# Minutes of meeting (2026-05) in the Study Board of Build, Energy, Electronics and Mechanics in Esbjerg 27.05.2026

*Present:*
Matthias Mandø (MMA) (Chair), Daniel Ortiz Arroya (DOA), Jesper Liniger (JEL), Mads Pagh Nielsen (MPN), Ulisse Valeriani, Jacob Gharib (Observer), Anette Larsen (ALL) (secretary)

*Absent:*
Visnu Ritesh Vijayakumaar Palanisamy, Oliver James Tholstrup Bradfield (Observer),

*Copy:*
Sara Lindberg Hildebrandt, Charlotte Slot Lolk, Anne Linde Poulsen, Pia Vestergaard Jensen, Christian Winther Dissing, Mads Pagh Nielsen, Tamas Kerekes, Gitte Hageman Christensen, Head of department, Anne Marie Hvilsom Christensen.

*Minute taker:* ALL

## Agenda

1. Approval of agenda
2. General announcements
3. Semester evaluations, autumn 2025
4. AOB

## Minutes

### 1. Approval of agenda
Approved.

### 2. General announcements
- Request to join elective. We have received a request from a student to join an elective that is not in his curriculum. Lecturer approves so we will allow this.
- Internship in own start-up. We have received a request for this but this is only in Aalborg and Copenhagen, so the enquiry has been rejected. We will try to arrange something, maybe if he can find mentors.
- Advisory board meeting. This focused on the change to the RISK study programme as well as feedback regarding the Mechanical Engineering application – establishment of 20 seat English language study programme.
- Tomorrow Energy will have an Advisory Board meeting.
- Various applications.
    - Bachelor of Engineering in Mechanical Engineering – this is the most demanding application – this is the most extensive application which, in the end, must be approved by the Ministry. We must also make sure that our arguments are not repeated from the other ongoing application – to change General Engineering in Aalborg into English language.
    - Industrial candidates (erhvervskandidater) – parallel with our current study programmes it will be made possible to finish your master's while simultaneously studying and working in a company. This will take three years instead of two: one year at university and then two years part-time.
    - APEL name change. APEL will change name to Applied Industrial Electronics.
- Extension of submission deadline for projects. Some AIE students have asked for a one week extension. In the end, we cancelled their registration, as they must finish a previous semester project first.

- Small worry. There seems to be some difficulty in finding project-oriented stays in external organisations. We will continue to monitor.
- Friday will be the day of the CES conference – Conference of Esbjerg Students.

**3, Semester evaluations, autumn 2025**
Please see below.

**4. AOB**
Nothing to discuss.

## Semester evaluations, autumn 2025

The response rate was 47 % for the BEEM study board and 61 % in total for both department's study boards, which is lower than the previous semester evaluation where it was 67 % and BEEM's response rate dropped from 56 %. There is room for improvement especially on Mechanical Engineering 3rd and 7th semester, AIE5 and the master's degrees in general.

Comments:

- There is room for improvement.
- MMA has talked to coordinators several times about encouraging the students to answer the surveys.
- This is a shame as we are missing data from 7th semester students on the diplomas and how they view their entire programmes. However, as the saying goes: you can lead a horse to water, but you can't make it drink.
- No further action

To ease the study board's processing of the results from the evaluation, CWD has gone over the results and identified which critical points the study board should process. The study board processes the points where the students give critical as well as positive feedback. The positive feedback will be highlighted at the end where the study board will discuss the courses with highest ratings from the students.

These minutes are structured in correspondence with the sequence of the questions in the questionnaire to the students. The table under Courses indicates what and where the students give feedback to and how the feedback is reflected in both quantitative and qualitative data as well as who the relevant lecturers/coordinators are. In the column, 'Agreed upon follow-up', it is noted how the study board has decided to follow up on each point.

**1. The study start on the first semester of the master's programmes**

Overall, the students are satisfied with both the study start and the programme. However, one APEL student does not feel they have chosen the right programme. The student argues that the academic content does not reflect the programme title, as the curriculum lacks electronics-focused courses and appears too similar to the AI programme. They recommend integrating electronics-oriented subjects throughout the semesters.

Comments:

- Project work is focused on electronics.
- Courses are also relevant within a broader electronics scope, but there are no Power Electronics 1, 2 and 3 courses.
- The coming flexible master will address some of these issues since students will have much greater freedom to choose which courses they wish to follow.

- No further action.

**2. The semester's coherence and planning**

Overall, the students rate the coherence and planning of the semesters very positively. However, one student from APEL7 evaluates it as very poor, criticizing irrelevant courses during the semester. Below is a summary of the students' criticisms and suggestions for improvement:

- AIE1: A student suggests that labs for AIE should be mandatory and included as part of the project ECTS, as they consider them essential to the learning process.
- AIE1: Students mention that the schedule feels inconsistent, with lectures sometimes grouped closely together and at other times separated by weeks. They note that this uneven timing makes it harder to remember material from previous sessions.
- BA1/MA1: Several students express that the PBL support throughout the semester is not well aligned with the project work. They feel that important PBL tools and guidance are introduced too late, often after groups have already begun working.
- BA3/BA5: Students mention that course planning appears disorganized and that the workload becomes very heavy because new and time-consuming FEM tools must be learned while courses do not connect well with the project.
- APEL7: A student suggests replacing the AI course with a more electronics-focused course or expanding the relevant signal-analysis content to better support the programme.
- APEL9: A student suggests offering more elective course options and improving the project catalogue to give students greater flexibility and better project opportunities.

Comments:

- Only a handful thought it was poor or very poor
- Mandatory lab. We are uncertain about the interpretation of this comment. There are project learning goals in the curriculum which often include lab work. Ulisse adds that there are courses with mandatory lab time.
  The point is you get basic knowledge from courses, and you turn this into more practical work. Especially, AIE has a lot of lab work.
  No further action.
- Inconsistent schedule. The administration is doing its utmost to make good time schedules. Lecturers may go away on conferences, but there is no extended holidays when you have to teach.
  No further action.
- PBL alignment with project work, mentioned both by MA and BA. Students have been critical of PBL at semester group meetings. We are working to make it more so they can use PBL. Also, MMA holds annual meetings with the PBL lecturers; a continued process. MMA will bring this up at the next meeting – that PBL must be more intensive in the beginning of the semester.

- Numerical methods and applied FEM. Appears disorganized, heavy workload. This is partly locally taught; from next semester, it will be all local. We will wait and see how the course is evaluated next year.
  No further action.
- More electronics. Please see above.
- More choice of elective courses and a better project catalogue. We will pass this on to the coordinator regarding the catalogue, however, we are continuously revising this to make it relevant and with updated knowledge. Also, we try to ensure that as many first and second priorities are being selected so that courses will run, but it is difficult, and we put a lot of work into trying to ensure courses are relevant for each direction.
  No further action.

Action points:

- PBL alignment with project work. PBL must be more intensive at the beginning of the semester. MMA will bring this up at the next meeting with PBL lecturers.
- More choice of elective courses and a better project catalogue. We will pass this on to the coordinator regarding the catalogue.

**3. Project and project-oriented study in an external organisation**

Likewise, the students rate their projects very well. AIE3 was the most critical semester since 9 out of 13 students on this semester rated their cooperation with their supervisor ranging from average to very poor.

- AIE1: Students suggest introducing basic project-planning tools (e.g., sprint planning and Gantt charts) and essential electronics training early in the semester to better prepare them for practical PBL work.
- AIE1/EN1: Students request the option to choose their own group in the first semester.
- AIE3: Students highlight insufficient supervisor support, noting limited engagement, lack of feedback, and irregular follow-ups. They also point to unmet expectations regarding access to promised equipment and suggest that periodic supervisor check-ins and a larger project budget would improve the overall project experience and outcome.
- BA5: Students request better-timed and more substantial concrete teaching, as the current content is placed too early and does not match project needs. They also highlight that the lack of a dedicated concrete course limits internship opportunities and recommend adding such a course to better align the program with industry demands.
- RISK7: A student suggests introducing an initial project submission at the end of November, allowing each group to receive early feedback on their progress and whether their work is on track for final submission.
- RISK9: A student reports misaligned expectations between the supervisor and co-examiner regarding the use of simulation, which negatively affected the grade. Better alignment on project scope and methodological expectations before the examination is recommended.

Comments:

- Cooperation with supervisor. There may be differences from 1st and 2nd semesters to 3rd semester, where supervisor expects the students to book supervisor meetings. There will only be supervision when the students ask. Maybe we can make sure the students are aware of this. MMA: as a supervisor I make the students talk about their cooperation, if they have not worked together before, and also, I clarify expectations: That they must contact me, not the other way around.
  No further action.
- Choice of own group on 1st semester. Jakob clarifies this may be from his group where there were difficulties. Maybe this comment was made before a solution was found. Jakob finds it is fair that groups are made administratively but with the option of splitting up if the group does not work. Having had that information would have made the situation a lot easier.
  A group contract is always a good idea as this can defuse potential situations.
- PBL. Sprint plan and Gantt chart. Comments to be forwarded to PBL lecturers.
- Concrete course. This has been added to the new study curriculum.
  No further action.
- Initial project submission at the end of November. The students must continuously submit chapters. If the coordinator wants a status seminar that is of course allowed, however, we will not revive P0 and P1.
  No further action.
- Project – oriented study. A job fair – this has been discussed many times, but it is not quite feasible. We do have a list of companies that the students can use.
  No further action.

Action point:

- We will discuss group formation rules at the next study board meeting.
- PBL. Sprint plan and Gantt chart. Comments to be forwarded to PBL lecturer.

**4. Courses**

CWD has reviewed all comments and pinpointed the courses that have been criticized.

| Course, programme, semester, and teachers | Quantitative data | Qualitative data | Agreed upon follow-up |
|---|---|---|---|
| Calculus<br>MA1, EN1, BA1, AIE1 | | - Reduce reliance on online teaching and improve video quality → Increase physical, on-campus teaching and interaction | Action point: MPN will follow-up.<br><br>Comments:<br>Video quality. The videos are bad. MPN states that there is an agreement Math 3.0 that all videos must be remade. MPN will bring this up at the next meeting with Math. Apparently, the videos from Aalborg are of better quality. One proposal could be that only the English version with lecturer is used, and not the Danish language from Aalborg. Maybe also if we had Danish videos with lecturer. There is good inspiration in Lisbeth Fajstrup videos. |
| PBL<br>MA1, EN1, BA1, AIE1 | | - Some students feel, that the course started too late, making it difficult to meaningfully connect the teaching to the project work and causing the project to progress ahead of the course content<br>- Workshops would benefit from more concrete case studies | Comments to be sent to lecturers. |
| Grundlæggende konstruktionsmetodik<br>MA1, BA1 | | - Students requested clear, short solution videos and clearer guidance on whether videos should be watched before class | Comments to be sent to lecturers. |

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| Energy Systems and Electro Physics<br>1st semester | | - Extend number of lectures about the economic part<br>- Increase teaching time and exercises for both parts of the course<br>- Sideline EnergyPLAN if possible | |
| AC-kredsløbsteori<br>EN3, AIE3 | 7 out of 13 students from AIE3 spent more than 45 hours preparing for the exam (including 3 who spent more than 60 hours) | - Course content and expectations were unclear, including topics listed in the curriculum that were not sufficiently covered, and a poorly structured Moodle page | Action point:<br>Comments to be sent to lecturer.<br>MMA will talk to lecturer.<br><br>We were pilots for a new Moodle page.<br><br>Regarding Fourier Transforms, this should be in Applied Engineering Mathematics on same semester. It may be a matter of arranging lectures. MMA will talk to lecturer.<br><br>No further action. |
| Datastrukturer og algoritmer<br>AIE3 | 4 out of 12 students assess that the quality of teaching contributed to a high academic learning outcome to a poor or very poor degree (including 3 who answered “very poor”).<br><br>7 out of 12 students spent more than 45 hours preparing for the exam (including | - Teaching relies heavily on slides with large blocks of code, with too few live coding examples, explanations, and visualisations<br>- Written exam format was considered unsuitable for a programming course, as it does not reflect real coding practice<br>- Course structure and delivery made it hard to follow and understand | Action point:<br>Comments to be sent to lecturer.<br><br>Lecturer will consider changing exam to oral. There is no time to code in real time in class.<br><br>No further action. |

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| | 2 students who spent more than 60 hours). | code, including issues with audibility and pacing | |
| Videregående statik og styrkelære<br>BA3 and MA3 | | - More structured Moodle room<br>- Provide more reusable material such as slides and videos<br>- Ensure more consistent teaching by holding all planned lectures | Action point: MMA will take this up with coordinator to discuss options.<br><br>There is improvement compared to last year, however challenges seem to be consistent.<br><br>One member comments that this is more than poor communication.<br><br>Jakob suggests videos from lecturer. |
| Applied Engineering Mathematics<br>EN3 and AIE3 | | - Increase practical and interactive learning opportunities | Comments to be sent to lecturers. |
| Dynamik og udmattelse<br>BA5 and MA5 | | - Improve support during problem-solving in the dynamics part<br>- Schedule the “fatigue” part earlier in the semester | Comments to be sent to lecturers. |
| Electrical Machines<br>AIE5 and DS5 | | - Ensure sufficient time between exams<br>- Continue and prioritize physical on-campus teaching | Credit to lecturer for coming to Esbjerg to teach.<br><br>MMA will ask study office to aim for minimum three days between exams; it is not often that there are only two days.<br><br>No further action. |
| Numeriske metoder<br>MA5, DS5 | 6 out of 6 students spent more than 45 hours preparing for the exam (including 2 students who spent more than 60 hours). | - Students preferred fewer online or hybrid lectures and more in-person teaching<br>- Supplementary video lectures were found | Comments to be sent to lecturers. |

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| | | useful for exam preparation | |
| Moderne digital regulering<br>DS5, AIE - ITCS, AIE – IE | | - Lectures were experienced as excessively long with insufficient breaks → Better structuring of lectures with shorter sessions and more frequent breaks is recommended | Action point:<br>Comments to be sent to lecturer.<br><br>Good ratings but also a few negative.<br><br>No further action. |
| Cyberfysisk systemdesign og programmering<br>AIE – ITCS | | - The course component taught and examined by Prof. Sahoo was perceived as poorly aligned with the course objectives, with unclear teaching and examination expectations | We keep track of comments, One member disagrees with the negative comment about one lecturer.<br><br>Please note that experience must be gained in a course; if criticism persists, then the study board will try to take action.<br><br>No further action. |

**5. Harassment and abusive behaviour**

- No students have experienced this.

**6. Top10 courses**

The study board also wishes to highlight the positive feedback from the students and has calculated which courses with at least three respondents the students has rated the highest.

**1. How do you rate the planning and the academic content of this course?**

| Top10 | Course | N | Weighted average |
|---|---|---|---|
| 1. | Termodynamik, varmetransmission og strømningslære | 10 | 1,2 |
| 2. | Strømningslære og bølgehydraulik | 3 | 1,3 |
| 3. | Effektelektronik | 3 | 1,3 |
| 4. | Sandsynlighedsregning, stokastiske processer og anvendt statistik | 8 | 1,4 |
| 5. | Stålkonstruktioner | 6 | 1,5 |
| 6. | Systemidentifikation og diagnosticering | 6 | 1,7 |
| 7. | Grundlæggende konstruktionsmetodik | 17 | 1,8 |
| 8. | AC-kredsløbsteori | 18 | 1,8 |
| 9. | Dynamik og udmattelse | 5 | 2,0 |
| 10. | Moderne digital regulering | 8 | 2,0 |

**2. How well do you think that the quality of the teaching has contributed to a high academic outcome?**

| Top10 | Course | N | Weighted average |
|---|---|---|---|
| 1. | Effektelektronik | 3 | 1,0 |
| 2. | Termodynamik, varmetransmission og strømningslære | 10 | 1,2 |
| 3. | Sandsynlighedsregning, stokastiske processer og anvendt statistik | 8 | 1,5 |
| 4. | Stålkonstruktioner | 6 | 1,5 |
| 5. | Numeriske metoder | 6 | 1,5 |
| 6. | Grundlæggende konstruktionsmetodik | 17 | 1,7 |

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| 7. | Dynamik og udmattelse | 5 | 1,8 |
| 8. | Energisystemer og elektrofysik | 17 | 1,8 |
| 9. | AC-kredsløbsteori | 18 | 2,0 |
| 10. | Systemidentifikation og diagnosticering | 6 | 2,0 |