# Action plan after external review of third-cycle studies at CSE

Department of Computer Science and Engineering, IT-faculty,
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The Department of Computer Science and Engineering would like to thank the evaluation committee for their insightful review and recommendations of the research education at the department. This external review was conducted in a constructive climate with rich discussions and generous sharing of experiences and ideas for development between the assessment panel and the department. The assessment report is equally rich with many recommendations to take under consideration.

There is no clear connection between all the recommendations to identified problems to guide the prioritisation process. Some recommendations are more an encouragement to do more of things already functioning well. All in all, the report contains approximately 60 recommendations, and there is no possibility in the short term to address all of them, so we have had to make some choices. We have collected the recommendations from the report into five areas and prioritized selected recommendations within these to make a realistic and feasible action plan that can be handled in one year. Prioritized recommendations are mainly selected based on importance, what we assess will have the most effect, and that is within our capacity. The recommendations left outside this action plan, mainly due to the time perspective, are saved and will be considered in future work or as otherwise commented on.

We would also like to emphasize that we are fully aware that some of the areas need long term planning and most of the planned actions only serve as a start to make improvement and will not solve all aspects mentioned in the recommendations. Several of the planned actions aim to implement routines for regular and systematic work ahead. To monitor improvements and ensure progress or need for adjustments or additional support in the processes, we will use the process tool 1 from GU, and conduct a survey during February/March 2023 to create a baseline and follow up in January 2024 and thereafter annually as anticipated.

The five areas are:
- Supervision and Examination
- Work Environment
- Recruitment and HR-processes
- Courses
- Information and Communication

Responsible roles used in the document:
- "Research education" in the text refers to the team responsible for the doctoral studies at the department comprising of head of department for doctoral studies (viceprefekt), directors of graduate studies (studierektorer), and operational support for doctoral studies.
- "ILG" in the text refers to the department leadership group comprising of prefekt, proprefekt, viceprefekt GRU, viceprefekt FU, line managers as head of divisions, and HR.
- "HoD" refers to head of department, prefekt.
- "Proprefekt" refers to head of department for research.
- "Line managers" refers to the head of academic divisions.
- "HOP" refers to the head of operational support.
- "HR" refers to human resources partner.
- "Faculty" refers to researchers, supervisors, and examiners at the department (Kollegiet).
- "PhD council" refers to the local PhD council at the department.
- "ITFUB" refers to the IT-faculty research education group.

## Supervision and Examination

### Forum to discuss and share

We recognize the need for forum to talk and discuss various aspects within doctoral studies at the Department. Currently, most discussion are held in small groups in follow-up meetings. The research education and all involved would benefit from more shared discussions. Hence, the action is to implement a forum, and to arrange for regular meetings in which we over time can address the various issues identified here as well as others. However, we are also aware of the limited capacity at the department at large and the overall workload, so we plan for one meeting per semester.

The five recommendations below are jointly addressed by *Action 1*.

- *Exchanging supervisory experiences – Ensure that successful groups and supervisors share their experiences and knowledge with all groups, in particular small and upcoming groups.*
- *Exchanging supervisory experiences – Plan for events where supervisors can exchange practices on a regular basis, such as having supervisor days, seminars or workshops to discuss and share supervisory experiences.*
- *Joint expectation baselining for supervisors and examiners – Arrange activities for the supervisors and examiners to get a common understanding of what PhD education entails, and how they can follow-up on their PhD students, and plan courses, activities and research throughout the education, using the ISP. Set up a routine for alignment of expectations between the parties at the start of a new PhD that can also be used during follow-up of the ISP. Take inspiration from the tools that Chalmers provides, and that might be used for the GU PhDs.*
- *Agree on the scientific basis of the PhD studies – Arrange recurring workshops/meetings to discuss concepts like scientific independence, depth and breadth knowledge of the field, etc.*
- *Supervisor exchange of ideas – Arrange supervisor get-togethers to discuss supervision issues and exchange experiences, could be done at Faculty level.*

*Action 1*:        Arrange regular forums (at least one per semester) for supervisors and examiners to discuss aspects such as degree expectations, concepts like scientific independence, depth and breadth knowledge of the field, and exchange experiences.
Responsible:     Research education
Starting time:    To be implemented during spring 2023.

### Expectations

We have available tools to talk about expectations between supervisors and doctoral students, but we know that these tools are not widely spread and used. Therefore, we will promote the use of these tools, and provide information and links to them on our Canvas page. The action is to implement a new routine during onboarding and first follow-up meeting to encourage and guide the use of available tools.

The four recommendations below are jointly addressed by *Action 2*.

- *A tool for discussing expectations - Promote the use of the expectation discussion tool*
- *Expectation management – Make sure to clarify expectations and develop a clear understanding between the PhD student and the supervisor*
- *Student expectations – Be sensitive to the PhD students' needs and expectations. It seemed that there were several cases where the expectations were not properly discussed between supervisor and student.*
- *Constructive follow up – The regular follow-up meetings were considered very good by the faculty and should be continued and widened.*

*Action 2*:      Inform about available tools for expectations at our Canvas and encourage the use of these tools with new PhD students and their supervisors during onboarding and first follow-up meeting.
Responsible:      Research education
Starting time:      To be implemented during spring 2023.


## Supervisor development

There is a central decision at Chalmers regarding supervisors that all should participate in some activity to develop their supervisory skills every third year. We are aware that this is not fully applied at CSE, and the action is to implement a routine to both make the expectations clear to all supervisors and to follow-up on this at the annual appraisal talks. Part of the action is also to recognize and include activities that are arranged at the department, e.g., future forum as discussed in *Action 1,* or the equality and diversity workshop for supervisors and examiners that were organised in November last year.

The below recommendation is addressed in *Action 3*.

- *Supervisor education – Be clear on the expectations of supervisors and examiners, educate supervisors in supervision at least every three years. Supervisory pedagogical education is very important and should be mandatory for all supervisors and when a long time has passed since the last time the supervisor got education there are needs to refuel supervisory skills. Supervisors should take part in some form of supervisory skills development every three years at the least.*

*Action 3*:      Clarify expectations to all supervisors and consider effective follow-up procedures in appraisal talks. Include arranged activities on work environment and leadership at the department.
Responsible:      Line managers
Starting time:      To be implemented during spring 2023.

## For future work

We recognize and appreciate the recommendations below. However, due to time and resources we do not plan for any immediate actions for these, but we will return to these in the future.

- *Supervisory teams – By combining novice supervisors as co-supervisors with more experienced supervisors for each PhD student, the learning process increases.*
- *Supporting the PhD student's career after the PhD – Maintain and further develop your routines on how to help the students beyond their PhD. Introduce the PhD student to new networks, help the PhD student getting a postdoc position, etc.*
- *Support PhD student networks – Continue the good work with providing networks for the PhDs.*
- *Exchange for external collaboration – Continue to expand the possibilities to perform internships and research exchanges*
- *Collaboration for exchange – Consider collaborations with other successful research environments to give the PhD students the required network and access to relevant PhD courses for the PhD students to be able to develop.*
- *Pay extra attention to the needs due to the pandemic – The pandemic has had an effect on the contact between PhD students and supervisors.*
- *PhD student's mutual experience exchange – Encourage PhD get-togethers, joint seminars, writing workshops to enable more peer learning and support among PhDs.*
- *The role of the ISP – Reduce the bureaucracy around the ISP updates and make sure that it can be considered to be an efficient and purposeful tool in the PhD education. Make sure that the e-ISP system is considered useful and is designed and introduced to support both PhD students, supervisors and the administration in an effective manner.*
- *ISP system support – Join the ISP reference group at GU to take part in developing the ISP use to better meet the goals and expectations of all parties involved.*

# Work Environment

## Research environment

We are aware of varied situations around the doctoral students, in which some have a strong group context and others are more individually based. We recognize the need to ensure a research environment for all doctoral students that foster the opportunity to engage in a high-quality PhD education.

The two recommendations below are addressed with *Action 4*.

- *Research strategy – Make sure to develop the research strategy and the research environment to foster the opportunity to manage a high-quality PhD education.*
- *Critical mass in all subject areas – If a particular research environment or PhD subject does have the prospects to meet a critical mass, consider reorganizing to give the PhD students a rich and diverse enough environment to prosper and thrive in.*

*Action 4*:      Identify units/divisions that need to improve provision of seminars to build and strengthen a research environment to foster the opportunity for more engagement between PhD students and other researchers in our research education.
Responsible:     Faculty & Line managers
Starting time:   Autumn 2023

## Supervisors leaving

It happens that a supervisor is leaving while they still have ongoing supervision situations with PhD students, which often creates challenging situations for all involved. We strive to handle these cases with both continuity and the need to ensure a research environment for the student in mind. If the student has passed beyond the licentiate level, and there is a mutual wish to carry on the collaboration with remote supervision, this is usually granted. If the PhD student is still in the earlier phases of their education, we usually change supervisor to someone within the department. Similar situations can arise if there is a change of supervisors for other reasons. We recognize the need to both follow up more diligently on arisen situations, and to increase the awareness of rights and needs to change supervisors and provide support to such processes. We strive to build a culture at the department based on the perspective that "it takes a village to raise a child" applied to our PhD students and the doctoral education.

The recommendation below is addressed with *Action 5*.

- *Supervision recruitment and commitment – We saw many cases where the PhD students had to change supervisors several times due to staff leaving, some decided to stick to their supervisors even if they no longer work at GU, some were not aware that they could get new or additional supervisors without the old ones leaving.*

*Action 5*:      Implement routines in cases where supervisor is changed or leaving but is maintained as supervisor remotely, with increased frequency of follow-up meetings to every 6 months to closer monitor how the situation unfolds.
Responsible:     Research education
Starting time:   Autumn 2023

## Teaching and department duties

PhD students at CSE are heavily involved in teaching, which can be demanding. In addition, we have identified that PhD students may be asked to do needed work that is neither research nor teaching. To lower the workload and increase better balance for our PhD students, we will write a decision that allows to allocate some of the percentage for department duties to other activities (in addition to already permitted activities in local or central PhD council work). Approval will be pending on need and funding to support the named activities. Activities can be advanced technical development, management tasks, or entrepreneurial tasks, for example, which carry additional benefit for the PhD student.

The four recommendations below are addressed with *Action 6*.

- *Teaching expectation predictability – make sure that the departmental activities for the PhD students are carefully planned and followed up in order to have a balanced set of activities that benefits the PhD student and avoids exploitation of the PhD students in the education.*
- *Variation and synergies – Make use of the staffing to make sure that the work tasks are distributed over time, that they are planned for synergies between the PhD student's topic interest and the departmental duties and that there is sufficient variation in the activities.*
- *Avoid exploitation – It is not uncommon that the departmental duties are used for low level activities that do not give sufficient experiences and stimulation, such as producing deliverables in an externally funded project, website creation, conference management or only low-level supervision. Bear in mind that the teaching experiences sometimes build the future faculty.*
- *Work environment issues – Work towards a better work-life balance for the PhD students. Management was worried and concerned about the health and well-being of their PhD students, although this was not reflected in the PhD students we met or the alumni (but maybe we met a biased sample?)*

*Action 6*:    Implement a decision that allows to allocate 5% of the total 20% department duties to other activities such as advanced technical development, management, administrative, or entrepreneurial tasks along with a routine to follow up on this matter at follow-up meetings.
Responsible:    Research education & Line managers
Starting time:    Spring 2023


## Culture and inclusion

A welcoming, inclusive, and collaborative working culture that is continuously aiming for equal opportunities, systematically striving for reducing perceived inequalities, and continuously targeting for fair participation is essential for a sustainable and long-term success. Hence, everyone as part of the work environment is involved and responsible for identifying, reporting, and improving the common and shared working culture in a constructive way. Jointly, between the two departments and the IT-faculty, we have arranged one workshop in November 2022 focusing on supervisors and examiners, and we plan to arrange a workshop in March 2023 focusing on the PhD students to discuss these issues and how to improve. In both workshops we have invited external expertise to support and guide these discussions. The plan is to continue with a third workshop in the autumn 2023 where all (supervisors, examiners, and PhD students) can meet and discuss together.

The four recommendations below are addressed with *Action 7*.

- *A work environment and culture for all – By taking strategic measures to work for the inclusion of everybody in the work environment and creating an inclusive culture may have large benefits for all staff and students.*
- *The importance of culture – Be very sensitive to the needs of the staff and the atmosphere in your working groups and support openness, creativity, safety and well being of all staff*

- *Avoiding harassment and toxic relationships – Make sure to have zero tolerance on harassment and observe and monitor the health and well-being of all staff to foster the creativity and purposefulness for all.*
- *Avoid discrimination – No one should feel excluded because of any of the grounds of discrimination and leadership needs to cater for a good culture in the organization on all levels.*

*Action 7*:        Arranging workshops to discuss these issues that facilitate involvement and improvement.
Responsible:     Research education
Starting time:    Spring and autumn 2023.


## For future work

We recognize and appreciate the recommendations below. However, due to time and resources we do not plan for any immediate actions for these, but we will return to these in the future.

- *PhD students teaching task – Introduce PhD students to the department's teaching practice before taking on classes/exercises for undergraduate students. Follow up on their teaching experiences and encourage auscultation.*
- *Career coaching – Arrange biyearly career advice activities, can be done on a department, faculty or study program level.*


## Recruitment and HR-processes

### On-boarding

To be received well when starting a new position is central for everyone, and perhaps even more so for PhD students as their position is quite often their first employment. In addition, they have a complex situation as they in doctoral studies are both an employee and a student. Since a few years, we have implemented an on-boarding routine from the research education ta welcome new PhD students and new supervisors and introduce them to the research education at the department. However, we are aware that equivalent on-boarding routine regarding the employment is not systematically in place. The administration and processes for how to receive a new PhD student needs to be streamlined and clarified for all involved. This includes awareness of division of responsibilities between line managers, PhD supervisors, and administrative roles and planning and conduction of this. We have also since earlier identified the need for support for new PhD students even before arriving at the department and had implemented a Buddy system among PhD students through the PhD council for this. As many other activities, this was lost during the pandemic, so one action will be to resume this.

The three recommendations below are addressed with *Action 8* and *Action 9*.

- *On-boarding – Continue to develop the "on-boarding", and provide opportunities to repeat this after a while, as not all can sink in at once.*
- *On-boarding – Make sure that PhD students are introduced to their roles early and continuously (even with private things such as how to pay tax, get a bank account, etc.). Provide additional information about cultural and societal understanding and rules, in particular for those coming from other parts of the world. Consider using a buddysystem to help new PhD students.*
- *Organization – Clarify the difference between line managers, the PIs of the PhD student's projects and the supervisors, especially with respect to development talks beyond the supervisory meetings, make sure to implement routines to follow up the quality of the supervision and identify risks in the PhD student supervisor relation.*

*Actions 8*:     Resume the "Buddy system" in collaboration with the PhD council
Responsible:    PhD council & Research education
Starting time:  Spring 2023

*Action 9*:      Streamline and clarify administration and process for how to welcome and receive new PhD students as employees
Responsible:    Line managers, Faculty & HOP
Starting time:  Spring 2023

## Recruitment

Good recruitment is crucial for attracting the best talent to our PhD programmes. It also effects our goal in improving diversity and equality in the PhD level. Although our PhD programmes have been quite international, new challenges arise (political climate, pandemics, economic situation) that threaten this position and require us streamline and improve our processes. Recent changes made to recruitment responsibilities and processes have tried to concentrate the know-how to the smaller group of division-heads. Information regarding recruitment policies has been distributed through Canvas but needs to be complemented by additional information regarding evaluation and selection practices. The department has started to offer research assistance ships to MSc projects with the view of attracting more of our own MSc students to apply for PhD programmes but also with the view of retaining talent. We have also had ongoing discussions between the research school team, department management, and project heads (supervisors) on offering and exploring concentrated recruitment. At the same time, some of these issues addressed by the recommendations arise directly from financial models and structural constraints on research funding and employment and would be very hard to act upon.

The 5 recommendations below are addressed with *Action 10* and *Action 11*.

- *Recruitment strategy – Decide on overall strategic principles for recruitment that matches the overall strategy of the research subject within the faculty, when it comes to international recruitment, competitiveness, etc.*
- *Recruitments – Consider concentrating recruitments to 4 times per year, to get more of a feeling of "classes" of PhD students. Make use of the fact that you have about 25 PhD students per year in total, meaning that there is a potential to create a class of PhD students that can take courses together and learn from each other.*
- *Increasing the number of positions – In order to keep talented students, one may try to find a solution for additional PhD positions or temporary assistant positions. It is in general difficult to find good candidates when the funding is there. Therefore, some measures to overcome this challenge would be valuable.*
- *Improving the administration of the recruitment – Improve the skills and tools on formulating requirements for positions, advertising and getting the positions known to the right networks, by administering interviews and selection processes, reference taking, etc.*
- *Evaluation of candidates – The instructions on how to recruit are lacking detail on how to evaluate the candidates in a fair way - perhaps because of lack of clarity in the ads on what you expect, or lack of agreement on what it is you actually look for and how that is going to be evaluated.*

*Action 10*:     Disseminate and improve information regarding practices for advertising, interview, and evaluation and make them available through Canvas page. Apply the lessons from revision of faculty recruitment announcement to make them more appealing to diverse audiences also to PhD recruitment announcements.
Responsible:    Research education & Proprefekt
Starting time:  Spring 2023

*Action 11*:      Continued discussion of joint recruitment as well as research strategy in supervisors'
                  and examiners' forum (see Action 1) as well as with ILG.
Responsible:     Research education, ILG
Starting time:   Spring 2023


## Gender equality

Actively working towards reducing perceived inequality in the work environment is essential, not only to attract new colleagues, but also to keep present staff for the long-term success at the university and to strive for being seen as an equal opportunities' employer. As such, process descriptions, processes, and instruments for recruiting need to be validated and revised where needed. In addition, the awareness to work towards reducing perceived inequality among recruiting faculty, supportive staff, and research groups needs to be continuously raised and refreshed.

The five recommendations below are addressed with *Action 12* and *Action 13* involving HR, proprefekt and the research education.

- *Increased gender equality in the faculty – Make sure to recruit female role models as faculty that can help changing the culture and to increase the interest in the subject.*
- *Creative recruitment – Be creative in recruiting (both faculty and PhD students) to manage better gender balance, while avoiding recruiting someone simply because they are women. There are several examples from other universities where they have managed to recruit more females with unorthodox recruitment methods.*
- *Increased gender equality in the recruitment processes – By having better ways of writing adverts, conducting interviews, taking references and follow up you will subsequently work to improve your recruitment processes from a gender perspective*
- *Active measures to improve gender equality – Work on changing the existing work environment to be more open to and welcoming for increased diversity. This can be done by gender coaching, leadership activities, education and awareness increasing seminars.*
- *Mentorship – provide mentorship for female PhD students to avoid drop-outs.*

*Action 12*:      Analyse and design suitable measures and ideas from arranged workshops about
                  equality (see Action 7).
Responsible:     Research education
Starting time:   Spring and autumn 2023.


*Action 13*:      Review, prepare, and gather existing information material (video/guides) for faculty
                  to raise awareness for unconscious actions and language that may be perceived as
                  inhibiting gender equality. Publish links to information material on our Canvas.
Responsible:     Proprefekt, HR & Research education
Starting time:   To be implemented during spring 2023.


## Off-boarding and alumni work

In addition to the exit-talk conducted by line manager or HR when employees end their employment with us, the research education recognizes the value of collecting information from exiting PhD students, which could help us in our improvement work and streamline some information collection, e.g., regarding mobility. Already in autumn 2022, we held discussions with the department of IT at the IT-faculty regarding this.

The two recommendations below are addressed as with *Action 14*.

- *Off-boarding – Keep track of where the students go after their PhD, they may provide a valuable resource for networks for future students and staff. Exit interviews may serve as a course evaluation to further develop the PhD education.*
- *Off-boarding – Conduct systematic exit-interviews*

*Action 14*:      Design a survey so we collect relevant data and design the process for conducting the off-boarding.
Responsible:    Research education
Starting time:   Spring and autumn 2023

## For future work

We appreciate the recommendation below that the situation at the department would benefit from identifying and set actionable and measurable goals for aimed transformations. However, due to time and resources we do not plan for any immediate actions for these, however, we can see that ILG would preferably return to these in the near future.

- *Measure and follow up progress – Setting goals and providing incentives is another good way of improving the situation. By clearly declaring your ambitions and following up the effects of the measures taken you start changing the focus.*

# Courses

## Available courses

Course work is a very important part of the research education. More than other parts of the education, it is the courses which support PhD students in reaching the following learning outcome from the national Higher Education Ordinance: "demonstrate *broad* knowledge [...] of the research field". As opposed to "demonstrate advanced and up-to-date *specialised* knowledge in a *limited* area of this field", which is assessed foremost through the doctoral thesis and defense. Therefore, a broad selection of offered courses is important. Courses fall into various categories: Master level courses, dedicated PhD level courses (offered broadly and taken by numerous PhD students at once), and individual reading courses. There is a well-known perception that the supply of the second category, dedicated PhD level courses, is not satisfactory. Also, there used to be no courses (outside the GTS package) which address PhD studentship broadly. In addition, the need for courses to learn pedagogics, academic writing, ethics, communication, management, and similar generic skills needed within doctoral studies are also well-known. As an integrated department between GU and Chalmers, we have the luxury that our PhD students have easy access to available courses at both universities. We recognize that available resources, especially at GU within units such as PIL and ASK, are less known and we will make guiding information available at our Canvas.

The four recommendations below are addressed with *Action 15* and *Action 16.*

- *Exchange of PhD courses – Increase the exchange of information about current and upcoming PhD courses between, and among, the faculty and the PhD students. Support the opportunity to trade courses between other divisions and possibly also with other universities to make the curriculum more relevant and available.*
- *A system for transferability of credits – Set up a framework for awarding credits for courses and activities as a support for examiners and PhDs in planning of the education.*
- *Breadth courses – Make sure that the PhD students gets an opportunity to take courses in university pedagogics, in scientific writing, in applying for funding and in entrepreneurship and IP.*

- *Pedagogical education and support – Make sure that the PhD students receive pedagogical training and support as part of their planned PhD courses.*

*Action 15*:    Informing about possibilities for taking PhD courses, also from outside the department and publish guiding information at our Canvas.
Responsible:    Research education
Starting time:    Spring 2023

*Action 16*:    Consolidate current pilot courses into established courses (like "Being a PhD student" and "Supervising undergraduate thesis projects" for PHD students).
Responsible:    Research education, Faculty
Starting time:    Spring 2023

## Resources for courses

There are some limiting factors for the local supply of dedicated PhD courses. Even if many researchers are very motivated to create and give such courses, the faculty has overall a very high teaching load in undergraduate education (compared to other parts of the university). In addition, the department provides little incentives to nevertheless give PhD courses.

The recommendation below is addressed with *Action 17.*

- *Funding and staffing of PhD courses – Make sure that there is a mechanism of staffing and funding the teaching of PhD courses in order to make sure that the delivery of courses actually happens.*

*Action 17*:    Investigate incentive mechanisms for faculty to create and give more dedicated PhD courses.
Responsible:    ILG
Starting time:    Autumn 2023

## For future work

We recognize and appreciate the recommendations below. However, due to time and resources we do not plan for any immediate actions for these, but we will return to these in the future.

- *PhD curriculum – Make sure to have a carefully worked out curriculum with courses for all different PhD specializations that are running on a regular basis.*
- *PhD course curriculum – Monitor the availability of PhD courses, to make sure that there are sufficient courses covering the essential areas within the department.*
- *Engage in national and international collaboration on courses – Make efficient use of regional and national collaboration on PhD courses, both to increase the efficiency and to give the PhD students access to a network of other PhD students in their field.*
- *Quality of the courses – It is important so make sure to have a system for monitoring the courses pedagogically, structurally and contents wise.*

# Information and Communication

## Online information

Following a major change in Chalmers' intranet and ongoing difficulties with updating information on internal and external webpages, about 18 months ago, the research education team created a Canvas course concentrating much of the information related to PhD education in the department. At the same time, much work remains to further consolidate the information available, create new guidance, and to further concentrate information. A major design principle applied in the creation of the Canvas course was not to create duplication of information to avoid having to update multiple copies of the same information with the worry that eventually this will lead to the mixture of correct and incorrect information.

The 3 recommendations below are addressed with *Action 18*.

- *Clear online information for supervisors and PhD students – Collect all information on PhD studies in one place/platform.*
- *Better online instructions – Collecting information about the PhD education online as guidelines and advice becomes an important information asset for both supervisors and PhD students.*
- *Supporting industrial PhD students – Develop a material to clearly guide the companies funding an industrial PhD what is expected of them, both in providing support and avoiding work overload.*

*Action 18*:    Continued development of the Canvas material. Following the recommendations, we will also consider what information does not need to exist elsewhere and move it to Canvas.
Responsible:    Research education
Starting time:    Spring 2023.

## For future work

We recognize and appreciate the recommendations below. However, due to time and resources we do not plan for any immediate actions for these, but we will return to these in the future.

- *Experienced administration – An efficient, sensitive and professional administration is of utmost importance for a well-functioning PhD education, it can support in most of the bureaucratic tasks and may also provide the services that are needed in the work. It can play an important role for the organizational culture.*
- *Avoid leanness – Make sure not to reduce the administration too much. There are also several requests to make the administration more effective. But too much of a reduction in administration may eventually transfer the administrative processes to the PhD students and their supervisors and risks errors and inefficiency in the organization. This could involve making the eISP update process lean, enhancing the processes for administration around travels and purchases, simplify thesis production and publication and administrative routines around the dissertation. In particular it is recommended to improve the administration of recruitment, on- and off-boarding, and maintenance of easily available on-line information.*

Bilaga 1.    Table 1: Overview of actions

| | Action ID | Action | Responsible | Starting time |
|---|---|---|---|---|
| **S & E** | 1 Forum to discuss and share | Arrange regular forums (at least one per semester) for supervisors and examiners to discuss aspects such as degree expectations, concepts like scientific independence, depth and breadth knowledge of the field, and exchange experiences. | Research education | Spring 2023 |
| | 2 Expectations | Inform about available tools for expectations at our Canvas and encourage the use of these tools with new PhD students and their supervisors during onboarding and first follow-up meeting. | Research education | Spring 2023 |
| | 3 Supervisor development | Clarify expectations to all supervisors and consider effective follow-up procedures in appraisal talks. Include arranged activities on work environment and leadership at the department. | HR Line managers | Spring 2023 |
| **W E** | 4 Research environment | Identify units/divisions that need to improve provision of seminars to build and strengthen a research environment to foster the opportunity for more engagement between PhD students and other researchers in our research education. | Faculty, Line managers | Autumn 2023 |
| | 5 Supervisors leaving | Implement routines in cases where supervisor is changed or leaving but is maintained as supervisor remotely, with increased frequency of follow-up meetings to every 6 months to closer monitor how the situation unfolds. | Research education | Autumn 2023 |
| | 6 Teaching and department duties | Implement a decision that allows to allocate 5% of the total 20% department duties to other activities such as advanced technical development, management, administrative, or entrepreneurial tasks along with a routine to follow up on this matter at follow-up meetings. | Research education, Line managers | Spring 2023 |
| | 7 Culture and inclusion | Arranging workshops to discuss these issues that facilitate involvement and improvement. | Research education | Autumn 2023 |
| **HR** | 8 On-boarding | Resume the "Buddy system" in collaboration with the PhD council. | PhD council, Research education | Spring 2023 |
| | 9 On-boarding | Streamline and clarify administration and process for how to welcome and receive new PhD students as employees. | Line managers, Faculty, HOP | Spring 2023 |
| | 10 Recruitment | Disseminate and improve information regarding practices for advertising, interview, and evaluation and make them available through Canvas page. Apply the lessons from revision of faculty recruitment announcement to make them more appealing to diverse audiences also to PhD recruitment announcements. | Research education, Proprefekt | Spring 2023 |
| | 11 Recruitment | Continued discussion of joint recruitment as well as research strategy in supervisors' and examiners' forum (see Action 1) as well as with ILG. | Research education ILG | Spring 2023 |
| | 12 Gender equality | Analyse and design suitable measures and ideas from arranged workshops about equality (see Action 7). | Proprefekt, HR, Research education | Spring 2023 |
| | 13 Gender equality | Review, prepare, and gather existing information material (video/guides) for faculty to raise awareness for unconscious actions and language that may be perceived as inhibiting gender equality. Publish links to information material on our Canvas. | HR, Research education | Spring 2023 |
| | 14 Off-boarding and alumni work | Design a survey so we collect relevant data and design the process for conducting the off-boarding. | Research education | Spring 2023 |
| **C** | 15 Available courses | Informing about possibilities for taking PhD courses, also from outside the department and publish guiding information at our Canvas. | Research education | Spring 2023 |
| | 16 Available courses | Consolidate current pilot courses into established courses (like "Being a PhD student" and "Supervising undergraduate thesis projects" for PHD students). | Research education, Faculty | Spring 2023 |
| | 17 Resources for courses | Investigate incentive mechanisms for faculty to create and give more dedicated PhD courses. | ILG | Autumn 2023 |
| **I&C** | 18 Online information | Continued development of the Canvas material. Following the recommendations, we will also consider what information does not need to exist elsewhere and move it to Canvas. | Research education | Spring 2023 |