UNIVERSITY OF CAMBRIDGE
Department of Computer Science and Technology

Faculty of Computer Science and Technology
Meeting of the Tripos Management Committee

Tuesday 29 April 2025 at 14:00 via Zoom
https://cam-ac-uk.zoom.us/j/83079740494?pwd=Ob6NLymOOuCeqa2pgQCasqxkeF7iHI.1

Unconfirmed Minutes

Members

Prof Robert Harle (*Chair; Director, undergraduate teaching*) (RKH) ✓
Aidan Bishop (*Undergraduate Teaching Administration*) (AB) ✓
Prof Paula Buttery (*Deputy HoD)* (PB) ✓
Dean Dodds (*Undergraduate Teaching Administration*) (DD) ✓
Lise Gough (*Postgraduate Education Manager*) (LG) X
Dr Tobias Grosser (*Deputy Director, IB undergraduate teaching*) (TG) ✓
Dr Carl Henrik Ek (*Advisor)* (CHE) X
Dr Sean Holden (*Chair of Examiners*) (SBH) ✓
Dr Martin Kleppmann (*Deputy Director, Part II undergraduate teaching*) (MK) ✓
Dr Roman Kolcun (*Advisor*) (RK) ✓
Prof Anil Madhavapeddy (*Deputy Director, IA undergraduate teaching*) (AVSM) X
Caroline Stewart (*Departmental Secretary*) (CS) ✓
Becky Straw (*Undergraduate Teaching Administration Manager)* (BS) ✓

1	**Apologies for Absence**

2	**Notification of AoB**

One item from the IT strategy committee regarding the systems to support ticking in the long term.

3	**Approval of the minutes of the meeting of 03 March 2025**

No objections

4	**Action from the meeting of 03 March 2025**

Completed actions from the last meeting can be found in the document 'completed TMC actions'
Completed TMC actions

4.1	**Examiners report recommendations 23_24.docx**

PB noted that Engineering and MML had upper bands on the supervision hours they expected. Colleges would have seen this from other departments but not us. RKH and MK will take the matter of Part II project supervision payment guidance to the DoS forum. **(Action: RKH & MH)**.

RKH looked at the internal examiners report. Faculty Board had four questions regarding this.

Firstly, the internal report proposed students handwrite an apology letter in cases of misconduct, under invigilated conditions so AI could not be used. CS wished for TMC to consider this before going to faculty board as it would be time consuming and unlikely to be beneficial. RKH noted Jamie Vicary felt strongly about this but difficult to map onto standard procedures. RKH asked for a show of hands to show support, no hands were raised. PB asked if we would arrange this or the colleges. SBH wondered what would happen if students said no to writing an apology letter. RKH did not feel this was in line with other procedures. PB wondered if this would be an admission of culpability if students maintained their innocence. MK did not consider this to be an effective penalty'. TMC did not consider this necessary.

Webpage used the gender biased term 'chairman' which should be changed to 'chairperson', 'chair' and 'examiners report'. CS believed this was historical and had not been updated. RKH asked if anyone objected to using 'chair' rather than 'chairman', no objections. BS will action this. **(Action: BS)**.

Clearly state the requirements for a Part III appeal on the website. RKH believed this had been addressed by a new appeals procedure. CS agreed this had been completed.

Deadline for examiners reports. RKH believed TMC and PEC could setup a deadline offline, suggested the same as the external examiners deadline so the reports come in prior to October. No objections.

RKH noted that Jamie's examiners report was incredibly detailed and he was grateful for this.

Engineering and ML had upper limits on supervision hours, colleges would have seen this from other departments but not from Computer Science. RKH wished for this to be addressed at the DoS forum.

4.2   MK was happy with random assignment for part II modules. CHE asked how many modules were oversubscribed. RKH wished to consider this more for the next TMC and for BS to provide statistics on oversubscription and selection methods. **(Action: RKH & BS)**.
Update: [Part II Module caps](#)

Pass on this as it is addressed later in the agenda and the urgency has gone because Mobile Robotics can be moved.

4.3   RKH asked CHE to provide more information about students gaming the system. CHE said it would be quite anecdotal but would write a few paragraphs. **(Action: CHE)**.

CHE had not arrived to report back on this. Roll over to next meeting.

4.4   Point 22, RKH wished to have Damon's feedback re target median as he had created the current recommendation. AVSM wondered if there needed to be a zero hurdle model. RKH asked CHE to write a response, TMC will consider at the next meeting. **(Action: CHE)**.

CHE had not arrived to report back on this. Roll over to next meeting.

4.5   Point 27, A faculty discussion should take place to decide the appropriate scope of a Part II Project, with respect to working style and technical content. The TMC will discuss this in the near future. (**Action: TMC**)

RKH did not feel this needed to be completed today and pushed to a future meeting.

4.6   Point 35, RKH believed this had been completed. PB mentioned the AI policy had been updated. RKH asked BS to compare the webpage and updated guidance which can be reviewed at the next TMC. **(Action: BS)**.
https://www.cst.cam.ac.uk/files/ai_policy.pdf
https://www.cst.cam.ac.uk/guidance-regarding-use-ai-tools-assessed-work

PB stated that guidance had not been updated since the start of the year and if the webpage was dated Sept/Oct then it should be up to date, BS informed us that the webpage was up to date.

4.7   Point 37, Simplify late coursework penalties to 10 marks (or 10 marks per day.)
RKH wondered if this was a knee jerk reaction, AVSM thought it seemed reasonable. AVSM will write a response for the next TMC. **(Action: AVSM)**.

AVSM had not arrived to report back. Roll over to the next meeting.

5   **Other matters arising**

None

6   **Equality, Diversity and Inclusion**
New standing item

This is a new standing item, RKH asked if TMC members had anything to bring forward. No matters were raised.

7   **General Teaching Matters**

7.1   External Examiners Report
TMC to produce short comment for Faculty Board
ee_report_form.doc

RKH believed most matters were fine however looked at a few.

Project based modules were considered a weak point, which RKH believed TMC was already aware of.

It was suggested that a more robust and fair system for marking should be introduced. RKH did not wish to invest much time into this as the tripos review may move modules to part III. MK wondered if the marking fairness issues would persist in Part III but RKH informed him that the grades would be pass and distinction. TMC agreed to defer this conversation until there is a clearer plan for modules.

SBH believed this could be mitigated if people followed instructions when marking, drawing attention to two modules this year had been marked outside the median. RKH believed taking a firm stance could be a good interim solution.

BS will send a message to all module convenors informing them that they will be expected to conform to the median (or have an extremely good reason for not doing so). **(Action: BS)**.

MK wondered how the median could be defined in a small module. RKH understood this but didn't believe there was a better approach. SBH believed that as the process has already been advertised, we should stick to it and potentially introduce changes next year.

MK and PB questioned modules with a small cohort, or a larger cohort involving group work, where the group make share a common grade, making the median hard to determine.

The process for marking students who complete the wrong number of exam questions is currently ambiguous. Best marks or first questions. RKH believed the policy had been, if a student completed six exam questions out of five, then all would be marked and the five best grades awarded. TMC agreed this was the best approach and likely already in place. CS recalled discussion about this putting pressure on students, marking and encouraging students to game it, RKH disagreed,

believing that students would also have less time to complete the questions. Only a small number of students were affected, rather than attempting to game the exams it was more likely the students gave up on a question halfway through and changed to a different one rather than putting additional pressure on themselves.

BS will add this to the marking scheme document. **(Action: BS)**.

The mark schemes for exams vary in quality, examiners suggested some guidance for breaking marks down. PB felt this was similar to steps taken after marking. SBH felt the current system for adjusting afterwards was better and felt there would be pushback against introducing additional steps. RKH did not wish for a mark scheme to be made public but wondered if it would help examiners. SBH did not think this would be helpful. RKH was against adding extra text but felt it happened organically in other ways and that we should have a draft marking scheme. RKH will look at this offline. **(Action: RKH)**. MK felt the mark scheme should vary based on the question style.

The examiners report suggested that questions should be answerable to any expert and the questions were focused on testing students on Cambridge lecture materials. RKH did not think processes should be changed.

Looked at examples of good practice and grade inflation was not found.

RKH will write a summary to be passed onto faculty board, by the end of this week. **(Action: RKH)**.

| 7.2 | Part II Modules 25/26 |

Modules

125 students for the upcoming part II year, we have 195 places in MT and 122 in Lent. Amanda has been asked if she would be willing to move mobile robotics to Lent which would solve the problem, 162 and 155 module places.

Affective AI has removed the requirement for a midterm report, which RKH believed was in response to something TMC had decided on earlier. No objections to this.

Advanced Graphics and Image Processing. Changes to the syllabus, generative AI will be added and less material related to reflectance models, global illumination, visual perception, AR and VR. No objections. Changes to assessment, the programming task will be replaced with a group project, students will be marked individually on their contributions. RKH wished for more detail on how the marking would work as he felt it would be unfair if three students received the same mark. BS will contact. **(Action: BS)**.

Understanding Quantum Architecture. A new module, previously approved.

Mobile Robot Systems, returning after three years, will move to lent. One lecture added on the topic of robot learning and more weight added to in-person performance. No objections.

Computing Education. An unusual course introduced last year with a small cohort. The examiners did not indicate this course was particularly difficult to assess. Proposed to remove the viva, considering it went well last year, no objections.

Cloud Computing. TMC had asked for changes to be made, BS believed more details would arrive soon. BS will chase. **(Action: BS)**.

Deep Neural Networks. Assessment will be changed to a timed in person test, take home tests will remain, students will receive feedback but not marks. The reason for this change is because LLMs can now complete the tasks for students. RKH did not consider this to be ideal and spoke about the distinction between a course and a module. MK believed this was to incentivise students to

complete rather than an exam, wondered if there was enough dynamic range in the question. RKH did not believe there was a check or balance other than being a module. PB believed this style of exam could be examined at the end of the year. RKH believed that as we need the module to run, leave it for now and return to later.

Multicore Semantics, proposal to remove practical work and assess on written coursework. RKH believed that if practical work was removed this would be a normal part II course. SBH had discussed this among examiners and the feeling was that this should be considered lecture courses and this was a way of avoiding scrutiny of the exam questions. RKH proposed reclassifying this as a normal course next year if it does not have a practical element. RKH will speak with Peter. **(Action: RKH)**.

RKH believes that if Robotics is moved, we can afford to lose Multicore Semantics as a module.

7.3   Guidance for lecturers on part II courses versus modules

RKH will write some guidance, if examinable then it will be a course. Take home exams are still possible on modules. MK suggested introducing exam quality controls to take home tests. SBH asked if anyone had confidence in take home tests at this point, which RKH agreed and wondered if we should stop supporting take home tests.

RKH proposed the following. If the course has an exam, completed under exam conditions, this should be part of the end of year exams. If a course has thirty percent practical work and seventy percent of the marks come from an exam, this should also be part of the end of year exams. RKH noted that Part II courses don't usually contain practicals but there is no reason against this. PB wondered about the EDI perspective as modules suit some people, PB felt these figures should be looked at as it could be a concern, moving away from something which supports certain groups (although PB was not sure evidence supported this).

RKH will draft this guidance and circulate, later adding to the website. **(Action: RKH)**.

SBH does not believe there should be separate QA processes for exams and modules, RKH agreed.

PB believed most things could be accommodated in ticks and exams, felt modules were hard to justify. RKH agreed, modules made sense when introduced, but with AI this was no longer the case.

7.4   From DOS meeting: AB spoke about being part III examiner and modules which are shared. According to the normalisation procedures a part II student must get a lower mark than a part III student, however this year one exceptional student exceeded part III students. RKH wished this to be raised at TMC.

RKH was unsure of how to proceed, should it be a strict requirement that Part IIs always get lower grades than Part IIIs. MK felt this rule was odd. PB did not believe this was an explicit rule. RKH believed there was a central rule regarding this related to the difficulty of the assessment. RKH believed this needed more research but did not think this should be a strict rule. RKH will research this further. **(Action: RKH)**.

CS found the following from faculty board 'There was a view amongst the Board that normalisation within each year group was necessary in order to ensure parity between modules and that it shouldn't matter between Part II and Part III because there is no comparison. It was also observed that where modules were shared between Part II and Part III, the original intention of these was for there to be a 20% difference in the workload and that 20% of the Part III assessment should be research based.'

RKH considered this to be reasonable. RKH asked BS to find the guidance sent to lecturers for discussion on Friday. **(Action: BS)**.

7.5   MLRD

MLRD changed this year. PB explained that the ticks were non-examinable this year, although ticks were still handed in through Moodle so we had a record (some people may have completed the work with supervisors without uploading so this record may not be definitive) of how many students completed the work.

There were 143 students. Tick 1 was completed by 105 students, however this dropped off significantly. The final tick was completed by only 44 students. RKH was surprised by these numbers. PB had spoken to some supervisors who preferred this as the question sheets were not very meaty. PB believed this was an interesting experiment and showed that students would not complete work of their own volition. PB did like the idea of telling the students that one exam question would be based on their practical work. RKH thought they could still avoid the MLRD question, but was an incentive.

PB believed we should speak to supervisors. PB also wished to check the final marks against those who submitted.

7.6   Livestream lectures

RKH explained that last term, a setting was changed and all lecture recordings were livestreamed. We were unaware until a student complained about being unable to access a livestream. After this all livestreams were turned off. Students gave feedback that they found livestreams helpful.

RKH asked what the policy should be for livestreams. Currently we record but do not stream. SBH asked who had access to recordings and why they needed it, BS informed him that anyone with recording access could have viewed the livestreams. MK noted that recordings usually became available an hour after the lecture so didn't believe there was a significant difference.

RKH proposed that we stick to the existing policy, livestreaming not allowed, students should be in the lecture theatre and not watching from home. Most people agreed to this. PB believed coming to lectures was better for the welfare of the students as otherwise a lot of them would remain in their rooms.

RKH asked BS to write this on the website and take it to SSCoF. **(Action: BS)**.

7.7   Part II Projects

This has been discussed multiple times and MK hoped this would be the final iteration. The original proposal involved removing checkers entirely, after feedback from colleagues MK proposed keeping checkers in a limited capacity. In the case where the day to day supervisor is a DoS or UTO, to have a checker, three distinct pairs of eyes should look at projects rather than five as is currently done. MK believed having five people reviewing projects encouraged them to see it as a box ticking exercise rather than caring about it. MK believed three people would be enough redundancy.

The UTO supervisor (renamed to Marking Supervisor) would be the person ultimately responsible for the project.

RKH thanked MK for his work. RKH proposed accepting the proposal for next year and seeing the results. No objections.

RKH asked BS to add this to the agenda for the DoS forum. **(Action: BS)**.

MK will reword the material on the website. RKH was happy but wished for it to be done after the term ended. **(Action: MK)**.

8   Tripos Review

8.1   Python bootcamp

RKH explained that Alaistair had requested a python bootcamp at the start of the year. The first Thursday, Friday and Monday could be part of the bootcamp with students doing some work over the weekend. Students would still need to attend Maths for Natural science lectures over the weekend but not considered a concern.

Arranging this would will require Digital Electronics to be moved slightly and condensed, losing two lectures and having two weeks of four lectures. Foundations of CS would not need to change, OOP would lose two lectures which RKH believed was fine.

RKH asked if there were any objections. MK RK, PB and SBH supported.

RKH will work with Anil on this. PB reminded RKH that Anil was on sabbatical next term, but RKH explained he would be involved in setting up but not running the bootcamp. RKH believed he and possibly Tobias would run it.

8.2   Group project and exams 25/26

RKH spoke about the idea of moving the exams forward and then having the group project a consolidated thing in lent term.

RKH believed this was tricky, a lot would need to change to make this possible. An eight lecture course and three twelve lecture course would need to move. In principle this could happen once the gap reserved for the group project was removed. There would still be an eight and twelve hour course which would need to be relocated. RKH's proposal was to move prologue, becoming an optional course in part II, but even if that was done there would still be a twelve lecture course. The only way this could be done and to have an exam would be to teach it intensively over two weeks. In the past PB had expressed an interest in teaching intensively but RKH found this to be difficult. SBH had previously done something similar at another university, teaching in three hour blocks, worked but was not fun for anyone and was asking a lot of the students. RKH also mentioned the difficulty of scheduling supervisions around this as usually they don't begin until two weeks in.

SBH spoke about exam questions, people struggled to provide questions in a timely manner, even with an extended deadline, some people needed to be chased up. Teaching this way would involve pushing the deadline forward by two weeks.

PB asked if removing the need for an external would give more time for question setters. SBH was concerned about quality control, PB thought it was unusual for IA questions to be sent to an external.

PB wondered if the course could be taught via recordings, which students could watch at their own pace. RKH was concerned about supervisions if students were studying the course at different times.

RKH felt this proposal was difficult and asked if everyone wished for this to happen for next year. PB found the group project to be quite an unequal experience and if it was done after exams, the students could enjoy it more, citing the experience engineering students have.

RKH wondered about dropping some courses from IB and moving to II. SBH wished for CHE to be involved as he will be examining. RKH will contact CHE. **(Action: RKH)**.

PB felt we could trial this, for example dropping the IA external for one year, but not committing to doing this long term. MK felt it would be worth trying and delaying for a year wouldn't make it

easier. RKH explained the original idea was to drop down to three streams, if that had been done, it would make moving the group project easier. MK was happy for Prolog to move to II.

RKH spoke about a gap created by moving Prolog. RKH liked the idea of teaching an eight lecture course over ten days. SBH agreed this felt more comfortable. RKH asked if SBH's course could be moved, but it could not as it needs to follow Logic and Proof. PB was happy to move her courses.

RKH will continue to push towards this and will have a meeting with BS regarding this. **(Action: RKH & BS)**.

9   **Any Other Business**

At ITSC there was a discussion regarding various different systems for ticking such as Chime with ITSC did not feel they could support. ITSC wondered what the long term strategy was.

In the past people have brought in or built their own system, then perhaps failed to maintain them or left the department. Discussion regarding who should maintain teaching systems, ITSC or the person who requested this system. ITSC was nervous as they were often not consulted.

PB wondered if a teaching and scholarships UTO should be in charge of these systems. RKH felt that would be distinct from maintaining them.

It was important that ITSC be kept in the conversation about future systems. RKH felt we shouldn't be using custom systems, MK argued that as computer science department we should be able to build systems to solve our problems.

MK suggested surveying lecturers to see what they need. RKH liked this idea and wished to bring it up at Wednesday. **(Action: RKH)**.

MK also suggested a guidance document for lectures, showing best practices and available systems, encouraging and pushing towards standardisation.

Date of next meeting: 30 June 2025 2pm