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Minutes

Subject:	Study board meeting – No. 2021.9
Date:	22 September 2021
Minute taker:	Tatiana K. Madsen/Heidi Sørensen
Participants:	Tatiana K. Madsen, Peter Koch, Henrik Schiøler, Troels Bundgaard Sørensen, Henning Olesen, Damian Leporis, Thomas B. Moeslund, Peter Fisker, Sandra Aynaddis Strabo
Observer:	Ove Andersen
Cancellations:	Lisa Bondo Andersen, Rikke Skov Udengaard, Johannes Kjær Helmers

Agenda

1. Approval of agenda
2. Approval of minutes from meeting in September 2021
3. Dispensation
4. Internship for diplom students
5. Curriculum for BSc in Electronics Systems Design
6. Curriculum for MSc DCLead and Nordic master
7. Minor updates of other study regulations
8. Digital competences – update of the study curriculum
9. Education evaluation for spring 2021
10. Estimation of interaction time
11. Results of the study start exam
12. Messages
13. A.O.B.

Minutes

Ad. 1. Approval of agenda

A change in the sequence of the items to consider during the meeting was suggested by PF. This change was accepted by all other members. With this change the agenda was approved.

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Ad. 2. Approval of minutes from meeting in August 2021

The minutes are approved.

Ad. 3. Dispensation

One application has been processed

Ad. 4. Internship for diplom students

KMN has participated under this item.
The challenges with internship on the 6th semester for diplom engineering students were discussed on the meeting in May 2021. The recommendation from the Study Board made on that meeting was to keep the current practice and to find the necessary resources to finance this implementation. However, no payment for supervision of internship projects can be provided by the department (since the internship semester does not generate any STÅ). Additionally, the students are facing a problem of not receiving SU during 4 weeks (this is due to the current construction of 16 weeks in a company + 4 weeks writing a report).

The Study Board has agreed on the following change in the regulation:

- 20 weeks internship in a company + writing the report while in a compony
- Exam on the basis of the report, with a short oral presentation
- Grades passed/not passed
- Internal censorship
- No mid term evaluation
- Students have a possibility to contact the coordinator in case of unexpected challenges

Ad. 5. Curriculum for BSc in Electronic Systems Design
Meeting with WG was hold on September 30 to clarify the concerns raised by ESN.
Afterwards, the updated version of the curriculum has been provided to the Study Board; together with a separate document describing “Math in time” implementation.
During the discussion round, the following opinions have been provided:

TKM: in the updated version the most critical issues have been addressed. As with any revision of such scale, there might be still some inconsistences left unnoticed, however they can be corrected while the new study regulation is implemented.

TBS: it is difficult to predict what the effect of changing the math flow and progression will be, before we have tried it out. We are risking penalizing math-oriented students.

PK: deep concerns about 2 main issues 1) introducing the principle math in time into the curriculum has resulted in a situation when mathematical topics are scattered around and included in many courses with only a few minimodules. When it comes to an actual implementation, we are depending on a lecturer to interpret and introduce math topics and it is easy to “loose” these topics. Additionally, it requires a lot of coordination across all modules. As a result, we are risking to have students with less math experience compared with what we have today. 2) a lot of analog electronics topics and included in the curriculum, whole only a few will need it when graduated.

HS: recognize that some updates were present in the latest version of the curriculum, but they are minor. Share the concerns expressed by PK. Choosing what math topics should be present on the 1st year of education, have strong preferences for Linear Algebra (not ASTA). Additionally, the existing curriculum is a good curriculum we have a constant intake; the graduates find job quickly and are appreciated by industry. There was done some work to streamline the math topics in the curriculum 5 years ago, however the suggestions have never been implemented and most probably this is exactly what is needed, instead of changing everything in the consistent curriculum. To change the current consistent curriculum is to gamble.

PF: the updated curriculum is a nice one and is more exiting. We have a chance now to make a change and do things differently in a good and exiting way. For many years the changes were only minor. This can be a push from a local optimal point.

HO: solid piece of work ready to be approved.

TBM: overall positive. Optimization landscape is changing over time and it is important to coordinate across educations.

By majority of votes (with 2 votes against) the changes in the curriculum has been approved by the Study Board.

The Study Board note that for the success of the presented curriculum a coordination between course holders and coordinators across different modules and semesters is a must.

Ad 6. Curriculum for MSc DCLead and Nordic master

Nordic Master is a specialisation under ICTE program and therefore there is a need to update it accordingly, when ICTE is updated. Due to the focus on sustainability on DCLead and Nordic master programs, the Study Board supports inclusion of courses from Sustainable Design program at AAU. Currently, OA and the education group are in contact with the persons responsible for running these courses to find out whether there are any prerequisites to follow the identified courses.

Conclusion: ESN tentatively approves the curriculum change. After the question with prerequisites is clarified and consistency among the shared courses between ICTE, DCLed, Nordic master and CE are checked (by TKM and the WGs), the curriculum is considered approved.

Ad 7. Minor updates of other study regulations

The following minor changes in the study regulations have been present and approved by the Study Board:

ROB bachelor : Analog Devices and Electronic Modules is moved from the 4th to the 3rd semester and Sandsynlighed&statistik is moved from the 3rd to the 4th semester.

CCT bachelor : Addition of some programming into Agil development course

Ad 8. Digital competences – update of study curriculum

Following the analysis of the digital competences in the current study regulations, it has been identified that reflective competences can be strengthen in the currently used formulations. Based on these conclusions, TKM has proposed reformulations of the single competences for P5 and P6 modules on bachelor programs and reformulations for P8 and P10 modules on master programs. The Study Board has agreed and approved the proposed changes. A short summary of the performed analysis and the proposed reformulations can be found in the appendix.

During the following brainstorming on how we can further strengthen the digital competences of the students, the following two aspects have been discussed:

1) Inclusion of a production of a short you-tube video showing the results of a semester project work as an obligatory element on one of the semesters during studies
2) More focus on project management tools, including different digital tools

To follow up on these ideas, it has been agreed on the following action points:

1) To contact Study Board for Mediology to learn about their experience (responsible: TKM)
2) To contact PBL contact person to check the current scope of PBL course and to discuss a possible workshop on digital project management tools (responsible: TKM)

Ad 9. Education evaluation for Spring 2021

The drafts for conclusions for education evaluations reports prepared by TKM have been discussed. Some reformulations have been introduced for the conclusion for ITCOM report. All conclusions have been approved.

Ad 10. Estimation of interaction time

The Study service has asked to provide the estimation of interaction time. TKM and OA have proposed this estimation for course modules to be 32% (on average a course has 12 minimodules; 3t 45min per module gives 45 hours of interaction for a course module). ESN agrees with this proposal.

Ad 11. Results of study start exam

TKM has presented the accumulated results for mathematics part of the study start exam. According to the results, PDP and CCT students have the weakest mathematical competences.

Ad 12. Messages

- The Study Board is looking for a new study counselor in Aalborg. ESN members were asked to spread the world.
- Nominations for ToY will be collected for this semester, however without spending time and resources on a advertisement campaign.

Ad. 13. AOB

None.

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Appendix. Digital competences analysis and conclusions

De studerendes digitale færdigheder kan blive opdelt i tre hovedområder :

- **Bruger færdigheder**
  - De studerende kan bruge konkrete it-redskaber/medier indlært i én kontekst, til løsning af andre opgaver i en tilpasset form. De studerende bliver bevidste brugere af digitale værktøjer, metoder og medier, dvs. de har stor viden om, hvad der findes af muligheder og kan træffe informerede valg af informationsteknologi på baggrund af teoretisk indsigt og praktisk erfaring.
- **Skaber færdigheder**
  - De studerende kan på baggrund af deres bruger færdigheder udvikle og anvende it-redskaber/medier til at skabe nye løsninger.
- **Refleksive færdigheder**
  - De studerende skal aktiv kunne tage stilling til konsekvenser af digitale muligheder i såvel et personligt som samfundsmæssigt perspektiv, herunder opmærksomhed på etik og lovgivning. I en akademisk kontekst er denne kritiske tilgang til digitale muligheder vigtig ift. studerendes almene og faglige dannelse, idet den indeholder elementer som brug og misbrug af data, når vi kommunikerer digitalt og bruger digitale værktøjer.

En anden dimension kan man kigge på er:

- Generelle akademiske kompetencer
- PBL kompetencer
- Fagspecifikke kompetencer

Derfor sætter vi en tabel som opsummerer digitale kompetencer i vores studieordninger:

	Generelle/akademiske kompetencer	**PBL kompetencer**	**Fag-/domeæne specifikke komptencer**
Digitale brugerkompetencer	Kan fremsøge relevant viden med kildekritisk tilgang og bringe denne viden anvendelse i et projekt med flere deltagere	Kan gennemføre et problembaseret projekt i samarbejde med peers (som evt er fysisks adskilte) ved brug af digitale værktøjer	Kan anvende centrale værktøjer inden for professionen
Digitale skaberkompetencer	Kan anvende digitale værktøjer til at dokumentere og formidle (videnskabeligt)* arbejde	Kan metodisk nedbryde problemstillinger til mindre delproblemer, som kan adresseres separate (evt af andre) med henblik	Kan modellere, simulere, implementere og teste/verificere digitale systemer til løsning af et problem inden for fagområdet.

		på efterfølgende integration, test og verifikation.	
Digitaliserede kontekstualiserende kompetencer (refleksive kompetencer)	Kan identificere egne læringsbehov og strukturere egen læring i forskellige læringsmiljø Kan kommunikere problemer, metoder og resultater inden for det professionelle (videnskabelige)* område, skriftligt, mundligt, og ved hjælp af forskellige digitale media	Kan reflektere over og videreudvikle samspillet mellem PBL og digitale kompetencer	Kan bringe faget i anvendelse til løsning af nuværende og kommende samfunds relevante udfordringer.

*Note: markeret med * er relevant for kandidat uddannelser*

Flere moduler i vores studieordninger bidrager og sikre at de studerende får bruger- og skaber-kompetencer. ESN vil gerne sætte større fokus på refleksive digitale kompetencer. For at tydeliggøre bachelorens og kandidaternes digitale refleksive kompetencer har vi udarbejdet generiske kompetencemål der indarbejdes i samtlige studieordningers kompetenceprofil og afgangsprojekt moduler. Analysen har været lavet for hver uddannelse og den viser at refleksive kompetencer kan uddybes med at tilføje henvisning til digitale værktøjer og platforme eksplicit.

Foreslået ændringer på bachelor uddannelser:

- P5: Kunne reflektere over egen brug af PBL-værktøjer i sine studier, inkl. digitale værktøjer, og over hvordan disse aktivt kan bruges fremadrettet
- P6: Kan identificere egne læringsbehov og strukturere egen læring i forskellige læringsmiljø
- P6: Skal kunne kommunikere problemer, metoder og resultater inden for det videnskabelige område, skriftligt, mundligt, og ved hjælp af forskellige digitale media og diskutere faglige og videnskabelige problemer med fagfæller

Foreslået ændringer på kandidat uddannelser:

- P8: Must know how to formulate own competences related to PBL, incl. digital competences
- P10: are able to communicate scientific problems in writing and orally, incl using digital tools, to specialist and non-specialist
- P10: are able to independently take responsibility for his or her own professional development and specialization, getting knowledge from different platforms, incl digital platforms

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