

Agenda PC - IDE

Meeting 179

Date: 27-11-2023

Time: 12:45 – 14:00

Place: Z - 109

Minutes secretary: Ilse Akkermans

CC:

Guests:

Members	Name	Present/Absent
Teachers	Geke Ludden (chair)	Present
	Jodi Sturge	Present
	Winnie Dankers	Present
	Kostas Nizamis (secretary)	Present
Students	Johan Stekelenburg (vice-chair)	Present
	Robert Breugelmans	Present
	Niek Reeze	Present
	Alexandra (Sasha) Tark	Present

Permanent guests	Name	Present/Absent
Programme Director	Wim de Boer	Present
BSc. Coordinator	Hiske Schuurman-Hemmer	Present
MSc. Coordinator	Elora Luijkx	Present
S.G. Daedalus	Nick Holtman	Absent
EvaCom	Teodora Cîția	Absent

1. Welcome
2. Announcements
 - 2.1. Chairman
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 - 2.2. Program Director
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 - 2.3. Officer of Educational Affairs, SG Daedalus

Sasha Tark will be the new officer of educational affairs of Daedalus. Sasha will fulfill this role starting February 6th. A new student member will be needed to represent the students as Sasha will attend the meetings in the role of Educational Affairs Officer from that date. **[AP studentmembers search for a new studentmember for the PC, preferably before the February meeting.]**
 - 2.4. Others

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3. Approve agenda
The agenda is approved.
 4. Approve minutes meeting 178
There are no comments on the minutes. Johan did a great job chairing the meeting. The minutes are approved
 5. Action Points from previous meetings(s)

AP 1 -178: provide documentation on the curriculum development such that the PC can read through and leave annotations on the curriculum development plans.

Wim has distributed the documentation to all the PC members.

AP 1 – 156: Re-establishing Discipline Council

Geke and Wim are still working on the bachelor curriculum revision. In the process they are also thinking about the discipline council.

6. Bachelor curriculum revision update

In the informal meeting it was discussed that the information on the structure is clear, but behind the scenes information is lacking; What is the focus and process?

[Wim] in the last slide, we will try to answer that. But it will also become more clear throughout my story.

A graphic is shown which shows the route of an IDE student from starting the program to beyond graduation. The vision of the program is to relate to the world, which is ever changing. Because of this, students are prepared for something we don't know yet. In response to the most recent curriculum meeting, Wouter Eggink sent the Bauhaus curriculum to the curriculum revision team. Wouter Eggink recognized the Wouter Eggink recognized the concentric focus of the curriculum and related it to Bauhaus. Concentric means you first learn the basics and when you progress you get to the core; you generate a deeper understanding. With this setup, learning lines are therefore difficult to define. Because things relate to each other and are interconnected. Learning lines can help to give structure, but it does not really reflect the way that the teaching process is happening.

The 'story of IDE' is a big poster. Wim highlighted the elements which he thinks represent the core for the new curriculum.

[Winnie] how did you come to these topics? How were these defined? Were they already on the poster?

[Wim] I think these topics were formulated because you have been talking as a group of instructors for so long already. Also, in the national council of the three universities with IDE as a program, we see these concepts in the reference framework as well. These elements are not directly taken from the council, but the topics are related to the mentioned reference framework. These topics were also discussed in the curriculum revision group.

[Winnie] And about the learning lines, could you not visualize them as matrices then? With how courses relate to certain topics. The learning lines and concentric aspect sounds vague still, how can we make clear why and what students are learning?

There are 3 ways to creating a better understanding of the curriculum: the blueprint, the requirements and the knowledge base. The blueprint is a blueprint on different levels which starts with the program's intended learning outcomes (PILOs). The PILOs were made earlier this year and can be considered 'the big frame', the summary of studying IDE. After that, the course themes were constructed, which showed on a more detailed level how to operationalize this. The exact contents of the modules is still being changed and adapted throughout the process. The module teams are working on the modules and there might be topics which seem to fit less than expected or additional theme that arise. An overview is shown with all the course topics per module. The PC thinks the overview is unclear. The themes suggest to be courses, but they are topics. Now it might seem like courses such as mathematics are not there.

[Sasha] In our recent evaluations of the curriculum a big topic of discussion was the disconnection of math in the curriculum, so it might be better to add this as a module topic. [Wim] Good point, we are working on better integration of mathematics in the module. In module 2, we will work on cases so students can see how math is involved in their later careers. The cases will be related to topics of module 2.

[Winnie] Also, the specific type of mathematics should be in there. Same for sketching. It should not just be "mathematics" as a topic, but it should be rather precise what type of mathematics.

[Geke] We have designed the overview in this way because we actively try to not look at it in the way of "you first need to learn this, before being able to learn that".

[Winnie] How do you define pre-knowledge then? If we don't define pre-knowledge won't that hinder other programs from being able to take IDE courses?

[Niek] Maybe Wim should finish the presentation first and then we will continue the discussion.

The PC agrees.

Projects will still be the backbone of the curriculum. The curriculum holds a design and research approach, but the aim is to put more emphasis on this. The new curriculum should embrace its academic responsibilities. The curriculum should leave students prepared for an academic career. The goal is to make students better aware of the research approaches which are taught. Because the approaches are applied and taught, there is not enough explicit attention given to these approaches.

On the next slide, there are three blue triangles. The idea behind this is that this represents the change in the support given to the students. Students are expected to increase in independence. The visual is a bit confusing, but orienting the visual differently would already enhance the comprehensibility.

Next the curriculum rationale is shown.

[Johan] Is the rationale IDE-specific or is it just a curriculum rationale in general?

[Wim] to a certain extent these are generic principles indeed. It is really important that you take quite some time with the team you're designing with. The team should use them as a frame of reference for the design of the curriculum.

[Geke] it is not IDE-specific, but it is the way we think we would like to teach IDE. This rationale comes from many discussions with staff members.

The knowledge base is a new element. 10 Years ago we had a book, but this book as well as the concept of a book is outdated. The focus lies in making it digital. Geke en Eric have started creating a structure for this. The toolbox should ensure a conscious "building up" of students' toolboxes.

Lastly, the year plan is shown. Workshops are scheduled in 5-6 week intervals. Most workshops are scheduled during the afternoon. Last week there was a workshop about reflection and the connection between modules. Also, the connection of mathematics to the modules was spoken about.

[Johan] What does pre-final mean?

Pre-final means that the courses are defined, but teachers are not yet assigned. The learning outcomes should be clear in the pre-final version.

[Niek] So there will still be room to adjust the learning outcomes? And if so, are module teams aware that it might still change?

[Wim] I always emphasize that it may still change. Steps back and forth are continuously taken. Designers know the word 'iterative' so the module teams will understand. And even a curriculum set in Osiris, has a lot of freedom on a lecture specific level.

[Geke] Some of the modules are in the final phase of defining their module intended learning outcomes. However, the 2nd and 3rd year modules are not this far yet. But that is okay, they can reflect back to first year courses.

[Winnie] I feel like we have outdated documents. We are making changes but I am seeing old versions again. This makes it feel like lost work that we are doing.

[Wim] Yes, this is indeed an old document.

[Geke] you are right. This is also caused by the continuous changing of things.

[Winie] Also, I feel like we, in module 6, are running behind.

[Geke] I said 'some' modules. I did not mean module 6 specifically.

[Hiske] In June 2024 the final version of the new curriculum should be there, because of the transitional arrangements and such.

Hiske and Wim should discuss the delivery of the curriculum and the transitional arrangements.

There is some confusion about if this discussion is about the process or about the contents of the curriculum. The informal meeting said that it would be about the process. But the PC specifically asked for the contents and for that reason, Wim has sent a document to all the PC

members. The PC was happy to have insight into the contents. Wim indicated that it is difficult to always have all the materials up-to-date and asks the help of the PC with notifying him if the PC notices outdated documents.

[Geke] It takes more than us reading the document to assess if one module follows the other. It also matters what choices students make in the 2nd year? Does that allow them to develop into the IDE'er that they want to be? It is hard to get that from the type of document shared now. I feel like we can only get that from discussing with the teams.

[Winnie] Maybe use colours to show relationships between modules?

[Wim] Last time, in the general meeting, all module colleagues gathered already to better relate each others modules to one another. It is hard to get that out of the document. They need to get together for that. What I want, is that we all take responsibility to better understand what IDE is. Colleagues are experts at one element. But everyone should be able to explain how everything relates to the bigger story. I was happy to see that this is going on.

The curriculum is an ongoing process and will not end when the curriculum is finished.

[Robert] I think it is nice to see newer tech like Artificial Intelligence in the curriculum. But I had a remark about Linear Algebra in the fourth module. Is it still before Finite Element Method? Because you need the knowledge of Linear Algebra before you can do Finite Element Method.

The students of the PC are unsure if module 4 is a good place for Linear Algebra. The mathematics courses have been noticeably a point of struggle for many first year students. Concerning the BSA, the addition of Linear Algebra in the first year might be stressful.

[Hiske] If we schedule Linear Algebra for the 2nd year and you don't pass, you can't do IFEM and then we have a problem.

[Geke] The bigger thing is, the first year should be doable. So it's not about where to place courses and making it doable in that manner, the first year should be doable regardless of whether Linear Algebra is there or not.

[Johan] At a previous meeting, Eric Lutters proposed a marketplace for topics. To prevent topics and subjects from being forgotten. People might think other modules take in a topic and then nobody does and the topic is lost.

[Geke] The tables that we see now, don't tell much about the core of the module. I feel like we need one slide per module, and then those next to each other. So we understand how things are different, how people are learning. We had this list with subjects when we started, that transformed into the blueprint.

[Johan] Yes, then it is fine, if you had the list and you have your arguments why certain things did not make the cut then it is fine.

[Niek] About the Mathematics and Physics lines, what is the plan right now, how will you make sure the stuff students learn is included in the projects, or how you adapt the physics and mathematics to the project?

[Wim] With a group of people, we explored different options for this question. We looked into the connection to other programs, outside of the module. In module 4 and 5, we want to better connect the themes of Mathematics 2 to the content of the modules. For the others, we sat together with the professors of these courses, but they are too much a thing of its own. There are examples, in biomechanical engineering for example, they get a case study every week. And they need to use the skills from their mathematics courses for this. We could apply a similar approach but then with case studies related to IDE. A group is already looking into the possibilities.

[Sasha] Alright, but we need to make sure these case studies are actually IDE related. We already got a case study once but it was just mathematics, related to a chair.

[Niek] Good to hear that you are working on this. Because, if things I learn are not included in the projects, I personally don't see much value. Either, the projects should be adjusted to suit the courses, or the other way around.

[Wim] Gabrielle Tuijthof has made a very clear picture of the relevance of mathematics as a designer tool.

[Geke] I agree that we should not think too easy of it. Maybe for those teams, concerned with this topic, it will be good to also add a student.

[Wim] Maybe we should organize something with students who experienced it.

7. Process of Master Theses assessment

The process of the master thesis assessment has been brought into the EER. It was decided that students should participate in one masterclass, which should be part of the final thesis. The duration of the thesis will be managed through mobility online. Administration also happens through this system. Supervisors however cannot access mobility online. Therefore, a new tool will be developed such that supervisors can more easily track students in their process. Teachers are not supposed to work with Mobility Online.

Bjorn de Koeijer, the coordinator of the Bachelor assignment, shared what his system looks like. The master assignment should have a process more similar to that of the Bachelor assignment.

[Robert] How does this apply to people doing their master now?

The new system will be implemented from the third module, so it will not affect people doing their master assignment now. Also, this system is not in the PILOs yet. The new process should be communicated to people supervising the students now.

8. Any Other Business

8.1. Are there any updates on the whole internationalization topic? How will it affect IDE and what is the plan?

Internationalization will be moved to next meeting as there is still a lot of uncertainty now.

- 8.2. The mathematics situation made clear that individual courses may be of good quality but their alignment (bigger picture) may be not. Is there currently any module/semester/year/programme evaluation? Who checks if the bigger picture makes sense?

Mathematics have been discussed in the bachelor curriculum revision. Mathematics gets good evaluations. The course is very well structured. The only thing is that it is not connected to the module. But the course on its own is taught well.

9. Any other business / Question round

There will be no meeting in December, the next one will be on January 15, but then there is also the fleet parade of the curriculum revision. The meeting will therefore be moved to Tuesday, 16th of January. Then we can reflect on information of the fleet parade.

10. Closure
14:00

PC – Open action items from previous meetings			
Action:	Target date:	Executed by:	Status/remark
AP 1 -179: Search for a new studentmember for the PC.	February	Student members	
AP 1 -178: provide documentation on the curriculum development such that the PC can read through and leave annotations on the curriculum development plans.	Before 6 th of November	Wim	
AP 1 – 156: Re-establishing Discipline Council	September 2023	Geke and Wim	