# Meeting SAT Computer Science 26 August 2021

## **Minutes Approved**

#### Present:

- Dan Witzner Hansen (HoP SWU)
- Marco Carbone (HoP CS)
- Therese Graversen (HoP BDS)
- Patrick Bahr (HoP SD)
- Niclas Hedam (Student rep., CS)
- Paolo Tell (Guest, faculty)
- Yvonne Dittrich (Guest Faculty)
- Jesper Bengtson (Guest, faculty)
- Marc Kellaway (Observer, Prog Coor SD)
- Mette Holm Smith (Observer, Prog Coor BDS + KDS)
- Allette Bjørn Bundgaard (Prog Coor SWU + CS) (Minutes)

#### Absent:

- Barbara Planck (HoP KDS)
- Theodor Christian Kier (Student rep., SWU)
- Viktor Shamal Andersen (Student rep., DS)
- Sara Gjerløv (Observer, Study and Career & Guidance)

## Minutes:

- 1. Approval of agenda: Therese chairs the meeting. Agenda approved.
- **2.** Approval of minutes from meeting **23** June **2021**: Appendix 2A. Minutes approved.
- 3. Which course should host the lecture on research methods and other fundamental topics with relevance to the whole K-CS-program: / Yvonne Dittrich, course manager on Advanced Software Engineering

In the Advanced Software Engineering course, students find the lectures on a) research methods and b) literature research and usage useful; however, students also think that they take up valuable time from the software engineering topics on the course.

The course manager finds, the same counts for the lecture on c) mining software repositories. If those lectures are useful for many courses on K-CS and the program in general, they might be moved to other courses to free time on Advanced Software Engineering. The question is which course(s) should host the lectures.

Reading material for the discussion: Lecture on research methods: <u>https://learnit.itu.dk/mod/resource/view.php?id=124295</u> Lecture on literature research and usage: https://learnit.itu.dk/mod/resource/view.php?id=125591 Mining Software repositories: https://learnit.itu.dk/mod/url/view.php?id=126049

Yvonne presents feedback from students and explains the cores topics on the three lectures, which is presently part of the Adv Software Engineering course:

Students on the course do not complain about the lectures, but about having them to late in the program.

In some universities topics like these are hosted by separate courses. Additionally, K-CS might consider extending the content and add a few topics.

Marco: Is some of this taught in Reflections on IT? Yvonne (co-teacher on Reflections on IT): No

Marco: How many hours will it take to cover those topics? Yvonne: In total 7 double lectures (14 hours + exercises). Dan: will it make sense to include a bit of the content in Projektarbejde og Kommunikation (1<sup>st</sup> semester) or on Reflections on IT (6<sup>th</sup> semester)? Yvonne: It is early to place it on bachelor level, thus 5<sup>th</sup> or 6<sup>th</sup> semester would be better.

Therese: from a supervisor's view it would be good to include the topics in the Research Project, so supervisors do not have to teach this individually to each group.

Niclas: Those are very important topics. However, it is too early to teach them in on the bachelor programs.

Marco: Suggestion: 6 lectures + exercises could be part of the Research Project as the workload is little during the first month. 2 hours lectures + exercises for the first 3- 4 weeks. How to read a research paper could be a voluntary part of the project period. It takes a qualified teacher to do it.

Marco, Patrick, and Barbara consider this with Yvonne.

# 4. Brainstorming about the CS structure (Specialization and replacement for Security 1 from autumn 2023) /Marco.

#### Marco:

## A) Specialization structure on KCS:

The current specialization structure of KCS is tight. The fixed structure with 7 specializations results in several specialisation courses with very little students. The 15 ECTS specialization courses are a collage of many different topics. Thus, teachers suggest dividing the 15 ECTS courses into two separate courses. However, for some courses this structure will work well for others not.

Proposed structure:

Two structures for specializations:

1)

Course 7,5 ECTS	Course 15 ECTS

2)

Course 7,5 ECTS Course 7,5 ECTS Course 7,5 ECTS	ourse 7,5 ECTS	Cours	Course 7,5 ECTS	Course 7,5 ECTS	Course 7,5 ECTS	
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- All specializations are 22,5 ECTS.
- Individual Specializations will also be an option.
- 1<sup>st</sup> semester is fixed with mandatory courses.
- Specialization courses are placed on 2<sup>nd</sup> and 3<sup>rd</sup> semester.

#### B) Replacement for Security 1 on 1. Semester K-CS from autumn 2023

Marco asks for SAT's input to a mandatory replacement course: Keywords from discussion:

- Jesper: course in semantics
- Marco: course in applied machine learning
- Therese: Tools for reasoning about topics students miss in mathematics e.g., probability as machine learning topics rely heavily on probability.
- Dan: mathematics, maybe mathematic modelling; making math applied expose to data. machine learning, visualisation, probability.
- Marco: model-based software engineering

## Derived discussion about the content of BSWU:

- Jesper: Take out Projektarbejde og kommunikation and spread the content from this course on relevant courses. Then use the free place for a course in mathematics.
- Therese: The present interest from students in machine learning make a need for more mathematics.
- Niclas: Do not remove Projektarbejde og kommunikation as it serves more than just project work.
- Jesper: Course structure should allow for courses of less than 7.5 ECTS.
- Paolo: Suggests a focused discussion on the future of Projektarbejde og kommunikation. This comes up so often and it might be good to settle this.

## 5. Information: / members.

Paolo: Information to SAT:

Analyse, Design and Software Architecture has asked for a rescheduling of exercise hours due to

very special circumstances. Rescheduling at this stage is not an optimal solution but keeping the exercises in the present time slot is not possible either.

Jesper: A new course in program verification will be introduced for spring 2022.

- 6. Update from study programmes: / Students. Nothing to report.
- Review credit transfers on Dept. CS-programs, Feb. Aug. 2021: Appendix 7A. <u>What should SAT members do:</u> Please, look at the data in advance, to qualify the discussion at the meeting. Comments are reported to Study Board after the meeting.

Study Board delegated the task of evaluating applications to Head of Program. Twice a year, SAT review the lists and see if something needs attention.

Comments from Dan and Therese: Credit transfer on BDS and BSWU is difficult, as the mandatory courses requires close to 100% overlap.

SAT has no other comments.

Study Program Report K-CS: / Marco - Appendix 8A.
Covid19 put a back stop to many things, and this also counts for K-CS. One point of interest is that the first students from BDS on KCS have done well.
As the MSc in Data Science is now up and running, the DS-specialization on KCS has been discontinued.

SAT has no comments to the Study Program Report.

#### 9. Dates for SAT CS meetings in Autumn 2021: / members.

The members present at the meeting decide on having meetings on Thursdays at 1300-1430 - preferably, not the 3<sup>rd</sup> week in the month.

## 10. AOB:

Nothing to report.