### Minutes 168<sup>th</sup> PC-AM (OLC-TW)-meeting Tuesday the 11th of May 2021, 15:45 – 17:15 hr. TEAMS meeting

5 Present: Hil Meijer (chairperson), Bodo Manthey, Gjerrit Meinsma (from 16:15 with notice),

Frederic Schuller (until 16:15), Anouk Beursgens, Lavinia Lanting, Linda ten Klooster, Lisa

van Dissel, Sem Geerts, Pranab Mandal (Programme Director), Jan Schut (M-

Coordinator), Judith Timmer (B-Coordinator)(until 17:23), Ginnie Renz (making minutes),

Niels Apeldoorn

10 Absent:

#### 1. Opening

The chairman opens the meeting at 15:45.

### 15 2. Minutes 167<sup>th</sup> meeting the 20th of April 2021

The minutes have been accepted.

#### **Action Points:**

	378:	to remain on the list
20	386a:	to remain on the list
	394a:	to remain on the list
	396:	to remain on the list
	397:	has been started; to remain on the list
	398:	done and to be removed from the list
25	399:	done and to be removed from the list
	400:	done and to be removed from the list
	401:	done and to be removed from the list
	402:	done and to be removed from the list

400: For the following year, the course *Time Series Analysis* will stay the same. In the Osiris description, it will be noted that the course changes slightly. In the future, if the learning goals change, an adaptation to them can be discussed.

#### 3. Advices / correspondence

- Negative advice on proposed new courses (164)
- Positive advice on proposed new courses (165)

The chairman explains that there are two documents for the advice on the new courses. The ones that need to be adjusted are placed in the email *Negative advice on proposed new courses* with the explanation of what needs to be adjusted. The part that the PC agreed with has been placed in the email *Positive advice on proposed new courses*.

#### 4. Announcements

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The Programme Director announces that he will be stepping down from his function as

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Programme Director as of September 2021 due to personal reasons. The chairman notes that this is a short period before September and wonders what happens if there is no replacement found for this position. The Programme Director explains that this has not been thought of as this decision was made just last week, but it has been assured by the head of the department that there will be someone to take over the position of the Programme Director on the 1st of September 2021.

Next, the Programme Director updates the pre-enrollment numbers for the bachelor. There are 94 pre-enrollments at this moment, while last year at a similar time, there were 83 pre-enrollments. The increase is mainly in the students from EEA countries.

Finally, the Programme Director explains that it may be possible for mathematics to have some classes on campus from September. The government considers putting a limit on the maximum students in a lecture room (75) instead of considering how big the room is and how many students can fit with regards to the 1.5 meters rule. The biggest problem will be to arrange lectures on campus, but for the rest, the Programme Director says, it may be possible.

The chairman finally welcomes Niels Apeldoorn, who will be taking over the position of Anouk Beursgens as Educational Officer of Abacus.

Linda ten Klooster announces that she will be leaving the Programme Committee as of September 2021.

### 5. New courses related to new specialization AI4Health

- Uncertainty Quantification and Data-Driven Modeling
   The chairman says that it is better when only one book is listed in the suggested material, not two or three. Manthey agrees, but he clarifies that this should not be a reason to write a negative advice on this course. Beursgens suggests that if the teacher desires to have both books suggested, then one book can be chosen as a more important one and the other one as additional reading for interested students.
- 2. Reinforcment Learning There are no comments made.
- 3. Deep learning for medical image analysis There are no comments made.
- 4. Case Study DS&AI Manthey points out that in the form, it is specified that the presence for the assignment is mandatory, which he thinks is strange. The chairman agrees, and he will write it in the notes when sending the advice about this course.
  - 5. Research Topics AI4Health

There are no comments made.

#### 6. Graphical Models and Causality

Ten Klooster points out that it is not specified whether the exam is written or oral, and that should be clarified, she says. The chairman states he will incorporate a note in the advice that the PC-AM assumes the exam is written, and if it is not the case, he will ask the teacher to notify the PC-AM about this.

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Frederick Schuller leaves at 16:15. Gjerrit Meinsma joined the meeting at 16:15.

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Geerts expresses his concerns about whether or not the track Al4Health is added too soon, considering the Data Science track started just a few years ago. Furthermore, he is concerned whether the students will indeed be interested in following courses of this track. The chairman mentions that he knows that every year a few students from other programmes, like Biomedical Engineering, Technical Medicine, are interested in taking master courses in Applied Mathematics, but that now also the imaging tracks in those programmes are targeted. The Programme Director also explains that it makes sense for this track to be introduced at this time as the programme then leads the current wave of Al activities, and they will for sure publicize this new track more now.

#### 6. Master EER 2021-2022

0. Faculty section

The chairman suggests that the document with track changes is going to be reviewed.

The following typos have been spotted.

A1.1.10: off these regulations - of these regulations.

A1.2: Between o and p, a new item should have been started for Fraud and plagiarism.

A4.2.1: test - tests (plural, check footnote 2 too)

A4.2.3: At least - at least

A4.7.4: the participates - the student

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The Programme Director draws members' attention to the point A2.7.5 and asks whether this point is fair. The Master Coordinator explains that in the admission letter, it is specified how much time students have to complete the pre-master and that it is not always twice the nominal study period.

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The chairman forwards a comment from Mirande van der Kooij, who takes care of the administration, about the point A5.3 that regards Cum Laude. She wonders why the weighted average was chosen as the calculation is complicated if the internship is not taken into account. The Programme Director explains that it has to do with the fact that Osiris also calculates a weighted average. He explains further that some programs do not have the internship included in their master programs. Therefore if a program has an internship included in their program and it is desired that this grade is included for

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the Cum Laude, then it is possible to do so. The chairman points out that it should be specified which programs want to have their internship included.

Geerts wonders whether in the point A4.2, about online surveillance and proctoring, it should be specified that it is just a possibility in the coming year. The point reflects that online surveillance and proctoring can be used if no other alternative exam method is reasonably possible. Meinsma notes that this should be sufficient. The chairman suggests to pay attention to master EER 2022-2023 whether the online surveillance and proctoring is still there.

1. Programme specific section

The following typos have been spotted.

B4.1.4: replaces - replace

140 B4.6: Reinforced learning - Reinforcement Learning

The Programme Director points out that the point B4.1.5 is specific for all tracks except Al4Health.

The chairman asks about the Second Examiner now that with the cluster MOR in place the chairs have officially merged. Two examiners are required for the assessment of the final project. One of them needs to be an independent member. Suppose they are both from the same cluster consisting of several research groups such as DMMP, SOR and Statistics. All members formally have the same superior. The chairman says one could argue that they are not independent, and asks how the program plans to deal with that. The Programme Director explains that the second examiner may come from a different research group which are still separate, despite being part of the same cluster. Manthey mentions that it would be convenient if, for example, a SOR member would be considered an external for DMMP and the other way around. The chairman notes that for the new staff members with whom he talked, this is not clear. The Programme Director wonders how it is unclear to the new staff members to which research group they belong as they are told so when hired. Manthey explains that it is not surprising this is unclear for new staff, as it took him a while to figure out what part of the university is responsible for which part.

The chairman lists some suggestions from Mirande van der Kooij. There is a distinction between a course program and a study program. Van der Kooij suggests changing these to study program. Moreover, in the EER, the following sentence can be found: the study program must include at least one Mastermath program if Continuous Optimization is excluded. Van der Kooij suggests changing it to in case the Continuous Optimization is excluded from the study program, at least one other Mastermath course must be included in the master program.

The chairman mentions further the point B4.9, about sequence of examination. The wording in this point is a bit confusing.

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In the point B7 joint degree is stated. Van der Kooij questions whether this should be dual degree instead. The Programme Director mentions that there is also another terminology, combined program.

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The chairman asks how many students are currently enrolled in the joint master degree, the one combined with UGM, an Indonesian university. The Programme Director explains that at this moment, there are no students enrolled within this program. The Master Coordinator follows that there is one student interested in this program but struggles with finding funds. He summarizes that last year there was one student enrolled, this year there are none and the following year, it is also expected that no students will be registered within this program. The chairman asks until when the contract is valid. The Master Coordinator says it is valid until the end of this calendar year. He explains further that if the student joins the program next year, the contract will be valid for her.

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The chairman mentions that in the point B4.3, about the SACS program, the Finite Elements Method is mentioned without the amount of ECs.

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Meinsma points out that in point B4.3 the name Hybrid System is used while the name of this chair will change.

The chairman notices that in point B4.1.4f, it does not say how much time should a student spend at an external institution. The Programme Director agrees to specify this.

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The Programme Director explains that point B4.7.h states that a maximum of 15 EC premaster courses can be part of the double programme. He explains that this is not allowed and that pre-master courses will be changed to bachelor courses.

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The chairman suggests writing positive advice about master EER 2021/2022 with the comments as discussed.

[AP Chairman: To write positive advice about EER master 2021/2022.]

#### 7. Bachelor evaluations modules 2020-2021

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- Module 2: Mathematical Proof Techniques:
  - i) Panel report 2

Ten Klooster points out that the module coordinator says he is looking for a new book for Linear Optimisation, but he does not make it a priority. Ten Klooster suggests he does. She explains that the recommended book is expensive, and rarely any student actually uses it. Lanting explains that she was the only one in her year who was using the book. Other students agree that a new book for this course should be a priority.

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[AP Chairman: To write the advice to PD that the new book for Linear Optimisation should be given a priority.]

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ii) Teacher's response

There are no comments made.

- Module 3: Fields and Electromagnetism:
- i) Panel report 1

There are no comments made.

ii) SEQ results

The chairman points out that there were many comments about using too much Dutch in the tutorials while some international students were in the classroom. Ten Klooster points out that this has been the case in the past few years as well. In this module, it was also allowed that a project group consisting of only Dutch students could make the project presentation in Dutch. Some students find it strange. The Programme Director thinks it should not have happened as the AM programme is offered in English. The Bachelor Coordinator explains she was not aware that Dutch is used during module 3, and she thinks there should be something done about it.

[AP Chairman: 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.]

[AP Chairman: To write to the examination board about the staff of module 3 being non-inclusive in this module and that the education of that module should be offered entirely in English.]

Lanting also points out that Prooflab 3 in this module needs to be improved. The students were expected to deliver a flawless proof for this course, but she thinks that this is not feasible for the first years and, in general, some attention should be payed to improving this course. Beursgens also points out that this is a 1EC course, but it took much more time than it should, according to students, and very few first-year students have passed this course. She says that the teacher of Prooflab 3 should provide feedback to students instead of just giving a pass or fail. She says that she or the Programme Director should talk to the teacher about this.

[AP B-Coordinator: To communicate to the teacher of Prooflab 3 that some feedback should be provided to the students.]

- Module 6: Dynamical Systems:
  - i) Panel report 2

There are no comments made.

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ii) Teacher's response Panel report 1 There are no comments made.

iii)	Teacher's response Panel report 2
The	ere are no comments made

- Module 7: Discrete Structures & Efficient Algorithms:
  - i) Panel report 1

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Van Dissel points out that assigning the groups entirely at random causes a group of mostly mathematics students can be created, and this is not advantageous as this is a programming project. Meinsma points out that there is a little Python course in module 4, so now it should be a bit easier for mathematics students. Not everyone agrees with that statement. Lanting explains that having computer science students in the project group has a good impact on progress in the project. The Bachelor Coordinator is asked to communicate the advantages of mixed groups in the project in module 7 with Marc Uetz, the module coordinator.

Beursgens also raises an issue that the book suggested for one of the courses in module 7 is no longer available. Therefore many students are getting another book that is suggested reading for the course. The teacher uses the book that is no longer available, which frustrates some students. Beursgens wonders if this could be communicated to the teacher and suggested that the available book is used instead. The Bachelor Coordinator asks Beursgens to provide the information on which course and book this regards, and in her talk with Marc Uetz, she will talk about this as well.

[AP B-Coordinator: Communicate to Marc Uetz about advantages of mixed groups for the project in module 7 as well as the fact that for one course, the book used is no longer available.]

- ii) SEQ results
- There are no comments made.
  - Module 11: Electives & Preparation Bachelor's Thesis
    - Panel report 1

The chairman points out that the same issue as last year appeared – that a teacher was supposed to give a lecture but was not aware of it. The Bachelor Coordinator explains that this year it was a timetable issue. Someone else was mentioned in the timetable than a person that actually was supposed to give a lecture. She further says that this has been solved quickly.

- 295 Minors quartiles 9 and 10
  - i) Panel report

There are no comments made.

Judith Timmer leaves at 17:23.

### 8. Master evaluations Q1 and Q2

- SIG master Q1
- SIG master Q2
- Game Theory
- Measure and Probability

305 - Nonlinear Dynamics

- Introduction to Mathematical Analysis
- Introduction to Risk Theory
- Mathematical Methods
- Numerical Techniques for PDE
- 310 Optimal Control

The chairman asks if anyone has some remarks about the evaluation of master courses. The Master Coordinator points out that the values of the course are pretty good, except for one course, Mathematical Methods. The chairman explains that this course has a lower score because the teacher was organizing this course for the first time, and there was an issue. He assures that this will not happen again.

### 9. Soft separation BSc/MSc 2021-2022

The chairman says that the soft separation rules for this year are the same as last year. He asks members if they agree with the implementation of these rules. There are no comments made. Nobody objects.

[AP Chairman: To write positive advice about soft separation BSc/MSc 2021-2022.]

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

There are no questions.

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#### 11. Closure

The chairman closes the meeting at 17:29.

# 330 Action Points:

Next meeting on the 1st of June 2021

Nr	Description	Meeting	Responsible
378	To organise the evaluation of the MDS track in February/March 2021.	15/09/2020	M-Coordinator
386a	To talk to the people responsible for organising the evaluation panels.	02/03/2021	Programme Director
394a	Organise that both, teachers of module 2 and students, make an overview of the workload of module 2.	20/04/2021	Chairman
396	To send an email to recruit a new staff member for the PC.	20/04/2021	Chairman

397	To check whether the specific master courses had a stable high workload over the years.	20/04/2021	Geerts
403	To write positive advice about EER master 2021/2022.	11/05/2021	Chairman
404	To write the advice to PD that the new book for Linear Optimisation should be given a priority.	11/05/2021	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
406	To write to the examination board about the staff of module 3 being non-inclusive in this module and that the education of that module should be offered entirely in English.	11/05/2021	Chairman
407	To communicate to the teacher of Prooflab 3 that some feedback should be provided to the students.	11/05/2021	B-Coordinator
408	Communicate to Marc Uetz about advantages of mixed groups for the project in module 7 as well as the fact that for one of the course, the book used is no longer available.	11/05/2021	B-Coordinator
409	To write a positive advice about soft separation BSc/MSc 2021-2022.	11/05/2021	Chairman