Minutes meeting in Employers´ Panel for Computer Science

Thursday 12. January 2023 at. 16.00, room 3A20 IT University of Copenhagen, Rued Langgaards Vej 7, 2300 København S.

Comments to those minutes may be given within 20 working days after receiving the minutes. If no comments are given, minutes will be considered approved without further notice.
No comments received before deadline and thus, minutes are approved.

Participants:
Members of panel: Christian Bjerre Nielsen (chairman), Kaare Brandt Petersen, Søren Ilsøe, Massimo Giulio Caterino, Anne Hauberg Aakjer, Daniel Schiermer, Jacob Benjamin Cholewa, Torben Wind Meyhoff

From ITU: Camilla Rosengaard, Dan Witzner Hansen, Louise Meier Carlsen, Therese Graversen, Marco Carbone, Patrick Bahr, Luca Aiello, Peter Sestoft, Thore Husfeldt, Mette Holm Smith, Marc Kellaway, Christian Balslev van Randwjik, Allette Bjørn Bundgaard (minutes).

Minutes:

1. **Welcome and round the table:**
   Point 8 added to the agenda:
   Status on the government´s plan to introduce 1 year MSc programmes / Peter:

2. **Follow-up on previous recommendations:**
   Nothing pending from previous meetings and no previous recommendation pending either.

3. **Report on the status of the panel's study programs (applications, admissions, employment, etc.):**
   More students rejected their offer of a study place in autumn 2022 and less students signed up for electives this spring. This might be due to lift of the Covid-restrictions; potential students postpone studies for a year and students go on exchange to make up for the years with restrictions.

   Unfortunately, is it not possible to fill spare study places when students reject before study start – The Stand-by function is not designed in a way that is suitable for this kind of purpose.

   Comment from panel:
   - The job market can absorb all ITU-graduates and thus, it is unfortunate if study places are not filled.
   - What about trying to persuade students back in ITU. Panel can help with this if they can flag that job opportunities are good?

4. **Commendations and recommendations:**
   None.

5. **Review of BSWU: Recommendations from the external review panel.** / Dan:
   Dan outlines the frame for the external review and present key points from report:
   The external review panel finds that BSWU is a good ambitious program with no recruiting problems
   However, the panel identified challenges and recommendations :
   - Why are students dropping out?
   - Changes to the onboarding of students may help reducing the drop out level – especially for those students with no earlier programming skills.
   - Build more options/tracks/niches into program to make the span of the study broader to make room for both very technical programmers and more software engineering oriented graduates.
   - Maybe working with electives can make room for such options in the program.
   - Proposal to secure coherence in the study program, by investigating the present structure and coherence – "are we teaching the right thing at the right time?"
   -Enhance data understanding in BSWU.

   Discussion:
   Question from ITU:
   - Are employers willing to take more BSWU bachelor graduates?
   Answer from panel: Some companies tend to prefer MSc graduates, as they have more technical skills and also more personal maturity.
   However, feedback from students tell, there are still good options for bachelors.
   Question from ITU:
   - What about hiring BSc bachelors as trainees or the like. In this way they develop personal life experiences while working?
   Answer from panel: Many companies already hire bachelors as student workers and the good ones continue in the company.

   Comments from panel:
   - Probably, a mental barrier exists for some employers to only employ master graduates.
   - DevOps as part of the study program is important for both BSc and MSc graduates, as this enables them to perform quickly when entering the job market.
   - It is important to teach graduates the capability to learn and shift.

6. **Revision of the study structure on the first year of BDS.** /Therese:
   Therese presents an update on the draft plan from last meeting.
   First and second semester have been restructured to allow space for a new course in mathematics and extension of the existing course in statistics
   Comment form panel:
   The proposal seems fantastic.

7. **New specialization structure on KCS.** / Marco:
   Marco presents the existing specialization structure, the new proposal, and the thoughts behind it.

Basically, students will have more freedom to combine the content of the specialization by choosing courses from a broad pool of courses.

Hopefully, the new structure will apply to KCS students admitted in autumn 2024.

Marco asks for the panels input based on three questions:
- How do employers value the possibility for students to specialize and go in-depth on the MSc programs?
- How important is the precise content of the specializations of new employee for the employers?
- How is the panel´s view on having large introductory classes at BSc-level to free resources to allow for smaller advanced classes at MSc level?

Comment from panel:
- For some companies, the content of the specific specialization is not so important. However, what is important is that students know how to study complicated topics into depth.
- Other companies need very specialized graduates in some areas, whereas other area do not need the same degree of specialized employees.
- Yet other companies have great demand for very specialized graduates.
- Specialization during the studies, may give graduates an advantages when applying for jobs - it appears directly from the diploma where candidates have deep skills.
- Specialisation show graduates´ passions.
- If specializations are composed from a pool of courses, how will ITU ensure that specialisations for all students make sense?
Answer from ITU:
This is left to students; we might even see new ideas and ways to go.
- employers look for a red thread in the specialization, this is important for students to know when combining courses.

The panel supports the idea and recommend that recommended specialisations and prerequisites support the new specialization structure.

8. **International graduates´ value for the Danish job market.** / Christian and Peter
Christian reports from the mini conference held by IDA – see links below:
https://ida.dk/arrangementer-og-kurser/arrangementer/smider-vi-guld-pa-gaden-konference-om-internationale-dimittenders-vaerdi-for-danmark-347704
High lights from this conference is relevant to put into a computer science perspective as four out of five programs in the computer science corner of ITU recruit students from abroad.

Please find information about the conference and an article presented there on the links below:
https://ida.dk/arrangementer-og-kurser/arrangementer/smider-vi-guld-pa-gaden-konference-om-internationale-dimittenders-vaerdi-for-danmark-347704

https://ida.dk/media/11875/internationale-dimittenders-vaerdi-for-samfundsoekonomien-med-fokus-paa-tekniske-og-naturvidenskabelige-dimittender.pdf

Keywords from the conference. Focus is on graduates within the STEM (science, technology, engineering, and mathematics) area:

- International graduates in general contributes positively to the Danish socio-economy, as the retention rate is high and those, who stay, succeed in being permanently employed in Denmark thus, contributing positively to Danish economy.
- Socio-economically, we get the payoff from those graduated without having the prior public expenses connected to raising a person into adulthood. The payoff from those graduates quickly balance the expenses to e.g. SU, and they contribute to Danish economy soon after graduation.
- Note that the same tendency does not apply to lower education levels.

- Danish students benefit from meeting foreign cultures and ways during the study in Denmark.

9. **Status on the Government´s plan to introduce 1 year MSc programmes. / Peter:**
   As part of the new government platform (regeringsgrundlag), an important point stand out: Introduction of shorter MSc programmes.
   No detailed plan from the ministry has yet been released.
   Below is what ITU knows so far:
   - The new MSc programs will be of 75 ECTS, consisting of 60 ECTS courses in the first year and a thesis of 15 ECTS during summer.
   - Both the 120 ECTS and 75 ECTS programs will run in the same topics and the bachelor graduates should compete to be admitted.
   - For STEM programs the ration should be 70% students in the 120 ECTS program and 30% in 75 ECTS. For humanities and social science, the ration will be the reverse.
   - Students in the 75 ECTS program should have the right to continue on a 1 year supplementary degree after some years of employment.
   - The content of KSD, does NOT make it suitable for a 75 ECTS track

   Discussion:
   - Will this create A and B level graduated?
   - It works in the UK, but the longer programs are the most popular.
   - If the number of admitted students are not raised in the bachelor programs, the total number of graduates will not raise, only the speed in which some of them graduate.
   - Who is going to supervise the theses through the summer?
   - What about the expenses and coherence of keeping two graduate tracks in parallel.
   - In some areas short of employees, the 75 ECTS program will be interesting, in other areas this program will be of no special interest to employers.

10. **Annual Report from Panel – please, find template as appendix 1 / Christian**
    Panel members gave input to Christian who will draft the report and let members comment.
    Deadline to **finish report is 1 February**.

11. **Any other business:**
    - Student jobs: How does it fit into being a full-time student?

    - Meeting in September: Will a member host the meeting in his/her company?
    Interested please contact Allette.