff.

6.23 The review team recommends that the School **considers Years 3–5** from an outside-in perspective. This will involve understanding what roles graduates are likely to assume in their careers, what competences will be expected of them, and translating these into course and programme learning objectives. (para 3.11)

*We see this as a key activity to undertake over the next 2-3 years. Our plan is to involve partner companies, students and staff in a review of the types of career destinations and competencies.*
expected of our graduates with a view to mapping these back onto our programme objectives. In
addition we will aim to make more use of the enhancement themes to help identify distinctive
elements of our programmes.

Since the review we have made substantial changes to the structure of our Honours programme
through years 3-5. Input from student representatives identified key constraints that limited
student choice of appropriate course pathways, particularly for those taking an exchange year
abroad. In response, we now offer most courses across two years (3/4 or 4/5), and have
streamlined degree programme rules to more effectively support suitable course
combinations. Within these broader changes, we have also reviewed individual areas of study:
changing and restructuring sets of courses to better fit recent developments in industry and
student career interests. Our recently introduced course.inf and student.inf web portals provide
much improved transparency and support for choosing and participating in our courses, linking
to course surveys, course materials, deadline and feedback timing information.

We have recently re-established our Industrial Advisory Board to take employer advice on
graduate attributes, and a first meeting is expected to take place in December 2014.

6.24 The review team recommends that the School reviews its portfolio of degree programmes
and provides roadmaps for each programme or programme grouping and their associated career
paths to ensure that students are making informed choices at the very early stages of their
studies (para 3.12).

We agree our portfolio of programmes can appear confusing to the casual observer and to some
students. Our goal will be to provide exemplar routes through our programmes that capture both
“standard” and “exceptional” routes since some of our more able students make quite non-
standard use of the programmes.

The focus of our curriculum development activities has been student choice rather than
restricting the learning journey to pre-specified pathways. Survey results indicate that flexibility
is one of the aspects of our curriculum that students value very highly, and there is no evidence
that it is creating confusion, especially since we apply a very permissive strategy regarding
programme changes. We agree that our “modular” curriculum structure creates administrative
overhead, timetabling pressures, but a significant simplification would only be possible if we took
very radical steps such as removing our joint degree programmes. Nonetheless, we have actually
managed to reduce our overall number of undergraduate degree programmes by 30% from 22 to
16 since the last review.

6.25 In view of the steady increase in the use of formal methods by industrial and commercial
software developers, the team recommends that the School considers building further on these
foundations by requiring student projects to use formal notations for specification and design
and strong verification methods (para 3.13).

At the moment, making this a requirement would not gain the support of all staff. Where appro-
priate we will suggest students take a formal approach to specification and design.

We have not attempted to enforce this in a top-down fashion. Comparison to other departments
and student feedback confirms that our curriculum places very strong emphasis on formal
foundations overall, and, where appropriate. However, it is important to allow flexibility given
the diversity of our programmes and student body, so that, for example, certain Cognitive Science
courses will naturally be less focused on formal methods.
6.26 It is recommended that the School looks at ways of **encouraging more academic staff to participate in the strategic discussions** and development of teaching initiatives in the School (para 3.14).

*This is a long term goal. Currently staff involved in year 1 and 2 teaching are strongly engaged in this discussion and as the stronger student ethos flows through the school later year staff are becoming more involved. We envisage achieving much wider engagement over a 3-5 year time span.*

We have increased visibility of teaching-related discussions through presentations at general staff meetings, thematic course reviews led by individual research institutes, more frequent email communication regarding teaching matters, involvement of staff in our Informatics Conversations series of staff-student events, and through thematic teaching-related workshops. While the proportion of senior staff who engage in strategic debates and curriculum development remains fairly steady, we are seeing increased interest in these issues in more recently appointed staff, which suggests that these efforts are effecting positive change.

6.27 The team recommends that the School clarify to themselves who the intended student **target group is for the MInf programme** (para 3.15).

*This is being progressed in discussions at College level.*

The MInf programme has been experiencing significant growth in numbers, so that we do not believe this to be an issue any longer.

6.28 The review team recommends that the School gives consideration to how some of the DoTs **more operational tasks can be devolved** and the DoT empowered to spend even more time on strategic thinking (para 3.16).

*We have appointed a Deputy DoT and have restructured admin support to provide more support to the DoTs.*

The new structure we have introduced has been working well, though we have seen a significant increase in central University initiatives that create additional duties for DoTs. Also, increased external administrative burden has resulted in Deputy DoTs primarily focusing on curriculum and teaching QA, so that the workload for both roles remains very high.

6.29 In order to determine the importance of programming in the curriculum the team recommends that the School **consult with potential employers** to define what competences their graduates should have (para 3.17).

*This will be part of our current programme aimed at providing better support for the development of programming skills in our undergraduates. We envisage consulting with companies in AY 2009-10.*

Engagement with employers in this area is ongoing. It has proven challenging to gain specific data on this. In a recent survey, employer contacts reported not having insight into technical skills of graduates they have employed (this can only be provided by technical teams, and not by high-level company representatives).

6.30 The team recommends that the School of Informatics **continues to monitor performance in Inf1** and considers further course review if there is no improvement to the pass rates in 08/09 (para 4.2).

*Ongoing, pass rates are improving significantly.*

This is no longer a problem, pass rates have been at good levels for several years now.
6.31 The team recommends that the School of Informatics monitors performance in Informatics 2 in light of the higher than usual fail rates, and considers whether the delivery and assessment methods being used are appropriate (para 4.3). Ongoing, pass rates are improving significantly. This is no longer a problem, pass rates have been at good levels for several years now.

6.32 The team recommends that the School considers teaching Maths in house and adjusting its content to relate more specifically to the Informatics degrees as well as looking at ways of embedding some of the fundamentals of Maths into teaching in Years 3–5 (para 4.4). Addressed via Board of Studies, interaction with School of Mathematics, and ongoing review. One approach has seen increased use of Inf PGs as tutors in Maths. Closer working with Mathematics has brought a rise in Mathematics pass rates and with the restructuring of Maths provision into 10 point modules we anticipate introducing some Informatics-provided courses in AY 2010-11. The review of our Maths teaching in Years 1 and 2 is now complete. We now teach a 20-point course (on discrete mathematics and proof methods) in house, and the School of Mathematics have revised the other three courses (on algebra/calculus/probability theory) our students take. These changes have been very well received by students.

6.33 It is recommended that the School continues in its efforts to enhance feedback and give consideration to whether the curriculum for Years 1–5 provides sufficient, appropriately timed opportunities for students to undertake assessed work, and therefore to receive feedback (para 5.2). We have reviewed feedback in the light of NSS results and attach a short report on our plans to address the feedback issue. This has been a focus of our enhancement activities, and our “Improving Informatics Feedback” campaign (which included introduction of an online system for tracking all feedback return times, appointing a Feedback Officer, and engaging with the student body to identify feedback needs) has recently brought significant improvements in this area (an 18% increase of NSS scores on Feedback and Assessment in 2013/14).

6.34 The team recommends that the School also conduct a review of the good practice that currently exists within the School and give consideration as to how this good practice can be adopted by other courses (para 5.2). The School will participate in events organised by our Teaching, Learning and Assessment group directed at transferring good practice. The first such event is scheduled to take place towards the end of first semester of AY 2009-10. We continue to engage with the Institute of Academic Development (formally TLA unit), engage staff to participate in their training events, and have organised a joint workshop on coursework design with them. We have also collected exemplars of good feedback and are disseminating them more actively, together with general School guidance on feedback.

6.35 The review team recommends that the School reviews the appropriate balance between 10 and 20 credit units in years 3 through 5 for the programmes (para 5.3). We believe most of our courses can be delivered effectively using a 10 point format but we are reviewing workloads to ensure they are well matched to this format. There has been extensive discussion of this issue, taking also the views of students into account. The consensus view within the School is that 10-credit courses provide students with more
choice and give them access to a more personalised course portfolio. We continue to look at coursework deadline planning and exam load in order to ensure a manageable student workload.

6.36 It is recommended that the College of Science & Engineering disseminate the Facilities, Teaching and Learning group model to other Schools within the College (5.4).

**College Response:** The TPR report will be considered at both College Learning and Teaching and Quality Assurance Committee. In addition it is recommended that The School of Informatics highlight these items of best practice in their annual Quality Assurance report which also reviewed as the Quality Assurance Committee. These committees contains the key personnel from the School in the College of Science and Engineering who are best placed to disseminate this information. This model has been disseminated at College level, and has also been presented to colleagues at the University level through presentations at Senate meetings.

6.37 The team recommends that the School look at ways of publishing more widely the main outcomes from the course questionnaires both to students and to staff (para 5.6).

*We will consult with staff and students with a view to devising effective, transparent, accessible methods to review teaching and learning provision.*

There is now a dedicated web page which publishes past course survey results and staff responses to student comments. Students report that this is much utilised by students in the course selection process. A purely student-led initiative ([www.betterinformatics.com](http://www.betterinformatics.com)) has also emerged that complements the School-managed survey information with crowdsourced information about courses.

6.38 The team recommends that the School considers the use of feedback and other teaching performance evaluation in promotion procedures as a means of incentivising staff in their teaching activities (para 5.6).

*Our goal is to devise an agreed, transparent method of reviewing teaching and learning in the school. Such a mechanism will be appropriate to factor into the professional review process being rolled out across the school.*

While the professional review process has been recently revised at the University level to take teaching performance evaluation into account, this has not yet been reflected in the School’s review process in a systematic way. It is worth noting, however, that for both our most recent Professorial promotions, their leadership in teaching was a significant part of their promotion case.

2. Taught Masters provision (PPR 2008)

(highlighted text in this part is as per the source document)

1. The Panel **recommends** that the School revisits the provision of feedback to students. As there appears to be no School guidance on feedback provision the Panel recommends that a framework/schedule of feedback provision is devised and included in the handbook given to students. *(This misquotes the recommendation in the report, which said that students appear to be unaware of School guidance on feedback provision.)* The existing policy, which is that feedback should normally be provided within two weeks of submission, will be included in the MSc handbook. There is an ongoing problem of adherence to this policy, and this will continue to be pursued with the members of staff concerned. We are reviewing our approach to assessment and coursework will be included in that review. We believe our students are required to do too many assessments. If we reduce the number of assignments we can work to improve the timeliness and quality of feedback.
There are now various online information sources that define specific principles and guidelines for feedback, both for students and staff. Compliance has significantly improved since the introduction of an online tracking system for coursework return. The total amount of coursework is still higher than we would like it to be, but students appreciate the learning experience and would prefer to obtain more credit for this work, rather than see it reduced.

2. The Panel **recommends** that the School considers ways to include more organised team/group working and problem solving perhaps through the tutorial provision. We are investigating the provision of group projects that could be undertaken by several students. We are also considering having a tutorial group that runs throughout the entire year to support the IRR and IRP courses, and this may be an appropriate forum for such activities. The IRR/IRP groups have been running successfully for several years. MSc project proposals now allow the option of having a project being conducted by a group of students (yet individually assessed). We have also introduced group meetings during the dissertation stage, and the Personal Tutor system mandates at least one group meeting for each student per year.

3. The School should **address** the issue of the ‘quiet lab’ and to take steps to ensure that this functions as a quiet working area. There are designated quiet labs on Appleton Tower level 5 that are clearly labelled as such. We will ensure that such notices are clear and prominent. Our experience is that students enforce such policies themselves. This issue arises primarily from a decision to reorganise the labs to increase space in quiet labs – it took students some time to realise the change had taken place. The quiet labs are quiet now. No further action. We have to occasionally remind students to comply with the quiet lab rules, but complaints are rare.

The Panel noted the enhanced information provision and **recommends** that the inclusion of advanced information on programming skills to facilitate student preparation would be a very constructive addition to the overall recruitment and induction provision. In the longer term the introduction of an e-learning package/course should be **considered**. We have plans to prepare an online version of our “Introduction to Java Programming” course. This should be available for 2008-9 intake. This pre-sessional version of the IJP course has now been introduced. Our rules on programming background have been simplified and the online guidance has been improved. Guidance on programming requirements and advertisement of the pre-sessional course is now provided early on in conversion-related communications with all applicants.

5. The Panel **recommends** that the School revisits the presentation of the course information on the web. The Panel **recommends** that the major and minor courses for each specialism are more clearly linked on the listing so that the students can identify a clear pathway to follow. The advance publication of course descriptors would assist the students to choose their specialism pathway. We agree that the course information on the web is in need of improvement and will try to make it clearer. This specific suggestion is one possible improvement that we will consider. The course handbook has been much improved in this respect. Instead of major and minor courses we now list small sets of core courses, and larger lists of optional (recommended) courses. We have also introduced a unified online course portal which can be used to navigate all our course information, including information not contained in official University course descriptors.

There still remains a problem with managing multiple information sources (University course
descriptors/School course landing page/lecturer’s live course page). While the MSc handbook gives guidance on how to best use these sources, it is hard to encourage students to use the handbook as the main source of information.

6. The Panel **recommends** that PG representatives in each specialism should be elected during the course induction period. The names and role of these representatives should be clearly advertised on the main programme webpage and the email channels available for communication should be improved. It is suggested that the School liaise with EUSA regarding possible training for new representatives.

*These reps were elected early in semester 1 but we do need to improve their visibility and training. This will be addressed as part of our review of student support that is taking place at the moment.*

Representatives are now prominently advertised on our web pages, and we try to ensure they are selected in such a way that we cover all our MSc programmes. All representatives are offered EUSA training sessions.