



AALBORG UNIVERSITET

Study Board for
Chemistry and Bioscience

Minutes from Study Board meeting on Wednesday 11.12.2024 at 10.00 in Aalborg and Esbjerg

Present from Aalborg: Mads Koustrup Jørgensen (MKJ), Majken Pagter (MP), Lars Haastrup Pedersen (LHP), Anders Emuel Olsen (AEO), Simon Abildgaard Hansen (SAH), Nicklas Bjørnmose Dupont (NBD)

Observers: Niels T Eriksen (NTE), Anne Sanggaard Sonne (ASO), Mads Hyldgaard Henningsen (MHH), Steffen Mariager Jensen (SMJ) deltog fra punkt 7 om Kvalitetssikring.

Present from Esbjerg: Morten E. Simonsen (MES),

Cancellation/not present: Martina Medini (MM)

Agenda:

1. Approval of the agenda
2. Approval of minutes from meeting 13.11.2024
3. Student applications (confidential)
4. General information
5. Discussion
6. Curricula
7. Quality assurance
8. Budget

1. Approval of the agenda

Action

Appendices 24-185, 24-186, 24-187, 24-188, and 24-189 as well as 24-190, 24-191, 24-192, 24-193, 24-194 were sent later for item 6b. Additional appendices sent by email for item 7 on Quality Assurance - Action Plans: 24-195, 24-196, 24-197, 24-198, and 24-199. The agenda was approved.	
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2. Approval of minutes from meeting 13.11.2024

The minutes were approved.	
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3. Student applications (confidential)

<p>a) List of application cases processed since the last Study Board meeting, appendix 24-180 Noted.</p> <p>b) Application to bring notes (aids) to an exam without aids, appendix 24-181 The Study Board rejects the application as an exemption would lower the exam's level. It is a prerequisite that an exemption does not lower the exam's level.</p> <p>c) Application for a 4th exam attempt, appendix 24-182 The application is rejected due to lack of documentation for extraordinary circumstances.</p> <p>d) Application for the 24-month rule, appendix 24-183 The application is rejected due to lack of documentation for extraordinary circumstances.</p> <p>e) Application for the participation requirement, appendix 24-184 The application is rejected due to lack of documentation for extraordinary circumstances</p>	
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4. General information

<p>a) Annual Report for the Diploma Engineer Censor Corps (Diplomingeniørcent-sorkorpset) 2023-2024, appendix 24-176 LHP reviews the annual report, including statistics on examiners, where 82% are men in the censor corps. The upcoming new candidate reform is mentioned in the report, as well as the use of AI in connection with exams. The Study Board discusses the current grading scale and there is a desire for more grading options above the middle of the scale. The censor corps desires clearer learning objectives to be examined.</p> <p>NTE: This could potentially be a discussion topic for a Study Board meeting in the spring regarding whether there are any exam forms or assessment methods that need to be changed in our curricula.</p> <p>The censor corps disapproves of ad hoc appointments.</p> <p>Noted.</p>	
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5. Discussion

<p>a) Guidelines for Exams and Updated Exam Covers, appendix 24-152 Discussion on whether submissions in DE should be anonymized. NTE: We will check how DE can be set up regarding whether students can be anonymous, and then the exam covers will be updated. Noted.</p>	NTE
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<p>b) Principles for Group Formation, appendix 24-153 Procedures regarding administrative groups and group sizes were reviewed. Procedures for splitting groups were reviewed. Noted.</p>	
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6. Curricula

<p>a. Status on the Curriculum Revision for the Biology Program (Bachelor and Master's) The Study Board has received feedback from Educational Law, which means that the two new curricula must be revised by December 17th at the latest. Once these revisions are made, the curricula will proceed to faculty approval.</p> <p>b. Revision of the Curriculum for the Bachelor of Engineering Program in Aalborg Appendices: Overview of Proposed Changes 24-171 Overview of Proposed Changes (Updated) 24-185 Module Description Process Technology 24-186 Module Description Applied Physical and Organic Chemistry 24-187 Module Description Hydrology and Water Treatment 24-188 Project Module Descriptions 2nd-4th Semester 24-189</p> <p>The following appendices were sent by email before the meeting: Overview of Proposed Changes (Updated) 24-190 Module Description Process Technology (Updated) 24-191 Module Description Applied Physical and Organic Chemistry (Updated) 24-192 Module Description Hydrology and Water Treatment (Updated) 24-193 Project Module Descriptions 2nd-4th Semester (Updated) 24-194</p> <p>All programs in Esbjerg must be revised in 2025, so Esbjerg's Bachelor of Engineering program is not included this time.</p> <p>The Ministry of Education believes there should be a greater distinction between bachelor's and bachelor's engineering programs. LHP reviews the proposed changes to the new curriculum for bachelor's engineers, as well as specializations and module descriptions.</p> <p>The 10 ECTS course Hydrology and Water Treatment is offered by BUILD. We are still awaiting approval from BUILD.</p> <p>LHP will look into whether it is Chemical Unit Operations (Kemiske enhedsoperationer) or Reactor and Process Modeling that students should take for specialization in environmental engineering.</p>	LHP
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<p>NTE suggests that for specialization in environmental engineering, two project module descriptions, ecology and ecotoxicology, be combined and broadened. New module title: Applied Ecology.</p> <p>The Study Board discusses the difference between bachelor's and bachelor's engineering programs and why it is necessary to change the curriculum for bachelor's engineering students.</p> <p>The Study Board approves the concept for the new curriculum with the few changes mentioned at the meeting.</p>	
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7. Quality assurance

<p>Analysis of the Study Start Test 2024, appendix 24-154</p> <p>The primary purpose of the study start test is to see if the new students have shown up for their studies – the secondary purpose is to give students the opportunity to refresh their mathematics (Mat 101) if they have challenges with solving the tasks.</p> <p>In Aalborg, the test ended early due to a fire alarm. The students taking the test had to submit what they had completed and did not have to retake the test. Noted.</p> <p><u>Processing of Semester Reports (Evaluation of F24):</u></p> <p>Overview of Received Semester Evaluations, appendix F24 24-155</p> <p>There are still a few reports missing. Correction: Stefan Junne is the coordinator for the 4th semester in Esbjerg instead of Jens Laurids Sørensen.</p> <p>4th Semester Bachelor, Aalborg, appendix 24-156</p> <p>Molecular and Cell Biology is a challenge for biology students, as many find it a difficult course.</p> <p>NTE: There is a need for further explanation from the instructor in the module. LHP: A solution could be a mini-module that everyone must go through – as part of the teaching in the Molecular and Cell Biology module. LHP: LHP and NTE will talk to the instructor about the course content so that everyone has a chance to keep up. Noted.</p> <p>6th Semester Bachelor Biology, Aalborg, appendix 24-157</p> <p>LHP: Comment on the Marine Biology course, where the instructor will change the content to include a field exercise, following feedback from students. Noted.</p>	LHP/NTE
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6th Semester Bachelor Biotechnology, Chemistry, and Environment, Aalborg, appendix 24-174

LHP: Comments regarding exams that are scheduled in the middle of the semester. There is a proposal that exams should be held right after the course and that not all exams should be at the end of the semester.

NBD: Has talked with fellow students: there is generally a positive attitude towards having a course exam earlier in the semester. One should be aware of which course if choosing to place the exam in the middle of the semester.

LHP: We can look into whether we should change the semester structure and exam formats when we start working on the curricula for chemistry.

Noted.

3rd-4th Semester Master's Chemistry, Aalborg, appendix 24-158

Noted.

3rd-4th Semester Master's Biology, Aalborg, appendix 24-159

Noted.

2nd Semester Bachelor, Esbjerg, appendix 24-160

Noted.

6th Semester Bachelor, Esbjerg, appendix 24-161

LHP: The course module Process Control, Instrumentation, and Safety has repeatedly received low evaluations. The semester coordinator and instructors have therefore discussed changes and will introduce an oral exam based on a report over the course assignment. This will be implemented in Spring 2025, and the requirement for report submission will be introduced as a prerequisite for exam participation during the curriculum revision in Spring.

Noted.

2nd Semester Master's Bioengineering, Esbjerg, appendix 24-162

Noted.

2nd Semester Master's Chemical Engineering, Esbjerg, appendix 24-175

Noted.

Processing of Evaluations with Students:

Attention Points F24, appendix 24-163

SMJ: Students want more study spaces.

NTE: More furniture has been added where there is space, but if anyone can spot more places where there is room for furniture or seating, we and CAS are open to suggestions.

LHP: There is a lack of power outlets for the white high tables outside 1.102 and in the kitchenettes on the floors. The latter can be temporarily solved with extension cords.



<p>ASO: There is a room at Frederik Bajersvej 5, room 135, which can only be booked by one group, but there is actually space for three groups as it is a large room.</p> <p>LHP: We need to take a tour around the buildings again soon – it will be in Spring 2025.</p> <p>SMJ: Additionally, there are several students who book group rooms for longer than allowed.</p> <p>LKII: The booking culture among students is perceived as inconsistent. The study secretaries will send a reminder to the students regarding the rules for booking group rooms.</p> <p>Point about exams being scheduled right after courses – has been discussed in a previous point at the meeting.</p> <p>Data Science: MKJ: There are some student groups who find it difficult to see the relevance of the course – so there will be some changes to the course after the New Year, including tasks specific to the different study directions. The exam will also be different in that AI will no longer be allowed, and the exam itself will be shorter.</p> <p>Pollution of Marine Areas: The course is being phased out at BIO. The course belongs to BUILD. The course at BIO will be replaced by another course on bioresources and green transition in the new curriculum from 2025.</p> <p>Marine Biology: Discussed earlier in the meeting.</p> <p>Molecular and Cell Biology: Discussed earlier in the meeting.</p> <p>Microbial Biotechnology: Discussed earlier in the meeting.</p> <p>Process Control, Instrumentation, and Safety: Discussed earlier in the meeting.</p> <p>Project Management and Economics: There has been previous criticism of the course. LHP: It can be considered whether there can be another course that students can take instead.</p> <p>Comment on the physical study environment: Discussed earlier in the meeting.</p> <p>Biology students want more fieldwork, etc. – this has been taken into account in the new revised curricula from 2025.</p>	<p>LKII</p>
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Evaluation of Study Activities F24, appendix 24-164

LHP: Regarding inappropriate behavior: In the BSc in Aalborg: there are few, but various categories, and we have not received any specific reports.

MHH: There is a need to inform students where they should go if they feel harassed. Students are told where to go if they have questions or challenges, but not specifically regarding harassment.

LHP: The study counselors can help convey information about where students can go if they have experienced harassment.

Esbjerg:

LHP: There have also been few reports of inappropriate behavior in Esbjerg. The same picture emerges in Esbjerg. These are not cases where we have received specific reports.

Evaluation of Study Activities F24 – Semesters and Projects, appendix 24-165

Evaluation of Educational Programs F24, appendix 24-166

LHP: We have addressed various issues from the reports.

The reports have been acknowledged.

Evaluation of Study Start 2024:

Evaluation of Study Start 2024 Result Report, appendix 24-167

Appendices to the Result Report, appendix 24-168

Evaluation of Study Start for Master's Programs, appendix 24-169

Result Report – ENG Faculty, appendix 24-170

Evaluation of Study Start for Bachelor's and Bachelor's Engineering Programs, appendix 24-177

Plan for Evaluation of Study Start, appendix 24-178

Questionnaire for Evaluation of Study Start, appendix 24-179

LHP: For Aalborg, the response rate is not very high. The response rate is higher in Esbjerg.

Overall, students have been satisfied with the study start.

NTE: It was mentioned, among other things, that there were not enough rolls (rundstykker).

LHP: Students' knowledge of AAU before the study start comes mainly from the study guide + AAU's own website. Additionally, from family/friends and visits to AAU.

NTE: I have just sent the study guide out for review to you – it is important we check the information here, as this is where most prospective students find information.



LHP: Furthermore, the evaluation provides insight into where our students come from and who they are. Primarily from the North Jutland Region – except in Esbjerg.

NBD: More men than women are satisfied with the social connection to the study.

LHP: Entrance exams; especially STX. For international students (in Esbjerg), it is, of course, a different background.

NBD: There are comments that there is too much focus on drinking culture, and some feel excluded because of this.

The reports for the bachelor's study start have been acknowledged.

LHP: The report for the master's programs.

It is primarily our own students from the bachelor's programs who enroll, but there are also international students in certain programs.

It is mainly academic interest that motivates students to apply for one of our master's programs.

It is primarily AAU's own website where students find information.

Generally positive feedback.

The report has been acknowledged.

Processing of the Data Package 2024

Email from AAU Quality and Analysis, appendix 24-172

Data Package 2024, appendix 24-173

LHP: There are 6 quality areas that are focused on, which are reflected in the Data Package, divided into these 6 areas.

LHP: The green areas are okay – we need to discuss the red areas – and partly the yellow areas.

SMJ summarized points of attention:

Below are comments on the yellow (attentive) and red (unsatisfactory) figures that the study board must address according to the Data Package 2024.

Dropout rate in the 1st year of study:

B.Sc. Biotechnology: 8 out of 49 students who started in 2023 have dropped out, of which:

- 2 internal transfers within the study board,
- 4 transfers to other AAU programs,
- 2 students have either been expelled or have voluntarily discontinued their studies.



B.Sc. Chemistry: 2 out of 11 students who started between 2020 and 2023 have dropped out, of which:

- 4 internal transfers within the study board,
- 1 transfer to another AAU program,
- 1 student has either been expelled or has voluntarily discontinued their studies.

B.Sc. Environmental Science: 4 out of 9 students who started in 2023 have dropped out, of which:

- 2 transferred to other AAU programs,
- 2 students have either been expelled or have voluntarily discontinued their studies.

M.Sc. Chemistry: On average, less than 1 out of 3 students have dropped out between 2020 and 2023.

- This average student has either been expelled or has voluntarily discontinued their studies.

Dropout rate within the standard study time + 1 year:

B.Sc. Biology: 17 out of 38 students who started in 2020 have dropped out, of which:

- 2 transferred to other AAU programs,
- 15 students have either been expelled or have voluntarily discontinued their studies.

B.Sc. Biotechnology: 22 out of 45 students who started in 2020 have dropped out, of which:

- 2 internal transfers,
- 4 transferred to other AAU programs,
- 16 students have either been expelled or have voluntarily discontinued their studies.

B.Sc. Chemistry: 6 out of 10 students who started in 2020 have dropped out, of which:

- 5 internal transfers within the study board,
- 1 student has either been expelled or has voluntarily discontinued their studies.

B.Sc. Environmental Science: 6 out of 15 students who started in 2020 have dropped out, of which:

- 1 transferred to another AAU program,
- 5 students have either been expelled or have voluntarily discontinued their studies.

M.Sc. Bioprocess Technology: On average, 2 out of 8 students who started between 2020 and 2021 have dropped out due to expulsion or voluntary discontinuation of their studies.



M.Sc. Chemistry: On average, 1 out of 6 students who started between 2019 and 2021 have dropped out due to internal transfer within the study board.

M.Sc. Chemical Engineering: On average, 1 out of 10 students who started between 2019 and 2021 have dropped out due to expulsion or voluntary discontinuation of their studies.

B.Eng. in Chemistry and Biotechnology (Aalborg): 14 out of 29 students who started in 2019 have dropped out, of which:

- 9 internal transfers within the study board,
- 5 students have either been expelled or have voluntarily discontinued their studies.

B.Eng. in Chemistry and Biotechnology (Esbjerg): 4 out of 10 students who started in 2019 have dropped out, of which:

- 4 students have either been expelled or have voluntarily discontinued their studies.

Average Exceedance of Standard Study Time (months):

B.Sc. Chemistry: On average, 3.7 graduates, from S22 to S24, out of 3.7 graduates on average, have an exceedance of 3.24 months on average.

- One student has an exceedance of approximately 12 months,
- Three students with approximately 7 months of exceedance, and
- One student with approximately 2.5 months of exceedance.

B.Sc. Environmental Science: 5 out of 10 graduates have exceeded the standard study time.

- One student has an exceedance of approximately 7.5 months,
- One student with approximately 6 months of exceedance, and
- Three students with just under 2 months of exceedance.

B.Eng. in Chemistry and Biotechnology (Esbjerg): On average, 2.7 graduates, from W21 to W23, out of 7.7 graduates on average, have exceeded the standard study time by an average of 3.24 months.

- One student has an exceedance of approximately 26 months,
- Four students have an exceedance of approximately 12 months,
- One student has an exceedance of approximately 7 months,
- Three students have an exceedance of approximately 1.5 months.

Unemployment Rate:

M.Sc. Biology: Involves 2.3 full-time persons/full-time unemployed graduates.

M.Sc. Chemical Engineering: Involves an average of 1 full-time person/full-time unemployed graduates over three years.



M.Sc. Chemistry: Involves 2.5 full-time persons/full-time unemployed graduates.

M.Sc. Chemistry: Involves an average of 2.5 full-time persons/full-time unemployed graduates over three years.

M.Sc. Environmental Science: Involves an average of 2.2 full-time persons/full-time unemployed graduates over three years.

Data package reviewed and acknowledged, and incorporated into action plans as necessary.

Action Plans for Education Evaluation

Appendices sent:

Extract Action Plan for Chemistry and Life Sciences, pdf, appendix 24-195

Extract Action Plan for Chemistry and Life Sciences, word, appendix 24-196

Quality Report BSc and MSc Biotechnology and Diploma in Chemistry and Biotechnology, appendix 24-197

Quality Report BSc and MSc Biology and BSc Environmental Science, appendix 24-198

Quality Report BSc Chemistry, MSc Chemistry, BSc Chemical Engineering and MSc Chemical Engineering, appendix 24-199

SMJ reviewed key points:

Dropout in the 1st year:

Initiative: Accurate information and marketing of our programs

- Updating match checkers and new match checkers for master's programs to adjust our expectation alignment with prospective students. Awaiting the description of new study guides.

Initiative: Study start and study progression in the 1st year

- We staff the 1st year with experienced project supervisors
- Use SMS for prospective students
- Use and update "How-to-Uni"
- Present the study activity model
- Well-organized tutor system in Aalborg.

Initiative: Mentor corps focusing on dropout, retention, study time extensions, well-being, etc.

- Use the Mentor and Ambassador Corps during the introduction period for master's programs in Aalborg.

Dropout within the standard study time + 1 year and average exceedance of the standard study time:

Initiative: Data-driven development and operation of programs



- Ongoing: Analysis of grade differences between programs to identify any differences between students and/or program structures with the aim of making any structural changes.
- Ongoing: Analysis of exam forms to identify with the aim of making any structural changes.
- Not started: Analysis of differences in student intake between programs to identify any differences in the student population with the aim of making any structural changes.

Initiative: Individualized guidance for students with special needs

- Study teams in Aalborg and Esbjerg inform delayed students about:
Reminder about re-exam registration
Student advisors (as needed)
Study and well-being guidance (as needed)
Sending "Fail-2 letters"
New: reminder about
- Participation in the "Proactive Effort"(Den opsøgende indsats)
- New task: Local procedures for selecting delayed students who need to meet with the head of the study board.

Initiative: High academic standards and relevant programs

- New task: To indirectly reduce dropout and the average exceedance of the standard study time, work is being done on a draft to adjust the role of the semester coordinator and a template for semester evaluation reports with the aim of creating a more targeted flow of information in education quality.

Unemployment

Initiative: Employability in our programs

- Ongoing: Regular annual company excursions to Silkeborg and Skagen
- Ongoing: Career-VIP should be revisited.
- Ongoing: Student development interviews driven by AAU Career
- Operation: Company-Friday organized by the Mentor Corps
- Not started: Fact sheets on the competence profiles of master's programs
- New: The study board strategically incorporates employability into the processes during curriculum revisions, meaning that the involved VIP in the curriculum revision processes include the knowledge and skills that their professional network points out as in-demand competencies.

Additional comments on the Data Package and action plans:

SMJ: Regarding the admission numbers. There is a decline in admissions to the biology program. Overall, a decline in our admissions through KOT. We have the High School Initiative and our own match-checker. There is also a decline in admissions to the bachelor's program in Esbjerg.



NTE: In Esbjerg, we have a challenge in admitting more Danish students, and there is a predominance of international students, who are particularly young and face different challenges, including social ones. We still need to try to attract more Danish students in Esbjerg.
SMJ: It's positive that there are more admissions to Bioprocess Technology.
NTE: There is a higher proportion of admitted international students who do not show up anyway.
SMJ: There is less dropout in biology, so that is positive.

In biotechnology, 8 students have dropped out, two of them have changed study direction, so it is actually 6.
NTE: The numbers zigzag from year to year, but we must try to retain our students.
NTE: Students are leaking from Chemistry to Chemical Engineering – this is a point of attention.
SMJ: Environmental Science is in the red. Two students have switched to another program. There are not many students, so in terms of percentage, it quickly becomes high when there are not many students in the program. The dropout rate in the 1st year has decreased over the past few years. This may be due to a good tutor corps and that students are more certain about what they want to study.
SMJ: In the master's program in chemistry, there was 1 student in 2021 who dropped out – otherwise, there is no dropout, but since there are few students, we look at the dropout over the last three years.
SMJ: We are part of the Proactive Effort at the Study and Well-being Guidance, where we try to help delayed students.
NTE: The main reason for delayed students is health, and we have difficulty helping with that.
LHP: Regarding our master's students, there is a single red number and a few yellow ones, but again, due to the few students in these programs, the percentage becomes large.
NTE: The numbers are sensitive to fluctuations, so they zigzag and are affected by individual students in terms of completion time. So there is an explanation for why the numbers fluctuate.
SMJ: Regarding time consumption, there may be an error source in that project hours are not counted.
LHP: Regarding the trend in grade inflation (comment from the Annual Report from the Censorship Corps), it does not apply to our programs – this is seen in the grade statistics.
LHP: The study environment is generally high (good), around 4 on a scale from 1-5. The academic environment is also good according to the report.
LHP: Regarding the point about external lecturers. In some courses, we have lecturers from Aarhus University, who are leading researchers in the respective fields. At BIO, it is exclusively researchers who teach.
LHP: The numbers for the master's in biology are red – again, there are few students, but the percentage becomes high and thus gives red numbers. The engineering programs look good for both Aalborg and Esbjerg.
LHP: Project-oriented course: There are not many students who take advantage of this opportunity.

LHP



<p>NTE: This is fully satisfactory, as students on long theses have the same opportunity, as they can write their thesis in collaboration with a company.</p> <p>LHP: Something important here is the dropout numbers. SMJ: We risk being dimensioned based on the unemployment figures. LHP: Study board members are asked to read through the action plans themselves and send comments to Lars by December 20th. Write comments directly in the document with track changes so Lars can see the changes. We need to comment on what we will do about the challenges we have.</p> <p>A new version of the action plan for Chemistry and Chemical Engineering will be sent, as an outdated version was sent out as an attachment.</p>	
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8. Budget

a) Study Board grants – nothing new	
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Louise Kiillerich Pratas
Referent

*AI was used for translation of the minutes from Danish to English.