

Faculty of Engineering

Minutes August 2019

Subject Education Committee

Date and time October 31th, 9-11 am

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Location Nobel

Invited Associate Professor Massimiliano Errico, Program Coordinator, Chair

Associate Professor Knud V. Christensen, Program Coordinator Associate Professor Birgitte Lilholt Sørensen, Program Coordinator

Associate Professor Shuang Ma Andersen

Professor MSO Henrik Karring

Associate Professor Martin A.B. Hedegaard Program Administrator Mette Smølz Skau Student Representative Mikkel Kristensen Student Representative Sebastian Krog Student Representative Thomas Thostrup

Senior Consultant Claus Holmegaard Bonnesen (for item 1-2)

Cancellation from Shuang Ma Andersen and Mikkel Kristensen

1: Welcome

- 2: Status Meeting Material
- 3: Changes in the BSc and BEng
- 4: Communication regarding the new MSc
- 5: Planning of future UUV meetings
- 6: Any other business

1. Welcome

Two new student representatives, Thomas Thostrup and Sebastian Krog, were welcomed in the committee and the rules of confidentiality were explained by the chairman

Claus Bonnesen was welcomed as a guest, as he was invited to present the status meeting material.

2. Status Meeting Preparation

Claus explained how it is measured, if a programme is research based.

The 1st indicator is "VIP-share": how much of the staff is scientific research staff (research staff= all permanent staff)

The 2nd indicator is STÅ (Student year work). The STÅ number is divided by the number of permanent staff members.

The 3rd indicator is the number of research publications and the number of PhD students. This is to measure if the research environment is active.



The 4th indicator is the number of peer reviewed and BFI articles, which is to measure if the research is of high quality. It is calculated by looking at who is teaching the courses and how many peer reviewed or BFI articles they have published. Some of the UUV-members had questions about why it was measured this way, since teachers might be teaching in one field but have published in another field. Claus replied that it is measuring if the research environment is active and the underlying assumption is, that we do not ask teachers to teach a topic, they are not qualified to teach.

Chemistry and biotechnology has a "green" score in all of the above.

3. The progress of the changes in the BSc programme

1st semester: The project will become more explanatory as to how and why things are as they are and less descriptive.

It was argued by a student representative, that the 1st semester project does not feel like a 15 ECTS course, and it should only count for 10 ECTS. This could open up for another 5 ECTS for math and physics.

2nd **semester**: It was questioned why cell biology was included in the new title for the microbiology course. Cell biology is loosely covered in the course, but it is not the focus of the course. This will be discussed further.

Inorganic chemistry was discussed. The topic used to be covered by KE521 but the students felt they didn't benefit from it. Therefore, it was changed to KE528, but recently NAT has stated that they consider the two courses to be almost identical. The UUV needs feedback from the students to decide, if KE528 is an appropriate course for our students or if the ECTS would be better spend on something else. Math and Physics has been cut from 20 ECTS and is now only 15 ECTS. With the new changes in the programme, there is currently only set 10 ECTS aside for this, which in many UUV members' opinion seem insufficient.

3rd **semester**: The new course Ecotoxicology (might not the right title) is added to give the education an updated profile on some of the challenges the graduates are going to face (environmental, human health etc). It was discussed whether this topic should rather be included into another chemistry course (e.g. organic chemistry) in order to prioritize math, physics, and other basic engineering skills. It was argued that Ecotoxicology is an "extra thing" that is not needed, and that the program ought to focus on more basic topics, given the very limited number of ECTS available. Further, KBM can't cover Ecotoxicology but will have to buy it.

The UUV does not recommend Ecotoxicology to become a course in the programme as it lacks relevance, and much more needed topics are currently being under-prioritized.

4th **semester**: The scientific approach will be included in the fourth semesters project. It is required by law to have 3 ECTS in this.

The organic chemistry course has been reduced (from 10 to 5 ECTS) and some of the content has been moved to another course called Natural Product



Chemistry. It was discussed if it needed to be divided into two courses and suggested that it was one course with one exam. The content of the new suggested course does not exist at NAT, so KBM will most likely have to deliver it.

5th **semester**: Process Design and Process Integration overlap, and it was argued that it would be better to have both in one course. If it includes process simulation, it could be course of 10 ECTS otherwise it should be able to cover it using only 5 ECTS.

There has to be a minimum of 10 ECTS electives, and EiT is mandatory for all BSc and BEng programmes on Tech. However, the EiT course was discussed as the chemistry engineering students repeatedly report, that thy do not benefit from it and it seemed to be more relevant for GMM and PDI. There are no calculations or relevant elements for chemical engineering students. One of the student representatives argued that the focus is on business and innovation and the cases are irrelevant. The chemical engineering students feels that it is a "filler course".

This means that 10 ECTS are going to a course we have no influence on, and that our students are not benefitting from. KBM do not have staff availability to take part in the course teaching. The hope is that we will be able to move it to the MSc program where it will be delivered by KBM for KBM students.

4. Communication strategies for promoting the content of the master programme to the students.

The semi-electives don't constitute specialisations. The students on 5th semester are starting to look for other master degrees, as they are not sure, what we are going to offer on the mastes programme. The semi-electives give the students specialised skills even though they do not show on the diploma. It was argued that it is very hard to promote something to the students when the specialisations are not recognized with a title. The promotion has stopped since we can't answer the students' questions at this point.

Massimiliano will inform students by the end of November.

5. Planning of Future Education Committee meetings

If suggestions for the name of the master's programme surface, we will call for a meeting. Otherwise, there is no need for more UUV meetings this semester.

6. Any other business

N/A