## Operational plan 2024

Department of Information Technology

## 1. The department's measures in relation to the goals of the Faculty of Science and Technology

### 1.1 Goals related to research

Five goals are described at faculty level (see TEKNAT 2020/31 for details).
Goal 1: Our research shall be further developed based on recognised excellence
The PAP group of the department will continue to work proactively on encouraging submission to relevant external calls. This includes our internal process on soliciting, reviewing, and improving KAW applications for the TekNat prioritisation, our use of VR grant writing clubs in each division, and our discussions to identify and support SSF-FFL and WAF applicants. We also encourage and coach or support faculty members to submit ERC applications at all seniority levels.

We will also continue to be supportive in the promotion of our best research constellations within the areas that are considered for internal prioritisation by TekNat if not UU, such as for the university-level focus areas envisaged for funding by VR, Vinnova, Forte, and Formas.

The department has several strong and internationally recognised research teams with supervisors who are committed to research, PhD studies and supervisor development.

The department continues to structure PhD studies to ensure that they are similar for all of our 11 different third-cycle subject areas and specialisations and strictly comply with the Swedish Higher Education Ordinance. The research that emerges from PhD studies is assessed as being well adapted to and meeting a high international standard. Strategically raising the minimum level of PhD studies will result in research being further developed.

The department will continue to support research that has an awareness of equal opportunities. The goal is to support integration of an equal opportunity perspective in research activities at the department. Strategies to achieve this include providing funding opportunities which support formulating and working with aspects related to equal opportunities in research project proposals. Another objective is to actively use an equal opportunity perspective with career development, including with support for early career staff and researchers.

Goal 2: Broad research initiatives shall be developed proactively
While we continue to execute on our previous departmental goal of establishing Cybersecurity, we increasingly push Sustainability as our next important research area for both the department and society at large. An incubator, known locally as an arena, has been set up by Professor Mike Hazas and is expected to gain traction.

## Goal 3: Research funding shall be broadened

See Goal 2: We will continue to diversify our research into Cybersecurity and we have now added Sustainability. This is expected to increase the number of grants awarded to the department in those topics.

In addition to our own internal prioritisation above, we are considering external initiatives. The one with the most immediate potential for impact is the SciLifeLab \& Wallenberg National Programme for Data-Driven Life Science (DDLS) because of their upcoming national call for hundreds of PhD and postdoc positions. We see our department as a key player in this area and will proactively position our relevant researchers for this.

We will continue to focus on the activities identified below to increase the number of external grants and the proportion of external grants with links to business, public authorities, etc.

## Activities:

- Encourage submission to relevant external calls for proposals.
- Provide information on the latest calls for proposals for collaboration research projects from Vinnova, SSF, KAW, etc. through LäsIT and staff meetings (Head of Collaboration and Outreach).
- Provide information about and work towards increased IT participation in the faculty's strategic partnerships, and thus towards joint applications through meetings, seminars and visits.


## Indicators:

- The number of VR/ERC/EU/VINNOVA/SSF/KAW/KKS (and other private foundations) applications and grants.


## Goal 4: Access to advanced research infrastructure shall be ensured

The following three important research infrastructures are hosted at our department and are all highly relevant also for the Wallenberg Foundation's 12 -year-initiative in datadriven life science (DDLS, https://www.scilifelab.se/data-driven, see Goal 3):

- UPPMAX provides storage and computational resources at the national level, with a majority of users at UU. UPPMAX also provides local CPU and GPU resources, cloud resources, and storage for research and education. UPPMAX works actively to ensure that the computational infrastructure needs of UU are covered regardless of changes in the national organisation. UPPMAX also actively works to optimise our energy usage, and to add services and platforms aiding ease of use and interoperability built on top of our solid existing hardware offering.
- The VR-funded Uppsala node of InfraVis (https://infravis.se/) is a national infrastructure providing state-of-the-art visualisation competence, equipment, and support to help visualise research data from any scientific domain.
- The BioImage Informatics Facility (BIIF) includes the SciLifeLab-funded BioImage Informatics Unit (https://www.scilifelab.se/units/bioimage-informatics/) and the Uppsala node of the VR-funded National Microscopy Infrastructure (https://www.nmisweden.se).

We will ensure that the department's infrastructures can function as a bridge between our own researchers and researchers from the surrounding life-science community (both academia and industry), leading to new networking opportunities, which in turn lead to joint PhD and postdoc projects within the DDLS programme.

Goal 5: We shall adapt research support to current needs

The department continues its career support programme for tenure-track assistant professors, including grant clubs, two public meetings per year with seminars, individual career planning, and individual yearly follow-ups from their head of division, programme-responsible professor, and director of studies.

The department also aims to reactivate PhD -student-coordinated activities, upon reminding them that part of the research budget is earmarked for this and that research support can be a topic for this.

The department has very well-functioning general administrative support. However, we need to develop efforts for specific research support.

### 1.2 Goals related to education

Five goals are described at faculty level (see TEKNAT 2020/31 for details).
Goal 1: Our education shall be further developed based on recognised excellence and demand

- In 2024, we will introduce a system for cancelling courses, which is necessary to create space for the continuous renewal of the courses offered.
- In 2024, we will create a functioning team of degree programme coordinators to enable collaboration on the commissioning of new courses that can develop existing programmes while being financially sustainable.

From an equal opportunity perspective, the department is working to provide diversityaware education that creates a better learning environment for everyone. The objective is to equip students with awareness of discrimination issues and tools to enact change, and to continuously work towards creating a better learning environment for all.

## Goal 2: Our education shall be linked to research

- To enhance the link between research and teaching, we will ask our teachers to talk about their research as part of our courses; a first objective is to give students more information about the research conducted in the department and the results of that research.
- Take stock of our courses' links to research within and outside the department to identify weaknesses (for example whether we need more researchers in a subject) and opportunities (for example world-leading research not being translated into undergraduate programmes).

Our PhD students are offered the opportunity to take on departmental duties at $20 \%$, mainly as teaching activities. As a result, the students come into contact with young researchers who talk about and refer to their research projects in their teaching.

Goal 3: Our education shall be linked to working life

- We will establish shared procedures for inviting external lecturers from industry
- We will establish procedures to ensure that external lecturers are promoted outside the specific courses in which guest lectures are given


## Activities:

- Provide information and encouragement to business contacts about degree project opportunities (with reminders especially in October).


## Indicators:

- Percentage of our programmes that have a business representative on the programme board.
- Percentage of our degree projects that are linked to business.

Goal 4: We shall ensure pedagogical development

- We will work to separate the responsibility for pedagogical development (which is far-reaching and strategic) from the task of director of studies (which is preferably reactive) and develop clear expectations for how this work should be conducted
- We will involve our excellent teachers more in the pedagogical development process
- We will review a remuneration model for teachers that can ensure that there is time to participate in pedagogical development and pedagogical dialogue
- We will promote more interdisciplinary teaching teams


## Goal 5: We shall offer lifelong learning

- We will increase the number of lifelong learning courses
- We will initiate a dialogue with all teachers about their interest in running 'LLL' courses


## Activities:

- Offer contract and LLL courses aimed at business and public authorities for lifelong learning/continuing professional development/new technologies.
- Support the university/faculty in the development of forms and methods for sustainable lifelong learning.


## Indicator:

- The number of courses offered in contract education (paying participants) and lifelong learning.


### 1.3 Goals related to cooperation and collaboration

Three goals are described at faculty level (see TEKNAT 2020/31 for details).
Goal 1: Our cooperation internally and with other higher education institutions shall be developed

- We will develop alumni activities in the department.
- We will build on collaborative projects in different areas of application. DDLS is an example of an interdisciplinary research initiative in which we expect to be a key player (see Goal 3 in Section 1.1).
- We will continue to encourage collaboration across departments through internal strategic initiatives and research arenas.


## Goal 2: Our collaboration with external actors shall be developed

## Activities:

- Continuously provide information about opportunities for collaboration, calls for proposals and activities at staff meetings and in LäsIT.
- Provide information about and work towards increased IT participation in the faculty's strategic partnerships, and thus towards joint projects and applications through meetings, seminars and visits.
- Organise seminars, information meetings and discussions with existing and new partners, and other industry stakeholders of strategic importance to the department.
- The Head of Collaboration and Outreach will provide assistance with drawing up agreements for collaboration projects according to the department's established collaboration procedure to facilitate and protect researcher's rights and to avoid difficulties for the university.
- The Head of Collaboration and Outreach will maintain an up-to-date list of collaboration projects at the department, including which type of collaboration is involved (shared project, course participation, degree project, project collaboration, etc.) to make it easier to provide business contacts.
- Participate in public events such as SciFest, Almedalen and the Ångström Explanatorium aimed at schools and the public.
- Involve PhD students, postdocs and associate senior lecturers in visiting and receiving visits from primary and secondary schools.
- Develop a strategy for alumni activities in the department.
- Continually highlight good popular science examples of collaboration and research that is carried out by the department, so that external stakeholders get a clear idea of our research activities.


## Indicators:

- The number of presentations/meetings with/by industry
- The number of activities aimed at the general public and schools

Goal 3: Guidelines on collaboration qualification assessment shall be developed
In 2023, a working group was set up at the faculty with the task of developing criteria and assessing collaboration qualifications, which will be decided on by the faculty board in 2024. The Department of IT is well represented in the working group by both the Head of Collaboration and Outreach and the chair of the Recruitment Committee.

## Activity:

- Support the work of the working group by providing test persons/profiles for the description of qualifications and criteria for their assessment.
- Hold a career seminar for associate senior lecturers and senior lecturers at the department once the faculty has decided on criteria and guidelines for assessing collaboration skills.


### 1.4 Goals related to the faculty as workplace

Three goals are described at faculty level (see TEKNAT 2020/31 for details).

## Goal 1: A good working environment with equal opportunities shall be offered

We continue to review periodically how faculty funding is allocated within each research programme, so that we can share best practices and strive to create equal opportunities for research, independently of which division or programme one is recruited to. Our Equal Opportunities group has opened four postdoc positions on this topic, and three of them have already been recruited: we expect this to start having impact in 2024.

The ongoing work on equal opportunities is very much appreciated by the employees as the department takes a very serious approach to reducing potential prejudice.

The department views the development of PhD students primarily as the result of PhD studies and not primarily as the result of a research project, which helps to create a good working environment with the focus on personal development.

We continue to review periodically how faculty funding is allocated within each research programme, so that we can share best practices and strive to create equal opportunities for research, independently of the division or programme to which a person has been recruited.

We will finalise the rules of procedure for the department, which will clarify key roles in the department.

We will continue the training on the organisational and social working environment that we had in the department in 2023 with training and case discussions on the UU employee policy.

## Activities

- Safety inspection. A physical safety inspection is planned for October 2024.
- Induction of new members of staff. Department-specific support material to ensure a smooth induction of all new staff was developed and implemented in 2022 and 2023.
- In 2024, department-specific support material for when staff finish their employment with us will be introduced.
- The career programme for associate senior lecturers was evaluated in 2023 and will continue in 2024 based on the evaluation.
- The departmental Equal Opportunities group set out a working method and action plan (see further under Section 2.X Equal Opportunities) noting particularly those actions under goals (2) Instigate and support work to tackle discrimination at the Department, considering the seven discrimination grounds identified in the Discrimination Act, (3) Work to generate and maintain an inclusive, accessible work and study environment that is welcoming to all and (5) Supporting career development from an equal opportunities' perspective
- Evacuation drill. The drill is expected to take place once a year within the campus management area. This is managed by campus management.


## Goal 2: Recruitment shall target prominent research and teaching staff

The department expects its search groups for the creation of faculty positions to be even more proactive after the publication of an opening, in order to make sure prominent people apply and understand up-front what it means to work in Sweden and at our department.

We will aim to achieve a better balance between faculty funds for research and the department's funding agreement targets, so that we can offer competitive conditions for recruitment.

Goal 3: Good career opportunities shall be available for our research and teaching staff See Goal 5 of Section 1.1.

### 1.5 Goals related to internationalisation

Three goals are described at faculty level (see TEKNAT 2020/31 for details).

## Goal 1: The forms of internationalisation shall be further developed

The department's activities are largely international. Students on second-cycle courses and PhD students are recruited mainly from abroad and the same applies to postdoctoral students, researchers and teaching staff. In 2023, we will continue to recruit widely.

Goal 2: Conditions for international employees and students shall be improved
This is closely linked to our efforts to have a good working environment for everyone (see 1.4 and 2.3) in combination with Goal 3 below.

Goal 3: Language barriers shall be reduced
The department will continue to promptly translate all new documents into English and will translate or summarise those documents that have not yet been translated.

The department will also continue to encourage our foreign staff to attend the Swedish for Academics courses provided by Uppsala University in order to facilitate their integration. In addition, local language courses are provided for the department's employees at regular intervals.

### 1.6 Goals related to the faculty in the world

Two goals are described at faculty level (see TEKNAT 2020/31 for details).
Goal 1: The Faculty shall keep pace with relevant global and local goals
We see our investments in Sustainability and Cybersecurity as direct actions to take on multiple key global challenges.

## Goal 2: The Faculty shall take advantage of the opportunities of digitalisation

The department will increase its use of videoconferencing in order to bring a wider range of high-profile guest speakers to our seminar series, our BSc-level and MSc-level
courses, and our PhD-level courses, as well as high-profile opponents and committee members to our PhD defences.

### 1.7 Goals related to the future and continuous development

Two goals are described at faculty level (see TEKNAT 2020/31 for details).
Goal 1: We shall have a current analysis of the surrounding world
No specific activities in 2024.

## Goal 2: We shall regularly reassess our activities

We will take the opportunity of the KoF/ÖB24 self-evaluation process and panel visit to reflect on our ongoing choices and distil new ones where appropriate. We have begun this in a bottom-up process with a department-wide Research Strategy Day on 25 October 2023.

We will continue working together through our PAP group and Arena startup funding to explore new directions. This approach has worked very well for us in the past, as seen in our identification and intensification of four strategic research areas over the past few years: AI (new programme and recruitment), Computing Education Research (new programme and recruitment), Cybersecurity (recruitment), and Sustainability.

We aim to continue this success by identifying our next focus area. We also aim to get all divisions to periodically revise and make transparently available their internal funding processes, in the hope of the latter becoming more uniform across the department.

## 2 The department's other goals or strategies

### 2.1 Education

Goal: To bring students back to campus
Since the pandemic, it has been difficult to motivate students to participate in education on site.

### 2.2 Working environment

Everyone with management responsibility must use a special template to conduct annual performance reviews so that together we cover all staff. The outcome of these reviews must be followed up and discussed by the management team. This allows us to detect signs of strain, stress, ill-health and other problems at individual and group levels at an early stage. Another purpose of the reviews is to identify the members of staff who have undergone some form of management or supervisor training. The next period will be March/April 2024.

Performance reviews for PhD students are divided into two parts. One part is held in connection with writing a new ISP and the other in connection with the senior group's follow-up meeting for the PhD student.

Time for performance reviews must be included as part of staffing plans at divisional level. The head of division and other people with management responsibility, as well as supervisors, must set aside time for planning, holding and following up on structured performance reviews, and for unplanned conversations of the same nature during the year. Those who conduct these reviews must pass on budget-related questions that come up during the reviews to the head of division or head of department.

## Mentoring programme

Everyone who is employed for a period of at least one year at the department must be assigned a mentor by the mentor coordinator.

## Language teaching

All new recruits who do not speak Swedish should be encouraged to take part in Swedish language classes.

## Working environment survey and health profile

A working environment survey and a health assessment are planned to be conducted in 2024. Under special circumstances, a separate working environment survey and followup are conducted. The latest regular working environment survey and health assessment took place in April/May 2019 when a working environment evaluation was carried out. In this context, all staff were offered a health assessment at the occupational health service. In addition, all staff at UU are offered a health assessment when they turn 50,55 and 60 years old.

## Management training for staff with management responsibility

Management training must be offered to and encouraged for everyone with management responsibility such as the head of department, head of division, directors, administrative manager, directors of studies, head of education, head of research and research directors. The goal is that at least $90 \%$ of all staff with management responsibility will have undergone training.

## Supervisor training

PhD supervisors and degree project supervisors should take part in supervisor training. In order to be principal supervisor for a PhD student, supervisor training is required. The goal is that at least $90 \%$ of all PhD supervisors will have undergone training.

## Training in first aid

Every two years, staff must be offered first aid training. A basic course and follow-up must be provided.

## Preventive health care

Preventive health care must be offered to all staff, for example through subsidised coaching, one hour of preventive health care per week during working hours, massage and fruit baskets in staff rooms. The department must also organise preventive heath care activities at the department.

## Preventive physical working environment work

The department provides support in the form of workplace design, procurement of work aids, etc. If necessary, adaptations are made for both staff and students as soon as
possible. Regular safety inspections are held. The results are compiled, evaluated and followed up.

## Social \& cultural activities

The department organises and supports various social and cultural activities.

## Stress \& conflict management

The department offers training in managing your work situation, particularly in relation to conflicts and stress. This can take place in groups or individually.

## Equal opportunities

The aspect of equal opportunities must be included as an important part of working environment work. The department's Equal Opportunities Group must monitor the issue and provide information on its work. Work on equal opportunities affects both students and staff.

## Evacuation drill

The drill is expected to take place once a year within the campus management area. This is managed by campus management. The evacuation plan is available on the website: http://www.polacksbacken.uu.se/Sakerhet/Utrymning/

## Fire safety inspection

The security and safety division must perform a fire safety inspection once a quarter.

## Working environment group

The group meets at least three times a year. Members: safety representatives, head of department, administrative manager, HR generalists, student representative. The working environment group must coordinate and provide information about the department's working environment work. In addition, the working environment group functions as a reflection group for the annual review of the action plan for working environment work.

## Crisis and Crisis Support Group

Members: safety representative, head of department, administrative manager, HR generalist, study adviser, student representative. The Crisis and Crisis Support Group must make sure that the department has procedures for crisis support and provide clear information about them.

## Information initiatives

We must provide information about the above and clarify the organisation and division of responsibility for everyone through the following channels:

- LäsIT
- The website
- The divisions' own planning days, meetings, etc.
- Working environment signs
- Information meetings after significant changes to procedures
- Staff meeting once a month

In 2024, we will work on a clearer communication flow in the department. The transition to the new web platform SiteVision will be completed.

### 2.3 PhD studies

There are regular reviews of the situation of PhD students and PhD studies, for example at

- the annual update of individual study plans with the help of a jointly formulated progression matrix
- senior group meetings for each PhD student
- supervisors' collegia

The department has a preparation process for recruiting PhD students. The purpose of the process is to ensure that we reach a wide audience when advertising PhD student positions and conduct qualification-based recruitment. The process must be followed when admitting and appointing PhD students for all of the department's third-cycle subject areas. Prior to advertising, a search group must develop a skills profile and criteria for how the applicants for the position will be assessed. These preparations provide a good basis for the advertisement, which must also take account of the equalities perspective. The search group continues to be involved during two-step interviews and candidate ranking. At the start of employment, the human resources generalist must be involved in the induction of the PhD student, ensuring they have the warmest welcome and the best start possible. An evaluation of the process has identified possible simplifications that will be introduced in 2024.

The department is continuing to improve the opportunities for PhD students to carry out their departmental duties. For example, the directors of studies and teaching teams help them structure their teaching. The aim is to allow PhD students to plan their time more effectively so that they can focus on their research and participation in conferences during periods when they are not teaching.
We have identified that PhD students' willingness to engage in collegial contexts in the department has decreased over the years. It should be possible to increase interest by making the engagement more worthwhile. The department considers it important to provide information about the existing regulations regarding remuneration and the extension of study time for Board work, for example. It is a pedagogical challenge to clarify the importance and advantages of engagement to attract more PhD students to become active. Otherwise there is a risk of exploiting the few PhD students who show interest.

The department encourages the further development of supervisors in addition to the mandatory supervisor training. The department strives to ensure that all third-cycle subject areas have supervisors' collegia to share experience, as they have proven to be successful where they occur. Supervisors' collegia can provide a forum for discussing questions about the PhD students' and supervisors' expectations of each other and the division of responsibility, for example, how to set clear milestones, maintain the quality of papers and requirements for co-authorship. A colloquium in research ethics was held for supervisors in 2023 to allow them to discuss related questions with their PhD students who are attending a mandatory course in research ethics.

### 2.4 Communication

In addition to the faculty's goals, communication at the Department of Information Technology is expected to fulfil department-specific commitments.

Communications operations in 2024

- Provide support for local web editors and writers in the department.
- Take photographs, make films and produce graphics that illustrate, highlight and promote the department's activities.
- Social media: posts about our research, our events and any prizes/awards.
- Update the website, particularly before the start of each semester.
- Review information on the internal staff website - before the start of each semester.
- Communication planning meetings with the head of department - once a month.
- Communication planning meetings with heads of division - every semester.
- Publish a newsletter - every month.
- Publish content on our digital screens.
- Create presentations for the department's staff meetings - every month.


## Communications operations in spring 2024

- Ensure that all editors and writers have received relevant training.
- Channel information by using the forms on the internal staff website.
- Switch to a monthly newsletter.
- Make use of the group and collaboration spaces in SharePoint.
- Ensure that the migration to Sitevision works properly and that the information is up to date. End the project in February - April 2024.
- Provide input for possible participation in Almedalen 2024.


## Communications operations in autumn 2024

- Develop proposals for profile products, printed and digital communication material in the field of internal and external communication.


### 2.5 Equal Opportunities

### 2.5.1 Introduction

The plan is composed of two parts. The first part describes day-to-day work with equal opportunities and gender equality at the department, and the second part describes activities planned specifically for 2024. The following plan is applicable to all activities within the Department of Information Technology and applies to all staff and students at the department.

### 2.5.1.1 Responsibility for Equal Opportunities Efforts at the Department

The Head of Department has overall responsibility for equal opportunities work at the department. The department has an Equal Opportunities Officer, appointed by the Department Board. The Equal Opportunities Officer is responsible for reviewing and evaluating equal opportunities work at the department, planning and executing equal opportunities projects and regularly updating the Operational Plan for Equal Opportunities. The Equal Opportunities Officer is also responsible for supporting students and staff on issues or questions related to equal opportunities within the department.

### 2.5.2 Day-to-day Efforts with Equal Opportunities

This section presents the day-to-day efforts with equal opportunities at the department.

### 2.5.2.1 Equal Opportunities Officer

An Equal Opportunities Officer is to be appointed. Information about how to contact this person is provided on the department website. Officers in charge: Head of Department and the Equal Opportunities Officer

### 2.5.2.2 The Equal Opportunities Group

The department appoints an Equal Opportunities Group led by the Equal Opportunities Officer. Each division within the department is represented in the group, in addition to representatives of SNIC, UPPMAX, the A Group and students. The members of the Equal Opportunities Group serve as the department's steering committee for equal opportunities. They are also the review panel for equality issues, such as monitoring and evaluating equal opportunities and gender equality efforts, suggesting equality measures, and planning and implementing equal opportunities projects. The group members are also expected to keep their respective divisions/equivalent and head of division/equivalent informed on the work of the Equal Opportunities Group. The Equal Opportunities Group has monthly meetings except during June, July and December. The group's meetings and reporting/documentation are to be in English. Officers in charge: The Equal Opportunities Officer and Head of Department.

### 2.5.2.3 The Management Group (In Swedish: ledningsgruppen)

Members of the department's Management Group who have not yet participated in training on equal opportunities and gender equality are to do so. At least one member of the Management Group who is qualified to deal with equal opportunities and gender equality issues is to have the explicit responsibility for monitoring these issues. Officer in charge: Head of Department

### 2.5.2.4 Contact person for gender-related violations

There is a contact person for gender-related violations. This person, as much as possible, is to receive relevant training to be able to fully perform this task. Officer in charge: Head of Department

### 2.5.2.5 Recruitment

Responsible parties for each recruitment process (supervisors, director of undergraduate studies, group leader, etc.) actively and widely search for candidates of the underrepresented legal genders. These measures are regularly reported so they can be collected and reviewed to allow gradual development of recruitment channels and contact networks. Over time, this can contribute to a gender-balanced recruitment processes. Officer in charge: Head of Department

The Head of Department, in collaboration with the Equal Opportunities Officer, investigates ways to track how an active and wide-ranging search for candidates of the underrepresented gender has been carried out, based on feedback from those responsible for the recruitment. Officer in charge: Head of Department

A follow-up analysis of legal gender representation in positions at the department is conducted using the gender equality indicators. The analysis looks at the proportion of women and men in the positions mentioned in the appendix of this equal opportunities plan. The follow-up should be done every fifth year starting the year 2016. Corrective measures will be taken if improvement is not made. By improvement is meant a visible change towards a gender balance within the interval

40-60\%. Officer in charge: Head of Department in consultation with the Equal Opportunities Officer

### 2.5.2.6 Salaries

Differences in pay both within and between comparable groups of employees will be investigated using the salary statistics to determine whether they can be explained on the basis of gender, or if there are other explanations. Specifically, salary differences between administrative and technical staff and between lecturers and research assistants will be analysed. If any differences are found to be based on gender, action will be taken to address these. Officer in charge: Head of Department in consultation with the Equal Opportunities Officer

### 2.5.2.7 Information

Provide general information on equal opportunities efforts at the department, available resources, etc. Officer in charge: Equal Opportunities Officer
Information on the work of the Equal Opportunities Group is provided regularly at division meetings and in LäsIT. Officer in charge: The Equal Opportunities Officer
An annual report summarises the work of the Equal Opportunities Group. Officer in charge: The Equal Opportunities Officer
Meeting minutes of the Equal Opportunities Group are published on the Staff Portal. Officers in charge: The Equal Opportunities Group
2.5.2.8 Appointment of groups with important strategic or decision-making functions Every group appointed to discuss or decide on issues affecting a larger number of employees is to include representation by both genders. This includes the Department Board, the Work Environment

Group, the Emergency Management Group, the Equal Opportunities Group, the Nomination Group and the Programme-Responsible Professors Group (Swedish: PAPgruppen). Officer in charge: Head of Department

A follow-up analysis of appointments at the department is conducted by collecting and documenting data on the gendered composition of investigative and decision-making bodies. The follow-up should be done every fifth year starting in 2016. Corrective measures will be implemented if progress is not made. Officer in charge: Head of Department in consultation with the Equal Opportunities Officer

### 2.5.2.9 Research

The department strives to increase the percentage of senior women in research and improve visibility for female researchers (both within and outside the department). This includes women being represented to a high degree in any group of strategic nature such as groups formed for referral reports, grant applications, etc. Officer in charge: Head of Research

### 2.5.2.10 Doctoral education

The department strives to reduce legal gender differences in representation of doctoral students. Officers in charge: Head of Department

The gender balance in legal gender of examination committees and faculty examiners for doctoral dissertations are regularly analysed per research subject. Corrective measures are implemented in cases of a gross imbalance over a 36 -month period. The aim should be to have an equal gender balance when assigning faculty examiners for defences of doctoral dissertations. In cases where a woman is not selected, a written report is submitted by the Doctoral Programme Directors Group (FUAP) and sent to the Head of Department. This report should not refer to a lack of candidates as a standard explanation. Instead, it should show that considerable efforts have been made and describe why these efforts failed. Note that even though the department does not formally appoint faculty examiners or examination committees, it is in our interest to evaluate and influence their gender balance. Officer in charge: Head of Department in collaboration with FUAPs.

### 2.5.2.11 Bachelor and master's education

Gender coaching and training in gender-sensitive teaching methods are offered to all teachers at the department. Officer in charge: Head of Department

### 2.5.2.12 Equal opportunities plan

The Equal Opportunities Plan is evaluated and revised annually. The plan is provided in both Swedish and English. Should disputes arise over how to interpret the different language versions, the Swedish version takes precedence. Officer in charge: The equal opportunities officer

### 2.5.2.13 Funding for measures to promote equal opportunities

The department has set aside funds for use with activities (proposed by employees at the department at application time) deemed positive for equal opportunities at the department. Calls for grant applications are made four times a year. The applications are compiled and ranked by the Equal Opportunities Group, after which the Head of Department makes the decision. The group may also propose initiatives that could be funded from this fund. A summary of applicants for funds and awarded grants are compiled and published on LäsIT and in other places at the end of each year. Officer in charge: Head of Department in consultation with the Equal Opportunities Officer

### 2.5.3 Action Plan 2024

We start from the principle that we approach all goals and actions in an intersectional way, with an understanding that every ground for discrimination can affect the experience of others. This plan identifies the strategic goals that represent our long-term aspirations and a number of related actions we plan for the coming year:

## Goal 1: Strengthen the effectiveness of the equal opportunities group as change agents at the Department

WHAT: The goal of this action is to improve the group's effectiveness as change agents at the department.

## HOW:

1.1 Update the website per our discussion on strategic goals at the 2023 group retreat, highlighting that we work to tackle all areas of discrimination and improve inclusivity for all. Ensure there is a Swedish language landing page, even if it just signposts to the English page (coordinator: Katie)
1.2 Update the form for reporting harassment and information regarding how to report harassment into the onboarding program for new staff (coordinator: Anna-Lena)
1.3 Develop the educational activities we engage in as a group in order to improve our understanding of individual differences (across different potential grounds of discrimination). For 2024 we pay particular attention to ethnicity and (trans)gender identity and expression.
> 1.3.1 Agree upon a shared text, film, article, podcast etc. to individually read/watch/listen to and discuss at group meetings for which no project proposal review is planned. Share via LäsIT (coordinator: Diana)
1.3.2 (Re-)consider how we can share ("internal") group resources, paying particular attention to ensuring student representatives can access these and know where to find them (coordinator: Katie, Anna-Lena + Hjalmar)
1.4 Try to understand how we can better facilitate student representative attendance at group meetings (coordinator: Hjalmar)
1.4.1 Ensure that PhD student representatives receive (and know how to properly document/request) prolongation/percentage departmental duty associated with the role (coordinator: Ivy)
1.5 Develop proposal for an Equal Opportunities Strategy Day at the Department (coordinator: Katie + input from all)
1.6 Map out key Departmental and Faculty actors (e.g. management groups, boards) who make decisions relating to equal opportunities, investigate how we can strengthen our connection with these groups in order to advocate the equal opportunities perspective (coordinator: Ivy)

Goal 2: Instigate and support work to tackle discrimination at the Department, considering the seven discrimination grounds identified in the Discrimination Act (Sex, (Trans)Gender Identity/Expression, Ethnicity, Religion or Other Belief, Functional Variation (Disability), Sexual Orientation, Age) in addition to social background as identified in the University's Missions and Goals.

WHAT: The goal of this action is to raise organizational awareness of discrimination and inclusion issues at the IT Department. Whilst the group is always cognisant of all $7+1$ grounds for discrimination, this year we particularly investigate the risks of discrimination based on ethnicity and (trans)gender identity and expression.

## HOW:

2.1 Update the wording on our project proposal calls in order to highlight breadth of potential areas of interest, including (but not limiting to) the $7+1$ discrimination grounds described above (coordinator: Katie + input from all)
2.2 Continue to support and enhance Departmental gender mainstreaming work, pushing for such work to include (trans)gender identity and expression
2.2.1 Investigate use of registered gender/sex marker as potential grounds for discrimination when used to make a hiring decision ${ }^{1}$. Explore suggestions on how to make this process more inclusive for applicants - include options to declare gender identity in addition to legal sex when hiring? (coordinator: Ana)
2.2.2 Investigate possibility of decoupling university records of which staff/students are male or female from registered sex in the Swedish population register (coordinator: Ivy)
2.3 Investigate means to identify potential risks of discrimination at the Department, as required by the Discrimination Act (e.g. project proposals, external expertise, student representative projects; always making sure that we help applicants be, e.g. GDPR compliant)
2.3.1 Investigate extent to which non-EU applications achieve equal access to job/PhD positions (e.g. survey to supervisors of different groups to see if/how many offers they've had to withdraw due to residence permits/visas being rejected or taking too long to process) (coordinator: Ana)
2.3.2 Investigate methods specifically for identifying discrimination risks associated with ethnicity (e.g. anonymous surveys; "contribute your experience" per the University of Cambridge "Everyday Racism" project) (coordinator: Katie + Lars)

[^0]2.4 Work to (better) integrate our efforts with other (e.g. faculty, central) gender mainstreaming work, pushing for such work to include (trans)gender identity and expression (coordinator: Katie)

## Goal 3: Work to generate and maintain an inclusive, accessible work and study environment that is welcoming to all

WHAT: The goal of this action is to go beyond (legally required) discrimination work and contribute to creating and maintaining a work and study environment that is welcoming to all.

## HOW:

3.1 Investigate how we can instigate and support Swedish language learning activities at the department
3.1.1 Investigate possibility/prepare proposal to Head of Department for funding external Swedish teachers coming to Ångström (coordinator: Katie)
3.1.2 Investigate how to instigate and support peer-to-peer Swedish practice (e.g. fikas, Swedish board games) considering international masters students as well as employees (which includes PhD students) (coordinator: Katie and Ana)
3.2 Investigate what "living, working and/or studying in Sweden" resources (e.g. information on facilities, entitlements, nations and student sections) are provided for/available to international students and faculty, consider whether we can fund related some literature purchases for our "internal" 5th floor library (coordinator: Hjalmar and Mengyu)
3.3 Investigate challenges faced by non-EU students and employees at the Department explore what kind of support can be offered (i.e. check if non-EU students/staff are aware of all the benefits they have in their contract, can the accessibility of the information be improved, should there be some kind of social support in the forms of "buddy system" investigate if the "mentor" system is working for this issue) (coordinator: Ana + Prashant)

## Goal 4: Delivering diversity-aware education

WHAT: The goal of this action is two-fold: i. to equip students with awareness of discrimination issues and tools to enact change, and ii. to continuously work towards creating a better learning environment for all.

## HOW:

4.1 Discuss plans for future iterations and potential frequency of the Social Consequences of Technology and Trustworthy AI course, particularly given plans to implement a local
course relating to the Duke University 3C Fellows Program ("Cultural Competence in Computing") (coordinator: Katie)
4.2 Investigate how student learning experience is currently assessed and see if we can get access to some results (e.g. getting summaries from our various directors of studies) and whether such data is stratified by e.g. international status, gender, disability etc. Explore whether data relating to equal opportunities can be added to such existing assessments. (coordinator: Prashant + Lars)
4.3 Support course teachers in including equal opportunities perspectives within/developing equal opportunities perspective with respect to their courses
4.3.1 Update project call wording to indicate these efforts might also be funded via the group funding scheme(s) (coordinator: Katie)
4.4 Explore possibilities to reach additional students via the group supported lecture on inclusion for BSc and MSc programs (coordinator: Katie)
4.5 Give a seminar about increasing the general awareness about the impact of impairments on teaching and mentoring for teachers and teaching assistants (based on workshop material from FIE 2023, coordinator: Lars).

Goal 5: Supporting career development from an equal opportunities' perspective

WHAT: The goal of this action is to support employee development from an equal opportunity perspective.

## HOW:

5.1: Contact those in charge of the IT mentorship program to check how PhD mentorship is arranged (and assess how it is working for all) (coordinator: André)
5.2: Investigate possibility of hosting career talks and related networking events (coordinator: Mengyu)
5.3 Collate, publish and maintain (i.e. via the website) a list of (inter)national mentoring and peer networks that might be of interest to those working/studying at the department (e.g. "Women in X" groups across the various ACM SIGs) (coordinator: Stefanos)

Goal 6: Promote and support equal opportunities aware research across the department

WHAT: The goal of this action is to support equal opportunities research, including EOfocused IT research as well as the integration of equal opportunities perspectives within all IT research activities at the IT Department.

## HOW:

6.1 Investigate the possibility to use equal opportunities funding to fund MSc students' projects of relevance to equal opportunities aspects in design and development of IT and AI methods (coordinator: Mengyu)
6.2 Offer assistance to support greater inclusion of equal opportunities perspectives in IT research that isn't itself explicitly pertaining to equal opportunities (e.g.: supplemental funding to existing projects to help them include a broader range of participants covering more of the $7+1$ grounds for discrimination)
6.2.1 Update wording on our project proposal calls and related advertising in order to include this within the project proposal scope (coordinator: Katie)
6.2.2. Discuss potential measures that could be used to discourage IT research that could lead to (in)direct harassment (e.g. the adoption of some form of anti-discrimination ethics policy) (coordinator: Ivy)

### 2.6 Financial targets for the funding of first-cycle education and research funding

Goal: To make education more cost-effective without compromising on quality or making teachers' working conditions worse.

Background: After the move to Building 10, the cost of the department's first-cycle education has increased significantly and in 2023 we gained a clearer picture of the cost increase as we had a full academic year's history. We can see a combination of a low subject factor, high costs for the building, a desire from the campus management to place a large part of the cost of Ångström's computer rooms with the Department of IT, etc. The plan to switch to 7.5 -credit module size courses that would have saved costs for the department was stopped by central regulation.

Analysis: All in all, this makes it impossible to continue teaching in the same way as before. If it is not possible to increase revenue, for example by increasing the subject factor, major cost savings will have to be made.

Impact: In practice, cost savings mean that the same educational tasks have to be carried out with less workload. To maintain quality and student access to teachers, mainly administrative tasks must be rationalised. This can be done, for example, by slightly streamlining the range of courses so that each individual teacher has a lower workload. Courses can also be merged, for example to reduce the number of retakes, etc.

## 3 The department's human resource management

### 3.7 Human resource management plan

## 1) Identification of:

a) Main strengths

The Department of Information Technology is one of the largest departments at Uppsala University and this provides an opportunity for breadth and depth within research, education and collaboration. In view of the fact that we are able to recruit lecturers and researchers in a large number of different research areas, we can also offer breadth and depth in our first-cycle courses. The students who choose to study here, many of whom are not from a Swedish background, are able not only to combine courses that suit their own interests, but also to acquire an educational profile that meets the requirements for an attractive, up-to-date education on the job market. Within research, we are successful at obtaining external research funding. We stand up well to international competition and have many valued collaborations with industry.

## b) Greatest challenges

The department's greatest challenges in terms of human resource management are 1 . The fast growing funding agreement targets in recent years, which are not matched by the same growth in research funding, and 2 . The difficulty of achieving diversity in recruitment, primarily in the recruitment of women for roles other than in administration.

1. Over time, it has become increasingly difficult to recruit new teaching staff since the ratio between the funding agreement target and research funding has become even greater. Between 2016 and 2020, the funding agreement target increased by $34 \%$. Expressed as full-time equivalents (FTE) per calendar year, the target increased from 1,022 FTE to 1,350 FTE. In the same period, our direct government funding for research and third-cycle programmes increased by $19 \%$, from SEK 81 million to SEK 96 million. This means that the terms of employment for all lecturers - including those we recruit - have worsened.
2. Over the years, the department has had a skewed gender ratio and to counteract this we carry out systematic, ambitious equal opportunities work, led by our Equal Opportunities Group. Despite this awareness and our active measures, wider recruitment is one of our greatest challenges. We have therefore initiated work in which we produce an overview and review of our recruitment processes. So far, we have developed a department-wide procedure for recruiting PhD students which was followed up in 2023. We have also recently reviewed our procedures for the search group with regard to teaching positions.

## 2) Analysis of:

a) Development areas

Society's interest in our areas of education and research have meant that we are able to offer our prospective teaching staff a range of attractive employment opportunities. We provide opportunities for relevant, up-to-date research and education in a professional, academic environment. One area we are currently focusing on is cyber security, in which
we have started extensive activities with good contacts with other parts of UU and surrounding society, and high interdisciplinary visibility in the most important international arenas.

Common funding is also used to provide support for department-wide operations in areas that are considered to be of future importance, either through an arena structure or as concentrated efforts in specific areas. The arena structure is flexible and a new arena is started as soon as it is required. Inactive arenas are closed down. A joint investment in sustainability is one of the latest specific area investments.

We continue to have deep commitment and responsibility within faculty-wide, interdisciplinary activities such as AI4Research, SciLifelab, Uppmax, MTSI, eSSENCE, CIM.

## 3) Strategy for long-term human resource management

a) Career paths and skills development

All staff at the department are offered performance reviews in which skills development is discussed. For PhD students, there is a special focus on following the individual study plan and analysing and explaining departures from it. We offer internal support for becoming an excellent university teacher and achieving the skills required to become a principal lecturer and professor.
For our associate senior lecturers, there is a department-specific programme with activities aimed at facilitating meetings and discussions about challenges and opportunities. During the programme, career paths and their various steps will be highlighted and clarified. This has been much appreciated.
For the administrative staff, skills development efforts are focused on specific subjects. Course administrators take part in networks and workshops within their area, and our finance officers and HR generalists participate in the training activities that are offered internally at the university. If necessary, external training courses are procured.

## b) Priorities

Our long-term priorities in terms of human resource management mostly involve the ability to offer attractive jobs and conditions to teaching staff and researchers in our areas of development mentioned in item 2a above.

Administrative support includes continual monitoring of what support is required for both core activities and departmental management. New roles have been created to meet new needs.

## 4) Planned actions

a) Action plan based on the responses in items 1-3

To achieve goal 2.1 Education, to bring students back to campus, we plan to implement the following:

- Record attendance - are there patterns, which courses/teachers manage to motivate high attendance and how, etc.?
- Inspire our teachers to adopt pedagogical practices that attract students to attend.
- Use scientific methods to investigate how attendance on campus can contribute to better learning and adapt teaching to the methods that have demonstrated the best impact.

To increase the willingness of PhD students to engage in collegial contexts in the department (see 2.3 PhD studies), we will set up a working group with one PhD student from each division. In 2024, the working group will investigate how to engage the PhD student community in activities related to PhD students at the department.

To achieve goal 2.6 , to make education more cost-effective without compromising on quality or making teachers' working conditions worse, we plan the following:

- Set up a working group led by the head of education to look at finances, the viability of courses, the opportunities for synergies, mergers, etc.
- The management team and the director of studies group are collaborating on a new proposal for the organisation of tasks that takes into account a teacher's entire workload, and is not based on individual tasks.
- Explore whether core funding can work both financially and in practice to ensure that all teachers are involved in teaching and the 'pedagogical conversation'.

Previously, the department's human resource management took place partly at departmental level (for example shared procedures for the search group and systematic equal opportunities work) and partly at division/unit level (for example planning prior to retirement). We now intend to systematise this work further.

- We have been using a department-wide recruitment process for PhD students for just under a year. This is partly to ensure wider recruitment but also to guarantee the quality of the process. The process was followed up in 2023.
- Our instructions to the search group have been revised to ensure wider recruitment as far as possible, and to achieve a more qualitative search group process in the recruitment of teaching staff in general.
- We have appointed a working group to review how we can improve our human resource management at departmental level. Examples of measures include taking greater financial risks in terms of recruitment (using some external funding as the basis for recruitment) and recruiting more lecturers who are expected to carry out a greater proportion of teaching as part of their duties.


## b) Potential need for support from the university centrally

In general, the university provides good support centrally in the form of templates and support material. We have also received support from the HR department on a previous occasion on one of the department's strategy days when we focused on recruitment. The HR department provided a review of skills-based recruitment. In our experience, support is available if needed.

The area in which we would particularly like support at the moment is in achieving a better balance between research funding and funding agreement targets.

## 1. - Account entries for IT jointly for 2019-2024

| Function | Account <br> entry 2019 | Account <br> entry <br> 2020 | Account <br> entry 2021 | Account <br> entry 2022 | Account <br> entry 2023 | Account <br> entry 2024 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Management |  |  |  |  |  |  |
| Head of <br> Department | $75 \%$ | $75 \%$ | $75 \%$ | $75 \%$ | $80 \%$ | $80 \%$ |
| Deputy Head <br> of <br> Department | $0 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $5 \%$ |
| Head of <br> Division <br> CSD | $45 \%$ | $45 \%$ | $45 \%$ | $45 \%$ | $50 \%$ | $50 \%$ |
| Head of <br> Division <br> DoCS | $50 \%$ | $50 \%$ | $50 \%$ | $50 \%$ | $55 \%$ | $55 \%$ |
| Head of <br> Division <br> Syscon | $30 \%$ | $40 \%$ | $40 \%$ | $45 \%$ | $50 \%$ | $50 \%$ |
| Head of <br> Division <br> Vi3(incl. <br> CER) | $50 \%$ | $50 \%$ | $55 \%(65 \%)$ | $65 \%$ | $70 \%$ | $70 \%$ |
| Head of <br> Division <br> TDB | $50 \%$ | $50 \%$ | $50 \%$ | $50 \%$ | $55 \%$ | $55 \%$ |


| Research |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Head of Research | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% |
| PhD studies |  |  |  |  |  |  |
| Director of PhD studies | 10\% | 10\% | 15\% | 10\% | 10\% | 15\% |
| Collaboration |  |  |  |  |  |  |
| Head of Collaboration and Outreach | 0\% | 10\% | 15\% | 15\% | 20\% | 20\% |
| Communication |  |  |  |  |  |  |
| Web group | 2x5\% | 7\%+2x5\% | 5\% | 5\% | 5\% | 0\% |
| Working environment |  |  |  |  |  |  |
| Mentors | Coordination <br> +3 senior faculty staff $+4-5 \mathrm{PhD}$ students @ 5\% | 5\% <br> coordination + 2 senior faculty staff $+4 \mathrm{PhD}$ students @ 5\% | $\begin{aligned} & 5 \% \\ & \text { coordination } \\ & \text { + 2 senior } \\ & \text { faculty staff } \\ & \text { + 4 PhD } \\ & \text { students @ } \\ & 5 \% \end{aligned}$ | $\begin{aligned} & \hline 5 \% \\ & \text { coordination } \\ & +2 \text { senior } \\ & \text { faculty staff } \\ & +4 \text { PhD } \\ & \text { students @ } \\ & 5 \% \end{aligned}$ | 5\% coordination +2 senior faculty staff $+5-6 \mathrm{PhD}$ students @ 5\% | 5\% <br> coordination <br> +3 senior <br> faculty staff <br> $+5 \mathrm{PhD}$ <br> students @ <br> 5\% |
| Equal opportunities |  |  |  |  |  |  |

Faculty of Science and Technology
Department of Information Technology

| Equal <br> Opportunities <br> Officer | $10 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $10 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Entries within UGA

| Function | Account entry 2019 | Account entry 2020 | Account entry 2021 | Account entry 2022 | Account entry 2023 | Account entry 2024 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Management UGA |  |  |  |  |  |  |
| Head of Education | 30\% | 40\% | 30\% | 30\% | 30\% | 30\% |
| Assistant Head of Education |  |  | 10\% | 10\% |  | 10\% |
| Directors of studies (including special tasks) | $\begin{gathered} 3 \times 48 \%+2 \times 24 \\ \% \end{gathered}$ | 4x50\% | $4 \times 50 \%+25 \%$ | $\begin{gathered} 3 \times 50 \%+ \\ 2 \times 25 \% \end{gathered}$ | $\begin{gathered} 2 \times 55 \%+50 \\ \%+40 \%+25 \\ \% \end{gathered}$ |  |
| Directors of studies (excluding special tasks) |  |  |  |  |  | $\begin{gathered} \text { CSD 45\% } \\ \text { DoCS 25\% } \\ \text { SysCon 25\% } \\ \text { TDB 45\% } \\ \text { Vi3 35\% } \\ \hline \end{gathered}$ |
| Special tasks |  |  |  |  |  | Education <br> Quality 10\% <br> Recruitment 25\% <br> Staffing 5\% <br> Pedagogical development $10 \%$ |
| Thesis coordinator | 20\% | 20\% | 20\% | 20\% | 20\% | 25\% |
| Responsibility for master's programme |  |  |  |  |  |  |
| DVM | 15\% | 18\% | 17\% | 17\% | 17\% | 17\% |
| - SS | - | 2\% | 2\% | 2\% | 2\% | 2\% |
| TBM | 13\% | 15\% | 15\% | 15\% | 15\% | 15\% |
| ISM | 15\% | 15\% | 15\% | 15\% | 15\% | 15\% |
| DSM | - | 15\% | 15\% | 15\% | 15\% | 15\% |
| IMM | - | 15\% | 15\% | 15\% | 15\% | 15\% |


[^0]:    1 "Även den som avser att ändra eller har ändrat sin könstillhörighet omfattas av diskrimineringsgrunden kön." - Diskrimineringslagen. Trans men and women (anyone who either has or plans to change their registered sex) is included in the definition of sex. A lot of decisions that use this exemption use registered sex to determine whether someone is male or female, but this doesn't actually match how the discrimination act defines sex and it could lead to some candidates, particularly trans women in male-dominated fields, facing additional barriers.

