

Annual Report Academic year 2021

Programme Committee CSE/ChE

Members

The Programme Committee consists of four teachers and four student members (table 1). The student members are chosen through an election which is held during the TOSTIS activity organized by the study association C.T.S.G. Alembic. Teacher members are appointed in consideration with the other members and the programme director.

Table 1: Educational Committee members

| | Name | Function or Group | Date of taking office |
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| <i>Teacher members</i> | dr. J.A. Faria Albanese (chair) | Membrane Science and Technology | September 2019 |
| | prof.dr.ir. M. Huijben | Inorganic Materials Science | September 2014 |
| | dr.ir W.M. de Vos | Catalytic Processes and Materials | November 2017 |
| | prof.dr.ir. J. Huskens | Molecular Nanofabrication | February 2020 |
| <i>Student members</i> | B.M. Jager | Student M-ChE (MME) | September 2020 |
| | J.J. ter Horst | Student M-ChE (CPE) | September 2021 |
| | L. Pieters | Student B-CSE | September 2019 |
| | V.A.B. Taboada | Student B-CSE | September – January 2021 |
| | J.E. Sweers | Student B-CSE | February 2021 |
| <i>Advice & Support</i> | prof.dr.ir. J.E. ten Elshof | Programme Director | - |
| | dr.ir. L.E. Krab-Hüsken | Programme Coordinator (CSE) | - |
| | E.M.E. Brus | Programme Coordinator (CSE) | - |
| | C.C. Diepenmaat | Study Advisor and Programme Coordinator (ChE) | - |
| | J.F.W. Schuerman | Commissioner of Educational Affairs C.T.S.G. Alembic | - |

Meetings

On the following dates, a meeting took place.

- 30th of September 2021
- 18th of November 2021
- 13th of January 2022
- 10th of March 2022
- 7th of April 2022
- 12th of May 2022
- 6th of July 2022

Meeting September 30th 2021

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| <i>Educational evaluation</i> | <ul style="list-style-type: none"> - Process equipment design runs well into Q4 which is undesirable for the bachelor assignment. The planning will be altered for bachelor students or the course will be removed from the elective suggestion list in M11. - M3 received a very poor grade and had a very low passing rate. Andre ten Elshof mentions this is due to linear algebra and the lockdown. A third try was offered for this course and a very considerate email by the programme was send to all students. - The M3 project was not well perceived. This could be due to the large variety in topics (and difficulty). Supervision was improved with student assistants and upcoming year, students can make their own groups and indicate preference for topics. - The passing grade of M7 is relatively low compared to last year. Jeanine ter Horst remarks that this is likely because organic chemistry was not an open book exam. Juriaan Huskuns mentions this will change upcoming year as well as the structure of the course. Also project groups were too large, but this will change upcoming year as the project will be more like a practicum. |
| <i>Discussions curricula</i> | |
| <i>General education</i> | <ul style="list-style-type: none"> - Student often do not finish their master thesis within the reserved time. There is consensus that eight months should be a limit. There should be a place where issues, such as one-sided elongation based on results, could be addresses by student. An exit evaluation is to be created to have more information from the student perspective next to the mid-term evaluation. |
| <i>Other business</i> | <ul style="list-style-type: none"> - Jimmy Faria replaced Wiebe de Vos as chair. - The numbering of the minutes and agendas is no longer consistence, Jimmy will fix this. - Lieke Pieters and Jimmy Faria will make proposals for spending the quality agreement budget. - The response rate of evaluations is low and the questions asked are not specific for the type of course. For more useful feedback teachers should be able to change the question list, however this does not work for the current evaluation structure of the university. Changing this is a priority. - The board of examiners suggests to implement a Dutch summary in a master thesis as is common for a PhD dissertation. The OLC is against as the educational programme is in English. |

Meeting November 18th 2021

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| <i>Educational evaluation</i> | <ul style="list-style-type: none"> - M-CHE Process Plant Design the course load is overall well distributed, the lecture and study material quality is considered excellent, and the exam questions match with the student expectation. The prior knowledge from some students is mismatching resulting in having challenges during the course. - Chemistry of inorganic materials and nanostructure course only received a few comments, however, the perception of the course is positive. The course was not found to be too difficult and the provided lectures and study materials were considered to be good. - Membrane materials Jimmy Faria talked to a student who studied the course, and the student had no comment indicating the course was going well. - AMM project the students were not content with the program planning. The new successor J.E. ten Elshof was not content about the course general since there were Corona measures that constrained the slot in the research groups and the former coordinator did not provide enough information and stepped out extremely late. From the research groups, they disliked the course being in quartile 4 due to several bachelor assignments taking place. J.A Faria stated to consider both the teacher and student perspective for better planning. |
| <i>Discussions curricula</i> | - |
| <i>General education</i> | - OLC does not have a lot of impact with many studies that have a say |
| <i>Other business</i> | <ul style="list-style-type: none"> - Someone has to clarify what is important in the documents in order to understand the documents better - J. Grevens successor will start working in January - J. Grevens needs to have a more consistent working method with H.J. van den Hengel - J.E ten Elshof mentioned to ignore the lecture free days for the February MME or MSE student to avoid piling up the workload |

Meeting January 13th, 2022

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| <i>Educational evaluation</i> | <ul style="list-style-type: none"> - Module 4, L. Pieters stated the implementation in the practical course will work out fine. The chemistry & technology of inorganic materials has no minimum grade at the partial exam, resulting in students putting less attention on the exam. - Module 8A. W.E. de Vos stated it was a decent course with a decent grade. Some students requested question hours, but the teacher said it was not possible. This could possibly be due to low number of student asking questions, hence planning question hours were not necessary - Module 8B, no discussion |
| <i>Discussions curricula</i> | - Internship, J.J. ter Horst stated to inform the international students the electives are not for internship. |
| <i>General education</i> | - |
| <i>Other business</i> | <ul style="list-style-type: none"> - Transparency and completeness of OLC information. Possible to access the OLC meeting minutes by contacting BOZ or Canvas page of the program staff - The Quality agreements documents are very clear |

Meeting March 10th, 2022

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| <i>Educational evaluation</i> | <ul style="list-style-type: none"> - The CSE BSc alumni evaluation (Pizza evaluation 2021) indicated overall positive feedback and the suggested tips are implemented. Practicum's are too stressful for students due to tight deadlines and physical reports. It is suggested to change the reports to hand in digitally or at a later deadline. This is to be discussed with the program staff. - The alumni evaluation also indicated that there is a growing interest in sustainability. |
| <i>Discussions curricula</i> | <ul style="list-style-type: none"> - Student evaluations indicated that more sustainability should be added to the curriculum. A task force is set up to do this with a focus on incorporating both the technical aspects of sustainability and its general awareness into the curriculum. - The new M1 Project is about sustainability and conceptual modelling. |
| <i>General education</i> | <ul style="list-style-type: none"> - 12 students in the MME and MSE tracks were unaware about the AMM project. Although an email about the projects is sent to the students at the start of the year and the project is mentioned in the curriculum, students missed this and did not select a project in time. The solution was for the students to find a project on their own, but this was dependant on the research capacity in Q4 since the project is a practicum. - New education software, such as 'ANS Delft' for examinations and 'Pebblepad' for reflections, are being looked into by the program staff. |
| <i>Other business</i> | <ul style="list-style-type: none"> - A new master program 'Erasmus Mundus membrane engineering for sustainable development (MESD)' will open in September 2022 with students entering in 2023. - Hybrid education is still active due to corona and small lecture halls. This is challenging for teachers, especially in setting up streams but they are urged to make hybrid education possible. |

Meeting April 7th, 2022

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| <i>Educational evaluation</i> | <ul style="list-style-type: none"> - The 'Characterization' course is well received but quite hectic due to the large amount of information to be memorized; however, this is expected since the course is on methodology. Additionally, there is no practicum. The course will be switched back to teaching in sequential parts and with an increase in exam time from 1h to 1.5h. - The 'Ion Transport in Fluids' course is well received. It is recommended to take the course 'Advanced Colloids and Interfaces' before this. - The 'Organic Materials Science' has 5 lecturers and so grading/teaching is complex. - M1 students struggled with MATLAB, particularly in its preparation and during later exercises since by then TA's were no longer available. |
| <i>Discussions curricula</i> | <ul style="list-style-type: none"> - 1st year lab journals are difficult due to the lack of time, which is causing stress and preventing learning. However, the argument is also made that limited lab times and its accompanying stress are both part of the learning which therefore encourages students to plan properly. Students still pass these labs, but the suggestion is made to move the deadline to midnight. - New M1 project about sustainability and conceptual modelling is developed. There will no longer be a practical part to the report. - M5 project presentation will be individual like the oral exam in M2, to ensure the student's involvement in the project and the group's product. |
| <i>General education</i> | <ul style="list-style-type: none"> - In M5, some lecture slides have Dutch words. Teachers are to make sure these are changed and students should point these out to teachers. |
| <i>Other business</i> | <ul style="list-style-type: none"> - |

Meeting May 12th 2022

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| <i>Educational evaluation</i> | <ul style="list-style-type: none">- Characterization: Students perceived the overall course as having too many topics, with an unequally divided study load. This was according to the lecturers caused by teaching all parts in parallel, rather than sequential. For the surface characterization part the exam was too long.- Advanced Catalysis: Students perceived the course as being chaotic, due to the amount of lecturers, lectures, lecture slides and a difficult exam.- Electrochemistry: Fundamentals & Technology: The course was generally well received with some minor points of improvement. |
| <i>Discussions curricula</i> | - |
| <i>General education</i> | <ul style="list-style-type: none">- New drafts for the bachelor and master EERs were proposed on the faculty and programme level. |
| <i>Other business</i> | <ul style="list-style-type: none">- P.A.M. Bonthuis - van Seters is introduced as the new quality assurance coordinator of TNW. |

Meeting July 6th 2022

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| <i>Educational evaluation</i> | <ul style="list-style-type: none">- Chemical process analysis: Course assessment was not clear, as it could be changed due to the amount of students participating. Overall well-received.- Electrochemical engineering: Well-received with positive feedback. Might be increased from 2.5 to 5 EC. |
| <i>Discussions Curricula</i> | <ul style="list-style-type: none">- Data science or big data is proposed as a master course- More sustainability-related assignments will be implemented into courses of the first two years in the bachelor. |
| <i>General education</i> | <ul style="list-style-type: none">- Suggested EER changes were accepted by the faculty.- Proposition to make a document with all changed courses over the years to gain a better overview of progress in the taught courses. |
| <i>Other business</i> | - |