FACULTY ELECTRICAL ENGINEERING, MATHEMATICS AND COMPUTER SCIENCE

DATE: 18 NOVEMBER 2021 OURREF: EEMCS21/BOZ/10687/AS

Minutes 170th PC-AM-meeting Tuesday 14 September 2021, 15:45 – 17:15 hr. TEAMS meeting

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Present: H.G.E. Meijer (chairman), A. Stoorvogel (PD), J. Schut (M-coordinator),

J.B. Timmer (B-coordinator), N. Apeldoorn (Abacus),

A. Schopbarteld (minutes), L. van Dissel, F.P. Schuller, K. Proksch,

S.J. Geerts, L.S. Lanting, N. Muntendam

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Absent: A. Skopalik replaces B. Manthey

1. Opening

The chairman opens the meeting at 15:47

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Remarks on the agenda:

three items were uploaded as late items, they might be postponed to a later meeting.

2. Minutes 169th meeting 1 June 2021

20 **Textual remarks:**

Page 4, (B-Coordinator -> lecturer).

The PC acknowledges that the responsibility for keeping the OSIRIS pages up-todate lies with the lecturer

The minutes are adopted with the above alteration.

25 Action points:

378 Can be removed from the list

Evaluation of the MDS track in February/March 2021 has been done.

394a Remains on the list

Organise that both, teachers of module 2 and students, make an overview of the workload of module 2.

396 Can be removed from the list

Proksch is the new member

397 To be removed from the list

Geerts looked into this but concluded that an advice is not feasible to do based on the insufficient data.

404 Can be removed from the list.

An advice for the new book on linear optimization has been written.

The programme director will see what is going on to catch up

405 Can be removed from the list.

Action point: The chairman will provide the names for action point 405

to the PD

Action point: Follow-up by the PD to state the conclusion of action point

409 Can be removed from the list

A positive advice about soft separation BSc/MSc 2021-2022 has been written.

410 Can be removed from the list

Muntendam has joined the PC as a student member.

411 Can be removed from the list

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It has been communicated to the students that they are required to send the course's teacher an email to receive feedback.

412 Can be removed from the list

Positve advice for the Bachelor's EER 2021-2022 has been written, there is a reply by the bachelor coordinator attached.

413 Can be removed from the list

It is expected this comes back after we see the master evaluations.

414 Stays on the list

Has to be checked by the chairman and the bachelor coordinator what is exactly asked.

60 415 Stays on the list

Lanting did not sent a message yet (was sent but did not go through).

3. Announcements

We started with about 60 first year bachelor students including double students. **Action point:** The bachelor coordinator will check the amount of new international students.

4. Advices / correspondence

 Mail from Hoeksma: Computer programming missing as an explicit PILO in the B-AM EER:

The PD together with the curriculum committee are looking in to what extent programming should be taught at a higher level within the bachelor. The curriculum committee is designed to give advice on how the bachelor curriculum should be revised. He hopes that a better conclusion will follow on what role programming should play in the bachelor. Reading just the email the PD thinks the advice is too vague. The student members of de PC were asked what they thought about the email. Geerts agrees that the email is vague and should be clarified. He also adds that he feels that being proficient in an programming language is too specific. According to Geerts students should be able to make and design algorithms. The chairman agrees that just being proficient in a programming language is too specific, since in many cases this includes skills that are less useful to mathematicians. The chairman concludes that people are open to a modern version of this topic.

Action point: The PD has to take this email to the curriculum committee.

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- Advice on book Linear Optimization

No discussion.

Advice on soft separation BSc and MSc

No discussion.

90 - Advice on EER BSc AM 202

No discussion.

- Mails from Veenhof: enroll for the participation training courses

The chairman recommends all of these courses to the PC, even if they are already booked. The chairman will attend "negotiating according to the Harvard principles" himself. This has been fully booked already. Either way, these courses are very useful for new members of the PC.

- Correspondence about Dutch in module 3

PD still has to look into this.

Mail from Master Math (meeting moved to 8 October 2021)

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Geerts can join from 10:30 onwards (only online), while Lanting can only join until 10.40. The chairman suggests for continuity it might be helpful she joins for the first 30 minutes.

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The chairman made a list of the 7 Mastermath courses for which UT students indicated they filled in the questionnaire. At least these courses should be looked at, and by October 1, comments are to be reported to either Geerts or Lanting.

Remark: Agenda item Abacus Evaluation has been moved to item 7 to better reflect the discussion.

110 5. Bachelor Evaluations

Module 3 reflection

It is being argued module three should be changed for AM students. A curriculum committee has been set up to discuss this. It should lead to a proposal for the new EER (initial thoughts to be presented in January 2022).

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Comments about talking Dutch will not be discussed here, an action point has already been made for this.

- Module 4

Comments by students are exceptionally positive.

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Module 7 reflection

Reply from Uetz stated that all students were very negative, Muntendam and Lanting looked into this and object; this was only a small selection of replies. This reply was referring to emails, which are not visible by the panel.

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The negative (sometimes also hurtful) comments completely miss the ballpark, these students must be told how to properly comment on a teacher constructively. If something like this may occur again the PD will respond to these students how to comment on a teacher in a more constructive way.

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The group composition is a point of concern. The B-Coordinator admits that collaboration might be challenging. Plans were made to fix this; the PC will observe how this works out.

135 - **Module 8**

The appreciation of this module is low because the students feel the module's final project is organized in a way that it is hard for AM students to contribute or study in a meaningful way. This is because AM students have not learned PLANT-SIM which IEM and CE learned in module 2. Students felt they learned things about collaborating and communicating in large groups.

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The B-coordinator adds that there is a mathematical part to the project but students feel this is a less appreciated part. Collaboration is (dependent on the group) very hard.

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Chairman: Collaboration is the main part of this project but for years this has not come across. This all depends on the group composition. Since this is a joint module making changes is very hard. But it seems that on average mathematics students have a negative study environment for this final project.

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Action point: The chairman needs to write an email to the module coordinator of module 8 to reflect on the project to explain whether he sees room for improvement given these comments (evaluations).

- Module 11 reflection

No comments on all 4 courses.

- Module 12 panel report 1

The panel report was positive.

160 6. Master Evaluations quartile 3

Graph Theory – Broersma

No comments

Intro PDE – Akkaya

No comments

165 - Mathematical Optimization - Hoeksma

No comments

- Optimization Modeling - Walter

No comments

- Queueing Theory - Boucherie

170 No comments

- Robust Control - Meinsma

No comments

- Stochastic Models in OM - Boucherie

No comments

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7. Master Evaluations quartile 4 & Evaluations by Abacus

Agenda item Abacus Evaluation has been moved to item 7 to better reflect the discussion.

Mixed-integer optimization (previously optimization modelling):

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Too similar to the course Advanced linear programming. (This will be discussed after the following action point has been completed)

Action point (PD): Ask the teacher of mixed-integer optimization (previously optimization modelling) to send the learning goals to the PC (since these are not on the OSIRIS page), and to check those against the ones from the Master math course Advanced Linear Programming.

Scientific computing:

Additional comments apart from the email:

Students find it strange that a full semester course (20 weeks) is graded based on a 20-minute oral exam (This might have been due to corona). It feels very hasty to do this in such a manner. Communication between lecturers and students is not easy. The lecturer writes there was very clear communication in which way the students are graded.

Action point: The M-coordinator will email the teacher of the course to come to a solution together.

Spatial statistics:

The two lecturers have different teaching styles. The previous PD and the M-coordinator discussed this with both lecturers. A promise was

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200 made to improve this. This improvement is not visible. Hence the current

PD and M-coordinator must dive deeper into the background,

specifically what agreements have been made. The chairman states that

after two years a course should have good teaching.

Action Point: The M-coordinator together with the PD must talk with the teachers. (According to the M-coordinator this will take a bit of time due

to the atmosphere)

Master Evaluations quartile 4 & Evaluations by Abacus Continued

Pioneers of AM:

210 No comments

Complex function theory (arguably part of the bachelor):

No comments

Time series analysis:

No comments

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8. Evaluation data science track:

The chairman states that the evaluations indicate the track is very good when it comes to the organisation and the courses. It also indicates that Statistics is a bit more theoretical than some students had hoped for (as a personal comment the chairman states that AI for health might make up for this). The thesis and internships are

problematic.

The M-coordinator states that the number of available internships will improve this year. There are new staff members and students have older students as an example. He states that there is an internship office and students should recognize this as a source for internships instead of looking for internships themselves. The amount of improvement is not clear according to the M-coordinator.

The PD sees that the problem for internships might lie in the fact that companies want their data analysed and staff members are more interested in fundamentals.

To conclude the chairman states that developing sufficient connections with companies takes time. There should be a follow up but not sooner than two years from now (September 2023) since this is something in progress.

9. AOB / Questions before closing the meeting

Late item:

Change of PILO:

The PC has no problem with the first change.

2 is incorrect because 3.5d does not state anything about exemptions, 3.3 does. Change 3.5.d to 3.3

On the website, it also states there are 11 PILO's but there are only 10, this number needs to be updated.

Action point(B-coordinator): change the textual comment and 3.5.d to 3.3

10. Closure

The chairman closes the meeting at 17:20.

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250 Action points

Nr	Description	Meeting	Responsible
394a	Organize that both, teachers of module 2 and students, make an overview of the workload of module 2.	20/04/2021	Chairman
405	To write to the staff of module 3 about being non-inclusive in this module and that the education should be offered entirely in English.	11/05/2021	Chairman
414	To look into the required prior knowledge for module 8.	01/06/2021	B-Coordinator & Chairman
415	To look into the time it takes the teacher of Mathematical Research II to give feedback to students.	01/06/2021	B-Coordinator & Lanting
416	Provide the names for action point 405 to the PD	14/09/2021	Chairman
417	A follow-up to state the conclusion of action point 405	14/09/2021	PD
418	Check the number of international students	14/09/2021	B-Coordinator
419	Presenting email by Hoeksma to the curriculum committee	14/09/2021	PD
420	Ask Module-coordinator M8 to reflect on the final project of module 8 based on student evaluations.	14/09/2021	Chairman
421	ask the teacher of mixed-integer optimization (previously optimization modeling) to send the learning goals of the course to the PC (as well as adding them to the OSIRIS page) And to check those against the ones from the Master math course Advanced Linear Programming.	14/09/2021	PD
422	Communication between the lecturer of Scientific Computing and students should be discussed with the lecturer for the coming edition.	14/09/2021	M-Coordinator
423	Discuss evaluation with lecturers of Spatial Statistics and ask for improvements regarding communication. To make sure the two teachers teach synchronized.	14/09/2021	PD & M-Coordinator
424	change the textual comment and 3.5.d to 3.3 on the PILO	14/09/2021	B-Coordinator