### FACULTY ELECTRICAL ENGINEERING, MATHEMATICS AND COMPUTER SCIENCE

**DATE: 19 JUNE 2023** 

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OURREF: EEMCS23/BOZ/10923/NL

### Minutes 183rd PC-AM-meeting Tuesday 16 May 2023 15:45 – 17:15 hr. Ravelijn 3411

Present: H.G.E. Meijer(chairman), A.A. Stoorvogel(PD), S.J. Geerts, L.S. Lanting, N. Luijten, E.

van der Veer, N.F. Berg (Abacus), B. Manthey, S. Langer(replacing Proksch), F. Schuller, J. Schut(M-coordinator), J.P. Boon, Q. Van Dongen(Candidate Board

Abacus)

Absent with notice: K. Proksch, J.B. Timmer(B-coordinator)

#### 1. Opening

15 The chairman opens the meeting at 15.51.

### 2. Minutes 182<sup>nd</sup> meeting 4 April 2023

Page 1 Line 22: percent is one word

Page 3 Line 98: advises as a verb with a s

Page 5 Line 214: interactive

Line 222: remove 4

Page 7 Line 287: as it is not used

25 With these changes, the minutes are adopted.

#### **Action points:**

• 436a – Remains on the list

The PD has asked the teacher and has been pushing him to make a schedule. The PD has not seen a response yet. The chairman wants to avoid an evaluation that says it would have been nice if the reader was updated. Lanting says that the reader will be updated as it is a case study for the EEMCS study trip. The chairman notes the teacher in the end is responsible for this update.

• 460 – Change to 460a

The advice has been written. The PD discussed the changes with the M-coordinator. The M-coordinator says it will appear in part B of the new version of the EER.

Action point 460a (PD): Provide a new form for Capita Selecta

- 461 Remains on the list
- 462 Can be removed from the list
   There are 35 first-year AM students enrolled for the 4<sup>th</sup> module of this year.
   The passing rate of Analysis and Calculus 1 is 42%. This includes all students, so also students that already left the programme.
- 463 Change to 463a

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The advice has been written. There will be a discussion on this point later in this meeting.

- 464 Can be removed from the list Advice has been written.
- 465 Can be removed from the list Done

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#### 3. Announcements

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236 students wrote AM as a possible study on their application of the Kick-In. This is roughly the same number as last year. Experience tells us that only a fraction of these students will choose for Applied Mathematics.

#### 4. Advices / correspondence

- Advice on Bachelor EER AM 2023-2024
- Advice on course proposal Capita Selecta
- Advice on Individual test Stochastic Processes

The chairman proposes to adapt the text of the advice as it was not shared with the members of the PC.

**Action point 463a (Chairman):** Adapt the previously written advice about the Individual test of Stochastic Processes.

The members of the PC agree with the proposed new version of the advice.

- Mastermath OC meeting 14 April

The chairman has a question about the discussion on Mathematical Neuroscience on page 4 of the minutes of the Mastermath meeting (page 23 of all documents). The chairman teaches this course himself. It turns out to be extremely hard to figure out if other universities teach a multidimensional version of Newton's Method. Therefore, writing the prerequisites for this Mastermath course is harder than expected. Geerts thinks the minutes reflect the meeting.

- Mail from PD: response from teacher Stochastic Processes
- Proposal from chairman wrt advice 186 (Stochastic Processes)
- Mail from PD: evaluation Continuous Optimisation

The PD comments that in the minutes it says that a lot of students postpone this course and only study for the exam in the last three weeks of the module. When this was discussed with the other PDs, it was mentioned that only students from Twente do this. Manthey was at this meeting and he remembers it as follows. In particular, students from Twente take Discrete Optimization as well as Continuous Optimization, and the former has a lot of homework. Therefore, students postpone working on Continuous Optimization until Discrete Optimization has finished. In the minutes that might have been overinterpreted.

Geerts wonders if this way of studying is actually bad. If it works for the students, it should not really be a problem.

The Chairman raises a new topic. Newton iterations may be related to Continuous Optimization. He checked it with many students, and they all said that Newton iterations is discussed but never implemented. The chairman wonders how it could be that

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something so important in mathematics is left behind. There is not a single moment where students implement this topic themselves. The chairman thinks this is a missed opportunity. Manthey thinks it makes sense to discuss such Newton iterations. However, Continuous Optimization is a rather broad field, so it differs per study how close you come to this topic. The previous teachers were from a different field and therefore probably not taught this in detail.

The chairman summarizes the discussion. There are two issues. How does the PC feel about our students postponing the material of Continuous Optimization? The PD says that in his experience cramming for a course instead of working on it the whole semester negatively influences the learning. The chairman says that if students cram it into the last three weeks, this creates a huge workload which then conflicts with other courses. Manthey thinks this is more of an observation than a problem. Lanting adds that the generation of students that are now doing this course already did some of its content in Linear Optimization and Mathematical Optimization in the AM bachelor, so the required effort is just lower. The PD agrees that the fact that it is possible to do this course in three weeks shows that there might be too much overlap. The chairman concludes from this that the situation might change over the years since the curriculum changes. The current situation is not preferable but there is not really a way to avoid it.

Then there is the issue of recommending this course in our curriculum. The members of the PC say that it is mandatory. The chairman does not think it should be mandatory.

### 5. Evaluation: Minutes Master Evaluation Third quartile

There was some overlap between the courses. Geerts says that students that do Finite Element Methods, as well as Scientific Computing, have an advantage since SC has much overlap with FEM. The PD says that the lecturers changed suddenly and very last minute this year. The new teacher of FEM was well received. The general feedback about the teachers was good. The PD already discussed with the two new teachers to investigate the overlap between the courses for the next academic year. The chairman concludes that there are new teachers, and they have to find their way, and as far as we hear, it was a good choice to have these two people teach the courses.

#### Information theory and statistics (D)

On the last line of page 29, it says that some of the questions on the exam required a calculator which was not communicated beforehand.

**Action point (M-Coordinator):** Investigate the calculator issue of the exam of Information Theory and Statistics.

The PD says that de Jongh took over this course. Mistakes can be made, but not announcing the required calculator must be taken into account when grading the exam.

#### Queuing theory (I)

There was a very strange structure with a cheat sheet for the test. Lanting explains that during certain lectures, students could work on their cheat sheets during the break. This was done so that the teacher had some overview of what was put on the cheat sheet.

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During some other contact hours which seemed random, there was also the opportunity to work on the cheat sheet. Geerts says that the cheat sheet constantly had to be handed in, so the teacher distributed the cheat sheets every time. Lanting thinks that this is to avoid that whole worked out exercises were written on the cheat sheet. Langer thinks the whole point of an open-book exam is that a student can put all they want on a limited number of pages. Boon thinks the teacher wanted the students to have a theorem list that students complied themselves, but he does not think this is the right way to achieve that.

The chairman believes that cheat sheets for this course are an ongoing discussion. The PD says that this manner of creating a cheat sheet is different than he is used to. He wants to talk to the teacher of this course to ask why this approach was chosen. The chairman says that it feels random. Is it announced to students when they can work on their cheat sheets? It does not sound fair. Manthey agrees that it is random, but it might be that the teacher thought to try something new. The chairman proposes to ask the teacher for a response. Berg sent all the feedback on the courses to the responsible persons. He did not receive answers yet. The chairman asks the M-coordinator if there will be an evaluation, and yes, there will be.

The PC would like to hear the feedback from the teacher. The PC finds this manner strange, but perhaps the teacher has a very good idea. Boucherie teaches this course.

**Action point (M-coordinator):** Ask the teacher of Queuing Theory for feedback on the cheat sheet.

### Scientific computing

The teacher has taken over on very short notice. The chairman thinks that if lectures are fine, let us be content for now and wait for next year for improvements.

### 6. Master EER 2023-2024 Part A, Faculty section

All EEMCS-PC have the chance to discuss Part A, and then writing Part B will be continued.

Geerts has a comment about page 12 of the EER (page 45 of all documents). It says, "The combined programmes are described in paragraph two" and Geerts thinks it should be "The common courses are described in paragraph two". So, courses instead of programmes. He thinks this can be misused such that two masters are received while very few ECs have been done. There is a long discussion, where Geerts thinks this wording does not suffice, but the other members of the PC do not agree with him. Geerts will write down his arguments so that the PC members might understand him better.

Paragraph six states "It is required for approval of both examination boards". In Geerts' experience, this is handled very loosely. The chairman says that you still have to have approval from AM. Geerts says that this wording says that a student also needs a signature from the other examination board. How can we as AM demand something from another examination board from another programme? The PD explains that an

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examination board can give someone the right to act on their behalf. If someone says it is fine, then that person is acting on behalf of the examination board.

The chairman thinks it should be clarified to whom the supervisor has to make a request for confidentiality of a thesis. The PD says that he has to decide, and the supervisor has to request. Since he needs to approve the request, he thinks it is obvious that the supervisor has to request it to him. The chairman says that the supervisor could also have the student do this according to this wording. He thinks the formulation is a little careless, he would like to have it changed.

Schuller has a question about the oral exams (article A4.6). It says that you can request to have another party present. He practices this automatically. The chairman says that this means that it is always possible to request another party on top of the already extra person. Schuller asks if he wants a PhD student or another colleague to be present apart from him, he needs to apply for that. Manthey explains that both the student and the teacher can ask another party to observe apart from the already mandatory extra person present.

The PD says that the same problem with fraud and Cum Laude exists as in the Bachelor EER. Where is the fraud registered? He discussed with the examination board, and they felt it was best to only include fraud committed within the current programme. The chairman says that fraud with courses done elsewhere might not be registered. The PD says that if a student commits fraud, they will probably not even pass the course so they have to retake it a year later. This results most probably in a study delay, which causes the students to not make the timing requirements for Cum Laude. Therefore, this is a very unlikely scenario. The chairman thinks we just have to accept this.

The chairman concludes the discussion on the M-EER. Geerts will write down his reasoning about the combined programmes so that the PC can start understanding the issue and see if we combine it into an advice. He will mention the issue of fraud but also the practical issues regarding timing. Lastly, he would like the confidentiality supervisor item to change from passive to active voice.

Geerts thinks it might be nice to have a separate article for the education master. It is not clear which diplomas you receive, and he thinks it should be defined in the EER.

#### 7. AOB / Questions before closing the meeting

Geerts wonders if there will be an evaluation to see if the goals of the new curriculum are achieved. The PD says that there has already been an evaluation of Analysis and Calculus. Geerts means the new curriculum as a whole. The PD says that he is definitely going to reflect on the first year. He is already thinking about what to change for the first semester. The chairman asks if the PD can make the points very concrete, so say exactly what you want to change for next year. The PD says that regarding the first semester, several teachers are leaving, so there will be new teachers for these courses. However, he does not want the courses to be changed drastically. Regarding Analysis, he is really looking at how he can improve it. The studying habits of the students have to be

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improved, and he and Lanting will discuss how student tutors might help.

The chairman says that there was very little feedback from the students from module 3. The same goes for module 11, while those for module 7 are such that he wants to wait for a response from the module team. He invites the PD to write the concrete changes

for next year for the next PC meeting.

Lanting has a remark about the evaluations. She thinks that students are increasingly rude in evaluations. The amount of information we can actually work with decreases. She thinks that it should be made clear to students that personal attacks on teachers make absolutely no sense, and should have not any place in such an evaluation. The chairman thinks that giving constructive feedback is actually part of module 1. Lanting thinks it is scary to see how much students think they can do to a teacher. The comments made in the panel evaluation were rude. The PD says that there will be a meeting soon with Computer Science to discuss this panel evaluation, since it was mostly Computer Science students that made these comments. Currently, they are at a point where lines are deleted from evaluations because they were offensive. Lanting says that teachers can be hurt by these comments. The chairman suggests that we ask the B-coordinator to check if giving constructive feedback is still part of the programme in module 1. Lanting thinks we should call in with Computer Science that the comments of their students were shocking and unacceptable.

The chairman asks if for Deep Learning we still get a response from the teacher. The M-coordinator says he reminded the teacher several times. The chairman thinks that otherwise the only other option will be to invite him personally. This will be a hassle since this teacher works from home on Tuesdays.

#### 8. Closure

The chairman closes the meeting at 17.14.

Next meeting: 13 June 2023

Nr	Description	Meeting	Responsible
436a	Ask the teacher for a design of a Statistics course for the next academic year.	17/01/2023	PD
460a	Provide the new form for the Capita Selecta Course	16/05/2023	PD
461	Arrange a meeting to discuss the idea of student tutors.	04/04/2023	Lanting & PD
463a	Adapt the previously written advice about the Individual test of Stochastic Processes.	16/05/2023	Chairman
466	Investigate the calculator issue of the exam of Information Theory and Statistics.	16/05/2023	M-coordinator
467	Ask the teacher of Queuing Theory for feedback on the cheat sheet.	16/05/2023	M-coordinator

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