

Faculty of Computer Science & Technology Tripos Management Committee

Chairman: Dr David Greaves

Secretary: Ms Dinah Pounds

Minutes of the Tripos Management Committee held on Monday 8 May 2017 at 13:30 in GC22

AGENDA & NOTES

Members

Prof Andy Pitts (*Representative on Mathematics Faculty Board*) Dr David Greaves (*Chairman*) Dr Hatice Gunes Dr Robert Harle (*Part IA coordinator*) Dr Sean Holden (*Part II and supervisions coordinator*) Dr Mateja Jamnik Dinah Pounds (Secretary) Prof Peter Robinson (Exchange Programme Organiser and Deputy HoD) Megan Sammons (Student Administrator) Dr Damon Wischik

Dr Hatice Gunes was welcomed to the Committee.

- 1. Apologies for Absence None
- 2. Notification of any other business None

3. Approval of the minutes of the previous meeting The minutes of the previous meeting were approved.

4. Matters arising.

i. The Intel lab can be rearranged to seat the additional students next year but careful consideration will needed when allocating practical groups. If numbers continue to increase, the design of the timetable will need to be rethought. The lecture theatre in the Roger Needham building cannot now be used for a whole lecture series. FW26 can be used for Part II lectures instead but the AV equipment will need upgrading. Action DP

5. Correspondence.

None

6. Reports from other committees

Directors of Studies Forum. The Directors of Studies agreed that accreditation by the IET accrues little benefit to our students and was content that we withdraw our affiliation. Members have expressed a wish to maintain the IA NST option at present but were content to phase out the PBST option. It was agreed that removing choice

in Part I was sound now that the new structure allowed for more opportunities for specialisation and a broader range of options in Part II. These should be more widely promoted.

SSCoF. No significant issues were raised. All undergraduate students may now access the Library 24 hours a day.

Athena SWAN. The issue of no female lecturers in Part I has been rectified and there are now three courses; MLRD, Interaction Design and next year, IB Logic and Proof with female lecturers.

EXCEPTIONAL ITEMS

- 7. Sabbatical request from Dr Andrew Moore from Jan 2018 for one year. The Committee supported Dr Moore's request. Part I courses are expected to be covered by a UTO and the newly appointed systems lecturer will be asked to cover Part IB Networking. There are 2 RAs who may be able to support by giving guest lectures. Action DP
- 8. Admissions. Offers have settled at 128. Directors of Studies are experiencing difficulties recruiting enough supervisors this year and anticipate next year will be worse. We hope that the Department's Wiseman award and asking all research students to nominate 5 subjects which they can supervise will help to relieve the shortage of demonstrators and supervisors. Colleges will be approached to offer more incentives to recruit supervisors. Action DP
- 9. Report on the new Paper 3 MLRD course. The shortage of demonstrators to cover the increased numbers next year was noted. It is hoped the Wiseman award will assist in recruitment. A mechanism for paying two 'super demonstrators' as requested will be explored. Action PR

The Committee appreciated that Python was a better programming language than Java for this course but could not endorse teaching an additional language in Part IA. The request for more ticks will be discussed at a later date.

10. Timetable and new course proposals for 2017-18.

- i. The draft Part IB timetable for 2017-18 is now complete including the new Paper 7. The students who took the 50% option will have a slightly higher workload in Lent term when the group projects take place.
- ii. IB C and C++. Dr Krishnaswami outlined a proposed practical course and made a case for teaching only C in Part IB. This was accepted by the Committee. Future developments may link IA Operating Systems with Programming in C. Continuing to offer C++ which is the favoured language used by industry was felt to be desirable. In future, it could be studied as a compulsory Part II course.
- iii. Part IB "Mathematical methods for computer science" will now be called "Foundations in Data Science. The syllabus was welcomed as being much improved. NB. The new paper 10 Big Data Science course will need knowledge of Python and some will be added to IB Data Science in preparation for this and for a compulsory Part II C++ course. Dr Wischik will also explore the current NST scientific computing course taken by our students as part of their Maths paper with a view to replacing it with a course more relevant to our students. Action DW.
- iv. The Committee were content and expressed approval for the syllabus for the new Paper 7 "Formal models of language".

- v. Report on revision meetings. Some discussion has taken place regarding revising IA Digital Electronics and introducing from Nand to Tetris. A new systems Paper 10 course is under discussion. Further talks on Paper 10 are due next term. **Action DP**
- vi. A reduction of IB Concurrent and Distributed Systems to 2 exam questions from 2018 was agreed.
- **11. Sabbatical cover for 2017-18.** All cover has now been arranged. Prof Mycroft has agreed to cover Foundations of Computer Science, Dr Jamnik has agreed to cover IB Logic and Proof, Dr Wischik will extend the number of IA Algorithms lectures he gives and Dr Harle will cover the remainder.

The Committee welcomed Dr Gunes suggestion that in future, courses should be cotaught which would provide an easy solution to the issue of sabbatical cover. We will promote this policy for future courses. Currently, courses have a back-up lecturer on an informal basis. It is not proposed to introduce co- teaching into current courses, although this will be possible in some cases, as this will increase lecturer workload. If a lecturer does not arrange cover for a course, the TMC will endeavour to find cover. In this circumstance, the change of lecturer may be permanent.

- **12. Discussion on Tripos option names and branding.** The Committee agreed that removing options in Part IA could reduce the course's attractiveness and that we should make it clear in our branding that Part II is full of options. We should develop our thematic streams and increase options in the ticks. The Tripos will appear richer and attract more female students and encourage diversity.
- 13. Consideration of whether Michaelmas term for Part II students should be for core, compulsory courses rather than optional courses. This will facilitate moving more material out of Part IB. The Committee were in agreement that this would relieve the Part IB timetable and facilitate the planned developments in the Tripos. This will be introduced in Michaelmas 2018 with selected Part II courses including C++ becoming a core and compulsory part of Papers 8 and 9. Other possibilities include the final part of Computer Design, Computer Systems Modelling, Information Theory and Control Theory (taken from Principles of Communications) although further discussion will be required.

14. Review of the 50% computer science option.

Directors of Studies have expressed a wish to maintain the NST option at present. It was agreed to phase out the PBST option which is only taken by small number of students. Action DP/DJG

15. Report on the accreditation visit from the IET and BCS organisations. PR

Consultation has now taken place with all of the relevant committees - the Director of Studies Forum, the Tripos Management Committee, the academic staff meeting and the Faculty Board. They have all concluded that the additional burden of meeting the IET's requirements for accreditation outweigh the benefits to our students. In particular, they are content that our current procedures for moderation of examinations by the external examiner are adequate, and are reluctant to grant an IET panel access to confidential information about individual students. We are therefore withdrawing our application for the Computer Science Tripos to be accredited by the Institution of Engineering and Technology. We will continue to maintain our association with the BCS.

16. Report on course surveys for Lent term 2017.

Generally, students were content with their courses and there were no serious issues requiring action.

17. Student handbooks and learning guides. The Committee suggest we consult student reps as to whether our students would find a handbook and organiser useful.

Date of next meeting - 30 June 2017