

Dear Vicky,

I am on sabbatical leave this academic year (2016-17) and normally don't read School-related email regularly. I was tipped off about a proposal for an "Internet of Things" course proposal and would like to respond. I have also attached a few supporting documents. Could you please print copies of this and supporting documents and table them at the BoS meeting on 2 November. Please confirm that you have received this email.

Thanks, A

1. System Level Integration Practical (SLIP) covers the material being proposed for the course "Internet of Things". The course in its present form has been taught since 2004 using the platforms and software environment developed as part of the EPSRC-funded "Speckled Computing" project. The current platform (Prospectz-5) is ARM-based and is its fifth generation.

2. Speckled Computing presaged the so-called "Internet of Things" by almost a decade and SLIP has pioneered the teaching and training of students in this field. It is 100% coursework-based and covers hardware/firmware, communication protocols, sensor data analytics, low-power embedded system (hardware/software) design and App design. Students work in groups of 4-5, and are chosen with interests/skill sets to cover the ones listed previously. Students are taught the principles of IoT design in weekly sessions in a laboratory setting which they practise by taking their ideas from concepts to a prototype demonstration to an invited audience over a space of 11 weeks.

[See the document entitled "SLIP-2015-16.pdf" for a summary of the course].

3. The "Interaction Design" aspect of IoT has been taught in the Human Computer Interaction (HCI) course since 2013-14 in the form of 6-8 case studies of real designs (with working versions demonstrated in the class or in the form of videos) and reinforced by a coursework on the design of an "IoT product" [See attachment entitled "HCIAssignment2015-16.pdf"].

4. The overall format of the course has remained remarkably unchanged since 2004, although refinements have been made based on student feedback. Students over the years have been very complimentary about this course and I have included the student feedback for the academic year 2015-16 (SLIPug.pdf). I will be bringing a proposal to the next BoS for SLIP to be assigned 20 credits to reflect the amount of work undertaken by the students.

5. In summary, Informatics was prescient in formulating SLIP a dozen years ago to teach aspects of "Internet of Things" based on our research, and which now has considerable commercial relevance for students wishing to be trained in this area. The proposed course has considerable overlap with SLIP and would be duplicating scarce resources.