

# The PhD Study Handbook ---Microdata Analysis Doctoral programme





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# Introduction

First of all, congratulations on becoming a PhD student! It is an achievement, and your acceptance marks the start of a longer academic journey. Doctoral studies are a time of creativity, development and freedom. Yet like all other forms of education and employment, doing a PhD also involves duties and rights. The work we do can be both rewarding and stressful, it can be draining but also energizing. Most of us work by ourselves, on our own projects, but that does not mean that we work alone. There is much support to be had at the Department and at Dalarna University.

This handbook is intended to be a document that gathers relevant information from various sources. It provides a complement to the General Study Plan (GSP). The handbook will not cover everything, but it will instruct, regulate and guide you to have a better overview conducting PhD studies. Furthermore, since the handbook depends on documents that are liable to change over time, certain things may become outdated. The content is advised by the Research Education Committee (FUN) in DU, what is stated in the document will be updated in case of changes.

More general information and guidance for PhD students in Sweden can be found in the national PhD handbook by SFS: <u>https://phdhandbook.se/</u>

Good luck with your research!

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#### Abbreviations and explanations

Below are abbreviations that are boards and committees that have various roles at Dalarna University relate to doctoral education and the organization as a whole, as well as some abbreviations used in this handbook.

#### HDa

Högskolan Dalarna (Dalarna University).

#### AFU

University Appointments Board / Anställningsförslagsutskottet

FUN

Doctoral programmes Board / Forskarutbildningsnämnden

#### UFN

University Faculty Board / Utbildnings- och forskningsnämnden

#### IFU

School Research Committee / Institutionens forskningsutskott

#### BFU

Preparation for Doctoral programme / Beredning Forskarutbildning

#### MDA

Microdata Analysis

#### GSP

General Study Plan.

#### ISP

Individual Study Plan.



#### Important contacts

Below are contacts that on various position that can provide different support.

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# 1. Doctoral education in Microdata Analysis

The doctoral education in the subject Microdata Analysis is one of four doctoral programmes at Dalarna University. The other three doctoral programmes are in the subjects Pedagogical Work, a Health and Welfare with Focus on Evidence-Based Practice, and Resource-Efficient Built Environments

### 1.1 Description of the Subject Microdata Analysis

Microdata Analysis (MDA) aims to understand complex dynamical systems on all levels, ranging from a holistic view about a phenomenon or process down to the elementary particles and essential causal relationships comprising systems. MDA does not focus on any specific kind or form of data but is instead a transdisciplinary approach, dealing in principle with data from any other field of research. This approach is possible because the rules and methods of analyzing data are generalizable and are independent of the area they are applied to. At the same time, selection of methods, research, and interpretation of results must be made in the context of a specific field of study, requiring contextual knowledge. Use data-based methods in problem-solving research is also within the subject in microdata analysis.

Simply put, Microdata Analysis seeks to answer the question: "How to analyze otherwise difficult to interpret data to understand complex dynamical systems at their elementary level"? However, this question defines three interdependent research domains: theoretical understanding of complex dynamical systems, method development, and translational research. Method development and the analysis of complex dynamical systems complement each other, and scientific research in these domains directly contributes to the heart of MDA. However, MDA often deals with data and data analytical questions from different research disciplines. Consequently, the translational research part of MDA is interested in analyzing data itself and how it leads to a better scientific understanding of our world. Insights in this domain not only contribute to MDA but make contributions to other disciplines as well. These three approaches are highly synergistic and together explain the transdisciplinary character of MDA. Consequently, a thesis that does not analyze a complex dynamical system, makes no reflection or analysis of the data analytical methodology, or does not introduce or apply new methods to an otherwise established field, would fall outside of MDA.

# 1.2 Objectives of postgraduate education

The complex processes in business and industry and the built environment that are the focus of study in this field can be schematically illustrated using a figure (see Figure 1). The first part comprises the collection of data and requires knowledge and understanding in various measurement techniques as well as design of experiments. The second and third parts comprise data capture, data processing and data storage, and require knowledge and understanding in advanced database methods as well as comprehension of the importance of metadata. The fourth part is the analysis, often in



the form of mathematical modelling of data that requires skills in statistical modelling, forecasting methods, simulation techniques, visualization and data mining. The fifth part comprises decision-making and action that requires an understanding of techniques such as benchmarking and counterfactual analysis, as well as economic decision-making and the dissemination of information within organizations.



Figure 1: Microdata chain

Doctoral Studies in Microdata Analysis aims at students who wish to acquire skills in all parts of the process and in-depth expertise in a specific domain.

#### 1.3 Extent of credits and time

The doctoral programme comprises four years of full-time studies and ends with a PhD. Halfway through, education can end with a Degree of Licentiate. The programme consists of courses and a dissertation work where an individual research project is carried out that aims to generate new knowledge in a scientifically interesting and relevant field.

The doctoral education for Degree of Licentiate comprises a total of 120 credits divided into courses totaling 45 credits (30 credits mandatory and 15 credits elective) at doctoral education level and a licentiate thesis of 75 credits. The doctoral education for Degree of Licentiate corresponds to 2 years of full-time studies.

The doctoral education for Degree of Doctors comprises a total of 240 credits divided into courses totaling 60 credits (30 credits mandatory and 30 credits elective) at doctoral education level and a dissertation of 180 credits. The doctoral education for Degree of Doctors corresponds to 4 years of full-time studies.

Doctoral studies may be conducted part-time, but on average must not be less than 50% of full-time studies.



#### 1.4 Mandatory postgraduate courses

Course work is usually concentrated in the early part (the first and second year) of doctoral study. The mandatory courses are given in English, once a year. The mandatory courses are:

- Data collection and data quality (MIKR002) autumn semester (5 credits).
- Economics of leadership for PhD students (FMI2222) autumn semester (7.5 credits).
- Complexity and Operations Research for PhD students (FMI2223) spring semester (7.5 credits).
- Statistical and machine learning (FMI2224) autumn and spring semesters (10 credits).

The PhD student, together with the supervisor panel (at least with the principal supervisor), chooses when and in what order it is appropriate to take the courses.

Mandatory courses are applied for when the course has been opened for registration. The application is sent out to all PhD students when relevant. The application is sent to the doctoral programmes coordinator as instructed in the application.

# 1.5 Elective doctoral courses

In addition to mandatory courses, courses in the subject, or relevant to the research area, courses comprising 30 credits for Degree of Doctors or 15 credits for Degree of Licentiates are required. The selection of the courses should enhance the knowledge and skills in developing the research work and should be listed in the ISP. The PhD student chooses the courses together with the principal supervisor. If a course is on a master lever, a reading course, and/or taken outside Dalarna University, it must be credited and the form for this is available on Learn and the staff webpage (medarbetarwebb), more details can be found in Section 7.

The pedagogic courses <u>Teaching and Learning in Higher Education</u>: <u>Qualifying</u> <u>Education 1 (APE277)</u>, <u>Teaching and Learning in Higher Education</u>. <u>Qualifying</u> <u>Education 2 (APE26A)</u> could be good elective courses.

Unfortunately, there is no portal for easily finding postgraduate courses. Sometimes higher education institutions write to other higher education institutions when courses are available, and this is communicated to PhD students. Therefore, one usually finds the courses you need by exploring higher education institutions or through tips from other PhD students.

# 2. Admission to the doctoral programme

#### 2.1 Application requirements

Applications for potential PhD students can be made in three ways:

• The person is applying for an advertised doctoral position.



- The person has a certificate of funding, corresponding to two years of fulltime doctoral education to a Degree of Licentiate or four years of full-time doctoral education to a Degree of Doctor via external funding. The certificate must be a document from an employer who guarantees funding, and that the person is allowed to conduct research studies within the framework of the employment.
- The person is admitted to a doctoral programme and willing to transfer from another academic institute.

To be admitted to doctoral studies in Microdata Analysis, the applicant must meet both the general entry requirements and the specific entry requirements, and have the capacity required to benefit from doctoral studies in this field. The applicant has the right to request that their eligibility for admission to the doctoral programme be reviewed and communicated as an advance notice to the applicant.

#### **General Entry Requirements**

The General Entry Requirements for admission to doctoral studies are as follows: An applicant meets the general entry requirements for third-cycle (doctoral) courses and programmes if they:

- 1. have been awarded a second-cycle (Master's) qualification,
- 2. have satisfied the requirements for courses comprising at least 240 credits of which at least 60 credits were awarded in the second-cycle, or
- 3. have acquired substantially equivalent knowledge in some other way in Sweden or abroad.

#### **Specific Entry Requirements**

Specific Entry Requirements require that the applicant has successfully completed at least five courses in the following subjects:

database systems or data warehousing – 7.5 credits data analysis and visualisation – 7.5 credits statistical learning or machine learning – 7.5 credits programming – 7.5 credits mathematics – 7.5 credits economics – 7.5 credits optimisation techniques or probability theory – 7.5 credits decision theory – 7.5 credits

#### 2.2 Admission process

Selection from among applicants who meet the general and specific requirements shall be made with regard to their ability to conduct the education. If the potential



PhD student meets the above requirements, the following documents must be sent to the Director of Doctoral programme in Microdata Analysis:

- 1. Form for admission to doctoral education that has been properly filled in.
- 2. CV with academic degrees, professional experience and other relevant qualifications.
- 3. Certificate verifying the eligibility for postgraduate education.
- 4. Financing certificate from employer or another funder.

The potential PhD student and the preliminary principal supervisor specify the start date for when doctoral education will begin if admission is approved.

# 2.3 Admission decision

The document titled Antagningsordning för Högskolan Dalarna – utbildning på forskarnivå<sup>1</sup> regulates admission to doctoral studies at Dalarna University. Admission is to either the Degree of Licentiate (120 credits) or the Degree of Doctor (240 credits). Admission to doctoral level studies can be for either the egree of Licentiate or the Degree of Doctor. The Head of School decides on admission or non-admission based on the evaluation of Director of doctoral programme.

After admission, the Director of doctoral programme contacts the PhD student and the preliminary principal supervisor for an initial conversation with introductory information.

# 3. Individual study plan

For each PhD student, an ISP must be established that includes the university's and PhD student's commitments and a timetable. The ISP contains a research plan for the licentiate thesis or thesis work, planned supervision for the coming year, planned courses during doctoral education and planned activity for the entire doctoral education. The PhD student's ISP shall be established no later than three months after the start date of the doctoral programme. The director of doctoral programme should stimulate the process of establishing the ISP. If any unexpected situation occurs, the director of doctoral programme should support and help in solving the problem so that the ISP can be established without influencing the study plan of the PhD student.

#### 3.1 Fill in an ISP

The process of filling in the ISP is conducted jointly by the PhD student and the supervisor panel. Please refer to the ISP form and the "Instructions to fill out the ISP<sup>2</sup>" for further details. It is important to choose Licentiate and PhD if you intend to have both degrees, it is ok to only choose PhD if one does not intend to have a Degree of Licentiate.

<sup>&</sup>lt;sup>1</sup> Antagningsordning – utbildning på forskarnivå, Dnr. C 2022/1579, Regel: Högskolestyrelsen, 2022-12-16

<sup>&</sup>lt;sup>2</sup> Instructions: Individual Study Plan (ISP) for PhD students Admitted to Dalarna University, Decision: FUN (Research Eduaction Committee), Dnr: HDa 1.2–2017/1573.



In Section 6 of the ISP form, it is important to state the research plan to fulfill the thesis work well. Normally, the research plan shall include the following: background, identified knowledge gap/problem formulation, purpose, preliminary research questions, potential method, ethical considerations, significance/potential impact, and an overall time plan.

If some sections does not apply (for example, the first ISP), then state why briefly, please do not leave it empty.

In the case of a PhD student who has been admitted to a specific project with external financing or who has another place of employment than Dalarna University, the Individual Study Plan should have a high level of detail. This is to mitigate the risk of the PhD student ending up in a position of conflict in terms of the outcomes of the doctoral programme and the goals of the project and employer.

Once the ISP is ready, it should be sent to the Director of doctoral programme for check and comments, who will then send the approved version to the Doctoral programmes Coordinator, who may also have comments, then the final version with all comments addressed will be registered and archived by the Doctoral programmes Coordinator. This process does not apply to the first ISP that is prepared at the beginning of admission, please refer to the following Section 3.2.

# 3.2 Approvement of the ISP

The Head of School is to approve the first ISP, upon admission, decision is made in accordance with the existing internal routines of the school<sup>3</sup>. The review undertaken in the existing internal routines will assess whether the scope, content, breadth and depth of the PhD student's research plan and course planning are sufficient and well suited for 4 years (2 years at Degree of Licentiate) doctoral studies and can lead to a PhD (or a Degree of Licentiate).

Thereafter, any updated version of the ISP will be approved by the Director of doctoral programme. If the Director of doctoral programme is also a supervisor (principal or co-) of a PhD student, the Head of the doctoral subject should review the ISP and approval with the signature.

In the case of a PhD student who has another employer, then the manager there must approve the entire ISP so that the programme, as described, can proceed. Signed documentation demonstrating the manager's approval of the ISP must be included as an appendix to the ISP.

# 3.3 Update the ISP

All PhD students admitted to the programme must update the individual study plan regularly (usually on a yearly basis) or when there is a need. The update of the ISP also contributes to quality assurance and legal assurance of the PhD student's doctoral

<sup>&</sup>lt;sup>3</sup> Revidering av handläggning forskarutbildning, Dnr: C 2023/50, Beslut: Prefekt, 2023-01-17.



education and to be a driving force for quality through annual evaluation. Usually, the update is conducted annually together with the principal supervisor and cosupervisor(s). However, if it requires, the ISP can be updated more frequently. The ISP shall be a dynamic document whose purpose is to follow up:

- When and why certain deviations occurs.
- Planned and completed activities (courses, research projects, etc.) in doctoral education.
- Achievement of objectives based on the degree scheme.

The director of doctoral programme should control the status of the update and followup on updates, a table for managing this is accessible through a Teams file <u>ISP update</u> <u>schedule.xlsx</u>.

The ISP is reviewed and signed by the PhD student and the principal supervisor and sent to the Director of Doctoral programme for approval and signature, the ISP should be finally sent to the Doctoral programmes Coordinator for properly registered in the system.

If there is change in the supervision team, change of topic, cases that may or have caused major deviation from the previous version of ISP, an update of ISP should be conducted immediately.

### 3.4 Extension of doctoral studies

A person may be employed as a doctoral student for a total of no more than eight years. The PhD student may receive an extension of the doctoral education period corresponding to the time when the PhD student has been ill, on parental leave, had care of children, military service or held positions of trust within trade unions and student organizations. The ISP must clearly state the activity level for each semester. Activity level is the time devoted to the education, i.e., to the project and courses. Dalarna University is obliged to submit information on doctoral students' activity level, study funding and degree to Statistics Sweden twice a year. All doctoral students admitted to a doctoral programme in DU must therefore report information on activity and funding to Ladok every six months.

#### 3.5 Revocation of right to supervision and other resources

If the PhD student materially disregards his/her ISP commitments, the principal supervisor must notify the director of doctoral programme, who consults with the subject representative and the Head of School. It is the Vice-Chancellor of Dalarna University who decides whether the PhD student should be disenrolled, no longer be entitled to supervision and other resources for the doctoral education. The resources may not be withdrawn for the time the doctoral student is employed as a doctoral student. Doctoral students can appeal to the Vice-Chancellor (Rektor) to get their right to supervision and other resources back.



A PhD student are entitled to supervision that will give you the guidance and support you need during your time as a PhD student. Supervisors should allocate time and opportunity to address the issues that you want to discuss. A specific supervision plan can be stated in your ISP and should be updated accordingly.

Questions concerning the work environment and your contract are, however, not your supervisor's responsibility. These types of questions should be discussed with your director of the department.

PhD students with employment other than at the Dalarna University, it is recommended that a co-supervisor or mentor or examiner to be arranged from the employer for quality assurance.

As part of the continuous educational development for supervisors within the MDA doctoral education, there is a supervisors' committee.

The purpose of a supervisors' committee is to provide support for supervisors by sharing experiences with each other, but also by gathering others' views and experiences regarding particularly important issues. Questions that contribute to the development of the MDA doctoral programme are also raised for discussion in this forum.

#### 4.1 Decision on supervisor

For every PhD student, one Principal Supervisor and at least one Co-Supervisor must be appointed. In connection with admission, a preliminary Principal Supervisor should be appointed. The choice of intended supervisors shall be based on competence in research subject, method, pedagogy, and time space for supervision. Together with the individual study plan is established, the Principal Supervisor and Co-Supervisor(s) should be formally appointed by the Head of School. If there are special reasons, the co-supervisor may be appointed later.

#### 4.2 Supervisor panel

The supervisor panel should consist of one principal supervisor and at least one cosupervisor. A Principal Supervisor must hold at least the qualification of Docent and have completed the supervisor training course. The Principal Supervisor is to ensure a supervisory team that together can provide the PhD student with scholarly support so that the student can successfully complete the doctoral studies. A Co-Supervisor must hold at least a Degree of Doctor and have completed the supervisor training course or have a documented plan to acquire such training within the first year of the supervision.

#### 4.2 Supervisor's responsibility

The supervisor group's responsibility is to support and guide the PhD student throughout the doctoral programme. The principal supervisor is the person who has been offered and taken the main responsibility for the PhD student's doctoral



education and progression, in consultation with the assistant supervisors. This means that the PhD student receives the time, support and help that is necessary and deemed adequate. The Co-Supervisors are responsible for the tasks agreed with the PhD student and the principal supervisor. In practice, this may mean that a Co-Supervisor takes main responsibility for different parts of the PhD student's education and thesis or dissertation work.

# 4.3 Time and content for supervision

The number of supervision sessions may vary from PhD student to PhD student as well as where in the process the PhD student is located. A good rule of thumb may be to establish a guidance plan for the upcoming semester on supervisor sessions at the end of each semester, preferably once a month. The PhD student is responsible for booking and implementing supervision times, as well as for material for supervision to be available to supervisors well in advance as agreed. All students, both PhD students and supervisors, must be informed and prepared for each supervision session. After the supervision session, the PhD student documents what has been agreed in the form of memos.

Supervision covers all work from the preparation of the research plan until the completion of the thesis. PhD students are entitled to supervision of 128 hours per year, which corresponds to 7.5% of full-time. Most of this time (5%) is normally allocated to the Principal supervisor, but it can vary over time how the total supervision time is allocated in the supervisor group.

The supervision usually include:

- Supervision meetings with the PhD student.
- Preparations in the form of loading material, contact by phone, email, etc.
- Participation in research seminars, summer schools, conferences
- Administration and contact with experts before and at seminars, licentiate seminars or defense.
- Participation in the collegium of supervisors and supervisor activities.

#### 4.4 Issues in the PhD student-supervisor relationship

Problems can arise in the PhD student-supervise relationship during postgraduate studies. If problems arise, the PhD student and supervisor should discuss this in order to find constructive solutions. In these conversations, the supervisor has greater responsibility for finding good solutions. If there are problems that the PhD student does not feel that they can/want to discuss with a supervisor, s/he should contact the director of doctoral programme. In common, the PhD student and director can then find strategies to get a solution that works.

If the director of doctoral programme is unsuitable (such as serving as a supervisor for the student) to solve the PhD Student's conflict. The head of the doctoral subject, deputy head of school, head of school can step in and provide support.



Doctoral students have the right to request a change of supervisor. Unless there are insurmountable issues, the supervisor (particularly the principal supervisor) and the PhD student are strongly encouraged to work through the differences as it is for the best interest of the student to have consistent supervision and the project does not get interrupted due to change of supervision. The change of supervisor can sometimes entail a change of thesis topic which can have effects on the students' progress.

# 4.5 Change of supervisor

According to the Higher Education Ordinance, a PhD student has the right to change their supervisor if the student so requests<sup>4</sup>. The procedure should follow the rules applied for changing supervisors. There are various reasons for changing supervisors:

- The PhD student wants to change supervisor. The PhD student has the right to change supervisor without giving reasons. Contact is then made with the director of doctoral programme. After talks with the PhD student, a solution is found together with the PhD student and the remaining supervisors.
- Supervisor wants/must cancel a supervisorship. If supervisors need to be replaced, this can be discussed with the director of doctoral programme unless the PhD student and the remaining supervisor group find a solution.
- Supervisors want to shift roles as supervisor between principal supervisor to co- supervisor. A shift in supervisorship should always be based on the PhD student's best interests and be anchored throughout the supervisor collegium. A change of supervisor should preferably not take place in the last year (calendar year) before a licentiate seminar or the public defense.

In cases where supervisor change refers to the change of supervisor, once the Head of School has made the decision, a new ISP should be submitted to the director of doctoral programme with any changes in the project plan visible.

# 5. Working environment

#### 5.1 Follow-up meeting

Once a year, the PhD student has a follow-up meeting with the Director of doctoral programme. This talk takes place inspiring and consists of a 60 min conversation on the psychosocial study situation and the progression of the doctoral study.

# 5.2 Social events

Twice a year, PhD students are invited to a social event. The purpose of this event is to have a good time together with other students, by sharing lunch and practicing a physical activity. It is also an opportunity to have an informal discussion on important matters for the students. Also, once a year, there is an introduction day for new PhD

<sup>&</sup>lt;sup>4</sup> Regler för byte av handledare, Dnr. C 2021/835, Regel: UFN, 2019-06-12.



students in order to share information on several topics about 'being a PhD at HDa', such as: ISP, support, contract, right and duty, ethics, among others. FUN also arrange such an introductory course regarding various aspects of a doctoral study. This is a joint event involving all the PhD programmes at HDa.

Within the MDA doctoral programme, there is a theme talk every month that all PhD students meet together to discuss a specific theme that varies from how to form a response letter to vacation plans. Once or twice a year, there is usually PhD students' event that organized by the four doctoral programmes, all PhD students from DU meet together for fun activities.

# 5.3 PhD student representatives

PhD students at the University have representatives in various committees and councils. There are selected PhD student representatives in the University Faculty Board (UFN), the Doctoral programmes Board (FUN) and the University Appointments Board (AFU) and these may come from one of the four doctoral programmes at Dalarna University. In the Department Management and IFU-BFU, there are PhD student representatives from the doctoral education in Microdata Analysis. The PhD students' collegium is responsible for nominating the representative and the student union make the decision on the appointment.

### 5.4 Learning spaces and digital meeting places

As soon as the PhD student has received a user account at Dalarna University, the PhD student and supervisors are admitted to the Learn room of the PhD programme in Microdata Analysis. In the Learn room you will find all the instructions, rules and templates that are relevant during the doctoral studies period. The supervisors who are not employees of Dalarna University will receive information from the supervisor group who are employed at Dalarna University. The <u>staff web</u> should contain most of what you might need as a doctoral student and it is available to all internal and external, please check <u>Doctroal studies Microdata analysis - Högskolan Dalarna (du.se)</u>, it is only available in Swedish currently.

# 5.5 Expenses

All PhD students receive financial support for trips (e.g., conferences), literature, equipment and other things needed during postgraduate studies, which is called a 'backpack'. Operating funds in the project shall not be financed by the backpack funds. Supervisors have a great responsibility to ensure that there are the necessary resources to carry out the project. Applying for funding externally are also important experiences for the PhD student (see 12. Seeking research funding)

#### 5.6 Personal information on HDa website

Throughout the doctoral education, the PhD student must actively update his/her research text and personal information on his/her homepage on the university website. Whether the PhD student is employed or not, it is important that they are seen and can



be found as PhD students in Microdata Analysis. The text should contain information about the educational background and the ongoing thesis work (e.g., publications). It is also nice if the PhD student has a photo on her/his personal page. The Office of Marketing and Communication helps with personnel photography.

# 5.7 Research support

At Dalarna University, research support during the research process is collected and presented on *Research Support* on the staff web in Swedish <u>Forskningsstöd</u> - <u>Högskolan Dalarna (du.se)</u> and in English <u>Research Support</u> - <u>Dalarna University (du.se)</u>

# 5.8 Sustainable perspectives

To not only cope with the Sustainable Development Goals developed by the United Nations but also to cope with the sustainable development<sup>5</sup> visions within the school and the Ph.D. programme, the students are encouraged to develop and participate in arenas for activities within sustainable development. For example, taking courses related to sustainability that can broaden and deepen the knowledge in sustainable development; participating in conferences with themes related sustainability issues; as well as attending seminars that can reflect on ongoing Ph.D. projects in relation to long-term sustainable development issues.

There are several occasions and activities that can be suggested: for example, the Research Collegium for the Advancement of Sustainability (RECAST) <sup>6</sup> in Dalarna University to contribute to the advancement of sustainability. Courses that are organized by the Global Challenges University Alliance (GCUA 2030), which is a network of university partners from across the globe with a common vision of contributing to sustainable, global development.

# 5.9 If and when problems occur

Problems can occur at any time and for various reasons. Who one can turn to depends on the cause and nature of the problem. Supervisor(s), director of doctoral programme and director of the department can be a good sounding board. Sometimes, however, one may need to talk to someone completely outsider. Students employed at Dalarna University should then contact the director of the department who can ensure that the contact is connected with the appropriate support. Students' Union, PhD representative can also provide good support. In cases where the PhD student is not employed at Dalarna University, the PhD student can turn to the Student Health Service at Dalarna University.<sup>7</sup>

<sup>&</sup>lt;sup>5</sup> <u>https://www.du.se/en/about-du/this-is-dalarna-university/sustainable-development/</u>

<sup>&</sup>lt;sup>6</sup> <u>https://www.du.se/en/about-du/this-is-dalarna-university/sustainable-development/recast/</u>

<sup>&</sup>lt;sup>7</sup> https://www.du.se/sv/studentwebb/stod-och-service/studenthalsan/studentkurator/



# 6. Employment as a PhD student at Dalarna University

Some PhD students are employed at Dalarna University and others are not. This section concerns PhD students who have a position at Dalarna University where they have a doctoral position with departmental service.

The PhD student may be employed as a PhD student for a maximum of eight years. However, the total length of employment may not exceed the full-time doctoral education of four years, for a Degree of Doctor admission, and two years, for a Degree of Licentiate admission. From these times, deductions must be made for the study time when the PhD student has not been employed as a PhD student.

However, it is possible to derogate from the rule on the total length of employment and to allow a longer period of employment. For this to be possible, there must be special reasons.

Special reasons include leave due to illness, parental leave, military service, or positions of trust within trade unions/student organizations.

### 6.1 Placement and responsibilities for work environment

A PhD student employed at Dalarna University is placed organizationally within the department that is suitable based on profession and thesis subject and should be discussed between PhD students, supervisors and department heads. It is the head of the department who is the PhD student's manager and has the responsibility for the PhD student's work environment and thus is responsible for introduction, and regular follow-up of work performance, as well as departmental duties linked to the position.

#### 6.2 Workplace

All PhD students employed at Dalarna University will have a workplace. When the admissions process is completed, the PhD student should receive:

- DU account.
- Access card.
- Technical equipment such as computer and mobile phone and an office (for PhD students employed at Dalarna University).

In Microdata Analysis, the PhD students usually share an office with another PhD student. The policy of sharing a room is implemented to avoid isolating the students and promoting a team spirit. Discussion about the workplace is preferably led by the head of department that the PhD student has and otherwise with the director of doctoral programme.

Furnishing of rooms and technology, i.e., computer, screen(s), certain software, ... is paid by the department where the PhD student is employed.

#### 6.3 Ladok



Dalarna University uses the study documentation system Ladok, where all students are registered. Registration occurs when you are admitted to the programme. The following information is registered in Ladok:

- Personal information, i.e., name, address, and personal identification number
- Date of admission
- Doctoral programme

• Qualifications, i.e., at which university/college you have completed your undergraduate degree or other graduate degree if you have studied in Sweden

• Degree of Licentiate (if any)

• Degree of activity, i.e., how much of your time is devoted exclusively to doctoral studies (excluding any teaching or administrative work)

- Form of inancing,
- Completed courses in the graduate programme

### 6.4 Learn

The university learning platform that provides useful and updated documents on the PhD programme. Here is the link of the Learn room for the PhD in MDA: <a href="https://learn.du.se/ultra/organizations/\_7060\_1/cl/outline">https://learn.du.se/ultra/organizations/\_7060\_1/cl/outline</a>. Only PhD students, supervisors and administrators of the PhD have access to this room. In that sense, the Learn room is also used as a platform of communication between the different stakeholders of the programme.

# 6.5 TimeEdit

Dalarna University uses TimeEdit to schedule classes, exams, meetings, and other events. Through TimeEdit you can check schedules, book resources such as classrooms, labs, services and so on, it can be linked to your outlook calendar.

# 6.6 Department duties

As part of your time as a PhD student you can develop your pedagogic and communications skills, which is an important aspect of your personal development. The scope for students who have full-time employment is, at most, 20% of working hours and usually means that you participate in teaching in the Dalarna University undergraduate and graduate programmes. If you have administrative duties included in your ISP, it means that your doctoral studies will be extended correspondingly (please refer to section 3.4).

As an aid in the context of teaching, you as a PhD student must complete an introductory course in university teaching (Teaching and Learning in Higher Education: Qualifying Education 1 (APE277)) or, alternatively, have equivalent knowledge from past experiences. This type of course should preferably be taken before or as early as possible before the teaching begins at undergraduate and graduate levels. It is not certain that your teaching or administrative duties will be evenly distributed during your time as a PhD student. Some periods may mean more teaching



The scope and content of any administrative duties will be stated in your individual study plan. The duties will be designed to have relevance for your doctoral studies. To ensure that this is achieved, the administrative duties will be planned via joint discussions between you as a PhD student and both the director of doctoral programme, principal supervisor and the head of the department.

# 6.7 PhD student salary ladder

PhD students who are employed at Dalarna University and have a doctoral position follow a so-called doctoral salary ladder. There are three levels of salaries that a PhD student can reach if no special regulations apply. The first level is the entry level and it is the pay which a PhD student receives upon beginning their employment. The second level is reached when the PhD student has completed 50% of the requirements for a Degree of Doctor, including both course credits and credits from fieldwork and writing. Ideally this level will be reached when the PhD student has come halfway through their graduate training, around the time when the PhD student is supposed to give their 50% seminar. The third and last level is reached when the PhD student reaches 80% of the requirements for a Degree of Doctor,

It is up to the principal supervisor to decide when the PhD student has reached the next salary level. Should the supervisors not take the appropriate action regarding the salary level, the PhD student should bring the subject to the supervisor's attention and the Director of Doctoral programme. If an error has been made, that is, if a PhD student have qualified for the next level, sent in application, yet not been moved to that level until a later date, the PhD student should receive retroactive payments.

Promotion to the next salary level takes place in the calendar month after the decision of the principal supervisor, who has to send a certificate to the head of the department.

If the PhD student has completed the pedagogic course <u>Teaching and Learning in</u> <u>Higher Education: Qualifying Education 1 (APE277)</u> at Dalarna university, and it has been approved, a salary supplement of SEK 500 per month will be paid at full-time from the month after passing the credits. Certificates proving completed training must be submitted to the HR department.

# 6.8 Equality and equal treatment

Dalarna University works continuously to increase diversity, equality and accessibility. One of the university's long-term goals is to value and utilize the skills, knowledge, and experience held by individuals in the organization. If any unpleasant situation happens that may involve discrimination, being unequally treated, the PhD student should report to the director of the department and then seek extra support if needed, such as HR department, the lawyer of the school, the union.

# 7. Accreditation of Courses



Courses at first-cycle, second-cycle or equivalent level may be credited in doctoral education. This needs to be stated in the ISP. An application for credit transfer has to be sent to the head of the subject of Microdata Analysis, who will make an assessment and a suggestion for the Head of School. Ultimately, the Head of School makes the final decision about the transfer of PhD student's credits.

### 7.1 Accreditation of courses taken prior to the start of the PhD programme

It is possible to credit courses that have been taken before doctoral education has begun, this applies only to courses taken from a master's programme (2-year), and a maximum of 60 credits can be credited. However, courses from previous studies may not be credited if they are part of a qualifying degree or similar. If the applicant wishes to credit courses that have been taken before the doctoral education has begun, the PhD student shall discuss this with the principal supervisor, subject representative and director of doctoral programme. However, the course completed before admission to doctoral education can only be credited if it can be justified based on the PhD student's upcoming research project and subject or corresponds to one of the mandatory courses. In these cases, a decision shall be made on whether the corresponding time should be deducted from the PhD student's term. A form is available in the Learn room to apply for credit transfer.

#### 7.2 Accreditation of courses taken at another higher education institution

Courses that the PhD student takes at another higher education institution during her/his doctoral education can be credited. Credit transfer cannot be guaranteed in advance and takes place when the course is completed. This applies to all courses that you wish to take credit for, including courses taken at HDa. For all PhD students, this applies to all elective courses that are conducted at other higher education institutions, courses at second-cycle level, online courses, ... The PhD student discusses with his or her principal supervisor which courses should be credited. After the course is approved, the PhD student applies for credit transfer via the intended form located in the Learn room. Doctoral programmes Coordinator

# 8. Research Ethics

PhD students and researchers have an important responsibility towards the people who participate or are affected by the research. It is also about being honest in the research you do, not being unduly influenced by your own interests or those of others.

#### 8.1 Ethical review

Research carried out on and on humans is covered by the Ethical Review Act (2003: 460), which aims to protect the individual and respect for human dignity in research. Some research that takes place in Microdata Analysis may need reviewed by and get approval from the Ethical Review Authority. All research ethics applications and



decisions are registered with the Ethical Review Authority and these registration numbers must be in the ISP for the PhD student.

The responsible person for the research is the principal specified in the ethics application. In cases where the principal supervisor is not the main applicant for the application to the EPM, the responsibility remains on the principal supervisor that the research carried out takes place within the framework of the research ethical approval.

For research where data collection and analysis are carried out outside Sweden borders, the research ethics and decision made by the country's responsible authority shall be registered at Dalarna University. The application and decision are then sent by email to registrator@du.se and the title of the email shall state "Inger Nylander – ethics application".

# 8.2 Regulation on good research practice

There is a law regulating good research practice and the examination of misconduct in research (2019:504). The Swedish Research Council's Good Research Practice (2017) summarizes some general rules (p.8) for a good research practice:

- 1. You should tell the truth about your research.
- 2. You should consciously review and account for the starting points for your studies.
- 3. You should report methods and results.
- 4. You shall openly disclose commercial interests and other bindings.
- 5. You cannot steal research results from others.
- 6. You should keep good order in your research, including through documentation and archiving.
- 7. You should strive to conduct your research without harming people, animals or the environment.
- 8. You should be fair in your assessment of other people's research.

At Dalarna University there is a management system that regulates how scientific misconduct or deviation from good research practice is handled (*Processing order for handling misconduct in research and deviation from good research practice*). This describes that everyone involved in research activities at Dalarna University is responsible for ensuring that the research process follows good research practice and must ensure that the data collected, compiled and reported are in accordance with the principles accepted by the research community. Research misconduct means what is a serious deviation from good research practice in the form of fabrication, falsification or plagiarism (FFP).

Other deviations from good research practice are things that do not count as misconduct in research, but which substantially harm or risk damaging the integrity of the research or researchers and that are committed with intent or by gross negligence in the planning, implementation or reporting of research. A PhD student or supervisor who becomes aware of suspicion of deviations from good research practice or misconduct in research must immediately report to the vice- chancellor,



manager or director of doctoral programme who makes a notification.

# 9. Publication

Publishing research work in the form of scientifically reviewed papers is important. In the MDA doctoral programme, only the form of compilation thesis will be accepted. In design, the compilation thesis comprises a number of scientific articles with a comprehensive summary (kappa). The doctoral thesis normally comprises at least four scientific articles. To be clear, it is not the number of articles in the thesis that is being assessed but rather the scientific quality and the independent contribution made by the doctoral student. At least two articles that to be included in the thesis, must be accepted for publication in a recognized scientific journal (e.g., those listed in the Norwegian list, Level 1 or 2). Of these two accepted (or published) articles, the doctoral student must be the first author of at least one.

Publication in non-peer-reviewed collections such as publishing in working paper series is not considered as a scientific publication. Dalarna University encourages open access publication.

It is possible to get language review from a professional consultant with support from internal funding. This can be done through contacting the consultant, send in the paper, and then provide the correct project number for the invoice<sup>8</sup>.

# 9.1 Selecting a journal/conference

Choosing a journal or a conference to publish in is not always easy. Supervisors are the best to discuss the selection with. A fun and good tip is to copy your abstract (summary) into one of the services:

https://www.journalguide.com/

or which then suggest suitable journals. Another option is to investigate if the journal or conference are indexed in the best databases. The most recognized databases for the journals are Scopus<sup>9</sup>, the Norwegian list of scientific journals (Level-1)<sup>10</sup>, and Web of Science<sup>11</sup>. For the conferences, we recommended CORE<sup>12</sup>.

What is important to keep in mind is that today there are many rogue journals and publishers; journals that look correct in every way but do not use a peer-review scientific process (i.e., that other researchers have reviewed and commented on the manuscript). If you have an uncertainty regarding a journal, you can contact the librarian.

# 9.2 Open Access

Open Access makes scientific results freely available on the internet. Dalarna University recommends that PhD students publish in Open Access journals, and you can request financial support for that. For more information about how to proceed,

<sup>&</sup>lt;sup>8</sup> Please check with the supervisor or the PhD director for specific information.

<sup>&</sup>lt;sup>9</sup> <u>https://www.scopus.com</u>

<sup>&</sup>lt;sup>10</sup> https://kanalregister.hkdir.no/publiseringskanaler/Forside.action?request\_locale=en

<sup>&</sup>lt;sup>11</sup> https://clarivate.com/webofsciencegroup/solutions/web-of-science

<sup>&</sup>lt;sup>12</sup> <u>http://portal.core.edu.au/conf-ranks</u>



consult the library webpage: <u>https://libguides.du.se/open\_access</u>.

# 9.3 Co-authoring

For the articles published, it is not uncommon that they have multiple authors. Some journals want a description of what each of the co-authors of the article has contributed. To avoid conflicts, but also to ensure that someone qualifies as a co-author, the students are encouraged to read and follow the field specific guidelines of co-authorship (e.g., the Vancouver Recommendations<sup>13</sup>).

How many authors are included, and the order of the authors is again field specific. For example, the lead author is expected to have mainly written the manuscript and be responsible for editing, analysis etc., while the last author can be the one responsible for the supervision of the work. Please note that the student is expected to have at least two lead author manuscripts in the thesis. In any case, the student should note down his/her contribution, as it will be the basis of the final grading of the thesis.

# **10.Research activities**

# 10.1 Seminars

Seminar participation is a very important and central part of doctoral education to achieve the degree objectives. Being able to discuss your own and others' work not only provides an increased knowledge and understanding of your own subject direction and chosen methods, but also increases the skill and ability to evaluate and assess other new phenomena, issues, methods, and outcomes. The seminars train the PhD student in presenting/describing and defending/explaining their approach/method through the input of the participants. Reviewing colleague's work aids, you to identify shortcomings, ambiguities and strengths in the scientific studies. All articles that are intended to be included in the thesis must be reviewed at a seminar, which means that most PhD students have at least four seminars where their work is reviewed. It is also during these seminars that the PhD student presents his/her introduction.

#### MDA seminar series

There is a specific MDA seminar series, which all PhD students are required to attend. It is also recommended to attend external seminars that can support doctoral studies.

Seminars are held on Wednesday mornings from 10:30 to 12:00. The purpose of the seminar is to get the views of outsiders on the scope, quality and possibility of conducting the planned in-depth sub-studies. At these seminars, researchers and PhD students present their papers, project plans, methods, ongoing research, ... All these seminars are open and advertised externally via HDa's website

<sup>&</sup>lt;sup>13</sup> <u>https://www.icmje.org/icmje-recommendations.pdf</u>



(https://www.du.se/en/about-du/news-and-events/calendar/). It is the responsibility of the student to book a seminar to present the significant progress of the thesis, by contacting the person responsible for the internal research seminars. Booking of seminar is made by the PhD student to the responsible of research seminars in Microdata Analysis<sup>14</sup>. To book a seminar, you have to send an email to the person responsible for seminars, including the title and the summary of the presentation.

# 10.2 Seeking research funding

An important part of research is to use funds for your research. As a PhD student, the funding is already secured for salary during doctoral education, but there may be other things in the project that need to be financed. Applying for research funding is not only good for being able to cover costs, if one is successful, but also provides good experiences that are valuable for conducting research. Research costs money and writing good applications for research funding requires experience. For a PhD student, there are many types of grants to apply for and some grant donors provide financial support only to PhD students. It is not easy to describe how and where one can find scholarships and other forms of financial support in general. The best way to find relevant calls is to search on the web.

A few tips to consider when writing an application:

- Read the criteria thoroughly in the call text and search only if you can meet them.
- Be sure to get comments from (ex-)supervisors who can give you valuable feedback before submitting the application.
- Sometimes assessment criteria can be set out in the call which provide good guidance on what is required for a "good" application.
- Reserve time to write the application. For those who are at the beginning and may write their first application, it takes time to present their idea in an attractive way.

# 10.3 Conferences

Each PhD student are encouraged to attend conference, networking with other researchers, nationally and internationally. Especially, present at a conference congresses, workshops or equivalent would be especially beneficial in discussing the research work, collecting feedbacks and make reflections correspondingly. More details can be found in Section 11.2.

# 11.International exchange, networks and conferences

#### 11.1 International exchange

An international exchange of ideas and new opportunities for collaboration for PhD students is an important part of doctoral education. International collaboration

<sup>&</sup>lt;sup>14</sup> Please check with the director of doctoral programme for whom is responsible.



provides opportunities for contacts with other environments, projects, materials and methods. As the principal supervisor, it is important to enable international contacts and collaborations for the PhD student. Students can take courses at international higher education institutions, participate in collaboration meetings and networks, and visit international environments that are relevant to the topic of their thesis.

Erasmus+ allows PhD students (and supervisors) to have expenses paid when they go to higher education institutions or companies/organizations within the EU/EEA for further education. Further education may include study visits, courses, seminars or workshops. To get compensation, an individual must be away for a minimum of two working days and a maximum of two months. More information on how to proceed can be obtained at Dalarna University website - *Internationalisation at Dalarna University*:https://www.du.se/sv/om-oss/hogskolan-dalarna/internationellt-samarbete/

# 11.2 Participation in national and international networks and conferences

Networking with other researchers, nationally and internationally, is often very stimulating and fun. Likewise, to go to a conference and listen to others and to present your own research. The PhD student shall be encouraged to participate each year and present his/her own results at both national and international conferences, congresses, workshops or equivalent. In addition to critical feedback, conference participation enables networking to benefit the PhD student's future.

There are routines and guidelines to follow in participating in national and international networks and conferences. First of all, the selection of conferences should be based on a joint discussion and agreement with the supervisory team. Then the intention of attending a conference should be informed to the research coordination and the director of the department for assessing the feasibility.

Upon approval, registration for the conference and travel booking may be further proceeded. Normally, it is recommended to use the school's bank card to pay for the registration fee if possible. Otherwise, if the payment was done privately by the attendee, compensation request can be done through Primula (<u>www.primula.du.se</u>) with receipts and relevant proofs. The bank card can be borrowed from one of the accountants of the institution and a form should be filled in along with the request.

All travel related bookings must be done through the travel agency Lingmerths<sup>15</sup> if possible, please check for more information on the <u>staff web related to travel</u>.

Each Ph.D. student can be supported for at most 2 conferences by the department's internal research funding each year, this may vary year by year depending on the budget. If a student did not have any request for conference or other related activities under a calendar year, the potential budget will not be saved for the student, it will not be transferred for the next year, it will not be given through other type either.

<sup>&</sup>lt;sup>15</sup> This may vary, for updated information, please refer to the school website.



If the cost is paid by an external project, the limit depends on the specific project.

# 12.Kappa, nailing and pre-defense seminar

# 12.1 Kappa (or Summary)

The first part of the thesis is the frame story, which is usually referred to as the kappa. The kappa is a summary to the thesis and presents questions and achieved results in an overall context. The introduction should be read as an independent scientific text. It should not contain copying text, shapes and tables from the sub-works.

The summary is usually written in English. At Dalarna University, Uppsala University's template for the kappa is used. Information about the template for the thesis and how to use it can be found at *the Library's research support* at Dalarna University website: <u>https://www.du.se/sv/bibliotek/forskarstod-och-publicering/</u>

# 12.2 Nailing

Nailing is an academic ritual in which the thesis/licentiate thesis becomes public and accessible to everyone in connection with the presentation of a licentiate or doctoral thesis. The nailing takes place at least three weeks before the licentiate seminar or the defense and from this time the thesis must be available to anyone who wishes to read it. The nailing is done electronically and staff at the library handle the electronic nailing.

# 12.3 Pre-defense seminar

Each PhD is encouraged to hold a pre-defense seminar, 2~3 weeks before the public defense. The purpose of this seminar is to prepare the PhD student for the official defense. The pre- defense allows the PhD student to practice explaining and describing important aspects of the thesis, defending the merits of the thesis, but also showing a critical approach. Everybody can attend this pre-defense and discuss the student's work as any regular seminar. The pre-defense is booked in the same way as other seminars in Microdata Analysis (see 10.1).

# 13. Licentiate thesis and Licentiate seminar

The licentiate thesis is normally designed as two or more scientific articles with a short frame story that also serves as an introduction to the thesis subject. The scientific papers that form the thesis must meet a level of quality that will allow for publication in refereed scientific journals.

Instructions for applying, selecting an examination committee, review for quality check, implementation can be found in the Learn room of the doctoral education. For the review, the Director doctoral programme appoints experts in Microdata Analysis to make a comprehensive recommendation whether or not the licentiate seminar can be supported based on the fact that the sub-works meet or not the scope and quality that correspond to the knowledge goals for two years of full-time studies.



The doctoral programme finances about 50 copies of the thesis depending on the expected need. Remuneration to the examining committee (travel and accommodation) can be covered by the internal research funding support for MDA doctoral education, and it should be advised through and advised by the research coordinator of the department.

# 14. Doctoral thesis and Dissertation

The doctoral thesis is 180 credits. In the MDA doctoral programme, only the form of combined thesis will be accepted. The doctoral thesis is usually designed with a compilation of several scientific articles and a kappa (compilation thesis), the thesis is usually written in English.

The doctoral thesis normally comprises four scientific papers that are presented in a seminar on an ongoing basis. To be clear, it is not the number of articles in the thesis that is being assessed but rather the scientific quality and the independent contribution made by the PhD student. At least one article, out of the contents of the thesis, must be published in a recognized scientific journal (e.g., those listed in the Norwegian list, Level 1 or 2). For quality assurance, the content of the thesis must be reviewed by at least two reviewers, including at least one external reviewer, sometimes in the final year of the doctoral study, and before applying for the public defense.

The experts, appointed by the Director doctoral programme, have to make a comprehensive recommendation whether or not the PhD disputation can be supported based on the fact that the sub-works meet or not the scope and quality that correspond to the knowledge goals for four years of full-time studies. Instructions for application, selection of opponent, examining committee, chairman, preview (or quality check), implementation and grading protocol are available in the Learn room of the doctoral education.

Doctoral education finances *100* copies of the thesis. Further dissertations are paid for by the PhD student. Remuneration to the opponent and the examining committee (travel and accommodation) can be covered by the internal research funding support for MDA doctoral education, and it should be advised through and approved by the research coordinator of the department.

The PhD student has the right to defend his/her thesis even if the review committee does not recommend it.

#### **15.Examination**

The doctoral student must submit an application for examination to the Director of Doctoral Programme. The final decision is made in accordance with current university regulations<sup>16</sup>. The doctoral thesis or licentiate thesis must be accessible from the Dalarna University website (via DiVA) at least three weeks prior to the date of

<sup>&</sup>lt;sup>16</sup> Revidering av handläggning forskarutbildning, Dnr: C 2023/50, Decision: Prefekt, 2023-01-17, see also Dnr: C 2022/1115, Beslut: UFN, 2023-01-18.



examination. The thesis is examined in conjunction with a public defence arranged in accordance with current university regulations<sup>17,18</sup>.

### 15.1 Examination – Degree of Licentiate

At least two months before the date set for examination, the Principal Supervisor proposes the name of the opponent as well as the names of the members of the examining committee: a chairperson and two examiners (one of these will act as a reserve). The members of the examining committee and the opponent must declare that there is no conflict of interest between them and the doctoral student and supervisors<sup>19</sup>. The opponent cannot be employed at Dalarna University.

The examiner must be qualified in the relevant field of research and be at minimum at the level of Associate Professor (Docent). The role of the opponent is to explain and illustrate the scientific strengths and weaknesses of the thesis in terms of the research field to which the work of the doctoral student is contributing. Therefore, the opponent must be qualified and active in the relevant field of research. The thesis is awarded the grade of either Fail or Pass.

# 15.2 Examination – Degree of Doctor

At least three months before the date set for examination, the Principal Supervisor proposes the name of the opponent, the chairperson (from DU), as well as the names of the four members of the examining committee (one of these will act as reserve). All four members of the examining committee and the opponent must declare that there is no conflict of interest between them and the doctoral student and supervisors<sup>20</sup>. The opponent cannot be employed at Dalarna University. At most, one regular member (i.e., not the reserve) of the examining committee may be employed at Dalarna University. Exceptions may be made in special cases if the reserve needs to be called in and happens to be employed at Dalarna University.

The role of the opponent is to explain and illustrate the scientific strengths and weaknesses of the thesis in terms of the research field to which the work of the doctoral student is contributing. Therefore, the opponent must be qualified and active in the relevant field of research, both nationally and internationally. Normally, the opponent must hold a Degree of Doctor and be at minimum at the level of Associate Professor (Docent). With their collective knowledge base, the members of the examining committee will be able to speak to the field of study that the thesis concerns. The members of the Examining Committee shall be at the competency level of Associate Professor, or full Professor. The chairperson from Dalarna University will head the defence and also be prepared to step in as a member of the examining committee in the event of another member's unexpected absence. The thesis will be awarded the grade of either Fail or Pass.

Prior to the examination, the Doctoral programmes Coordinator will send the grading

<sup>&</sup>lt;sup>18</sup> *Regler för anordnande av disputation och licentiatseminarium i nätbaserad form*, Dnr: C 2020/1111 Beslut: UFN 2020-09-15.

<sup>&</sup>lt;sup>19</sup> Regler för examination på forskarnivå, Dnr C 2022/1115. Decision: UFN 2023-01-18.

<sup>&</sup>lt;sup>20</sup> Regler för examination på forskarnivå, Dnr C 2022/1115. Decision: UFN 2023-01-18.



protocol to the Chairperson. The Chairperson should hand over the grading protocol to the chair of the Examining Committee, who is responsible for filling in the protocol. Once the protocol is properly filled in, the Chairperson should send both a scan version to the email of the Doctoral programmes Coordinator, and then send the original via the internal mail system to the Doctoral programmes Coordinator.

# 16. Graduate

The PhD student applies for a degree certificate himself/herself. The degree application cannot be submitted until all courses are registered in Ladok and an approved licentiate seminar or defense has taken place.

It is the Graduation office at Dalarna University that issues degree certificates. The processing time is usually two weeks and can be longer during summertime due to summer vacation. Application for a degree certificate can be made on Ladok Studentportal: <u>www.student.ladok.se</u>

Select:

- Degrees and certificates
- Degree certificate application
- Follow steps 1-5

#### 16.1 Degree of Licentiate

The following requirements must be met for the PhD student to obtain a Degree of Licentiate:

- approved doctoral courses (45 credits)
- approved licentiate thesis and seminar (75 credits).

#### 16.2 Degree of Doctor

The following requirements must be met for the PhD student to obtain a Degree of Doctor:

- approved doctoral courses (60 credits)
- approved dissertation thesis and defense of thesis (180 credits).

#### 17. Career plan

As a PhD student you are pursuing the highest academic degree possible: a PhD. Thinking about where you stand in your career, how your doctoral education contributes to it and where you want to go are vital to your development, no matter where you envision yourself in the future. Doctoral studies are temporary and expire when the four years of active study time have elapsed. Although those who have received a doctorate enjoy favorable conditions to advance in the labor market, it is important to think about what to do after your doctoral studies and explore the options available. Be familiar with the conditions governing financing and accommodation. If you live in a student flat, you are normally no longer entitled to stay there when the educational programme is completed.



A well-informed career plan is central to your motivation, speed of progress and longterm success. To secure rewarding roles and succeed in them, inside academia or beyond, you must know your options and plan your preferred destinations early. You also need to make choices that leverage your chief strengths and priorities.

# 17.1 Career paths after PhD

If you are interested in a continued academic career, it is a good idea if, during the last year, you foster contacts with potential future research environments and look into the possibilities of doing a post-doc. Your supervisor and the other senior researchers often have good contacts; it is a good idea to consult with your supervisor about future career opportunities early on. Financing for post-doc appointments can be sought from many sources and it is important to probe these sources in advance to put together well-developed applications. Unfortunately, competition is often fierce for post-doc funding. It is also good to check possibilities with tenure-track in different sources.

Many PhD holders build a career outside of academia. It is highly recommended that you initiate an open and honest discussion with not only your supervisor, but with others at DU who can give you advice on different possible career paths. Previous PhDs in MDA who develop their career outside the academia can be a good source of advice and experiences. Be on the lookout for LinkedIn, positions like data analysts, AI oriented areas can be highly relevant.

#### 17.2 Extra sources

This section is meant to provide you with resources and links relevant for PhD students, so you can find the information you need to work on your own career. Dalarna University offers a broad range of activities that contribute in one way or another to PhD students' career development.

#### Career opportunities

#### at DU Jobs and

#### careers

Advice on jobs and careers, including information about work permits, CVs, interviews and study.

#### Career and professional development

Information in this section describes various stages of university employment, from new employee to retirement, as well as the common set of values for employees in the government sector.

You can also try to find external resources that can help you to form a good career plan. https://sulf.se/en/work-salary-and-benefits/career-and-promotion/

# 17.3 Safety nets – A-kassa and SULF

PhD students with employed positions are eligible for unemployment benefits (unemployment insurance, or A-kassa) but the requirements are that you have been a



member of the unemployment fund for at least six months prior to termination of employment. It is therefore strongly recommended that you, as PhD student, remember this and join in advance. It is also recommended you join the union SULF that is specific for academic occupations, this will ensure the optimal welfare that you can receive under unemployment. This is, however, only valid for PhD students who have employment, not scholarships.

# 18. Instructions and forms

The <u>staff web</u> provide many information related instructions and forms. In the <u>Learn</u> room of doctoral education, you can also find instructions and forms related to doctoral education, such as:

Admission and ISP:

- Process up to admission
- Application for admission (form)
- Individual Study Plan (form)
- ISP Instruction
- Financing

certificate (form)

Courses:

- Rules for crediting doctoral education.
- Application for credit

transfer (form) Support material:

- General rules for third-cycle studies
- General Study Plan (GSP) for Doctoral Studies in Microdata Analysis
- Guidelines for PhD student supervisor collaboration
- Syllabus for mandatory courses
- Handbook for PhD students and supervisors in Microdata Analysis
- Rules for change of supervisors
- Application for expenses (form)
- Mentorship
- Information on migration
- Recorded lectures

Licentiate seminar and PhD disputation:

- Instructions for applying for a dissertation and licentiate seminar.
- Registration and decision on the public defense and licentiate seminar (form)
- Instructions for the examining committee's review of licentiate thesis
- Instructions for the examining committee's review of doctoral thesis
- Checklist for the public defense



All forms are registered and archived when approved or rejected.

# 19. Other practical issues

# 19.1 Swedish course for international PhD students

It is always free to take Swedish for Immigrants (SFI) courses. If you want to take a Swedish course at Dalarna university or other university, there should be a good motivation stated that this can enhance your doctoral studies. The course needs to be put in an ISP and get approved by the supervisors and the director of the doctoral programme. You need to send an application to the admissions office in order for registration to take place. If the course cannot be put on the ISP, the course will not be supported by the doctoral study funding. You can further discuss with the head of the department and seek possible support for the study fee. You as a PhD student are then admitted outside the usual admission numbers.

# 19.2 Healthcare allowance

Employees at the university have the opportunity to receive a healthcare allowance.

The annual contribution is SEK 2,000 for t employees with employment for more than 6 months.

The university has its own place for massage with discount price, which you can book a slot through TimeEdit.

#### 19.3 Pensions

Dalarna University is connected to the National Government Employee Pensions Board (in Swedish: Statens Tjänstepensionsverk, SPV) and its service for pension administration.

For you as an employee, this means that if you have any questions, SPV: s pension experts can answer your questions about stately service pension.

# 19.4 Insurance

For university employed PhD students, as a state employee you are life insured through state group life insurance. Your life insurance applies the day you arrive at the workplace and as long as you are employed.

PhD students may sign up to <u>Swedish Social Insurance Agency (forsäkringskassan)</u> as soon as they arrive, as it can take many months for registration to be completed and its benefits to be accessed.

In addition to sick leave and parental leave, forsäkringskassan also offer a dental care subsidy. More details can be found here: <u>https://www.forsakringskassan.se/english/dental-care-subsidy</u>

#### 19.5 Vacation

For university employed PhD students, scheduled vacation should be applied in



Primula and get approved by the head of the department, otherwise it usually will be put between last week of June and first week of August.

#### Number of vacation days

The number of holiday days is determined by the employee's age Up until 29 years - 28 days Beginning from 30 years - 31 days Beginning from 40 years - 35 days

#### Saved vacation days

Any worker entitled to more than 20 paid holiday days for a particular calendar year may save one or more of the overdue days to a later calendar year. However, no worker may have more days saved than 30.

#### 19.6 Sick leave

For university employed PhD students, if you become sick you are to notify your workplace by sending an e-mail to the head of the department and also <a href="mailto:support@du.se">support@du.se</a> as soon as possible.

Longer sick leave should notify the head of the department and should be reported by the personnel at HR, who will also register you with the Swedish Social Insurance Agency (Försäkringskassan, FK) and submit the first doctor's certificate to the agency. If the sick leave is extended, a copy of the doctor's certificate stating so is to be submitted to the personnel at HR. The employee is responsible for submitting the original doctor's certificate to the FK (also, the health care facility in question may send the certificate directly to the FK).

#### 19.7 Parental leave

For university employed PhD students, if you plan to take parental leave with parental benefit from the Swedish Social Insurance Agency (FK), you should inform the head of the department as soon as possible.

The University <u>has a local agreement</u>, regarding parental pay. Parental pay is 10 percent of the pay for a single workday for any amount up to the price base amount and 90 percent of the pay for a single workday for any amount above the price base amount. Parental pay is paid for a maximum of 360 days for each childbirth.

If you stay home to look after a sick child (temporary parental benefit) you are to notify your workplace by sending an e-mail to <u>support@du.se</u> as soon as possible. You register with the FK yourself. Register in Primula upon returning to work.

#### 19.8 Student Union

As a PhD student, you can join the student union and then can be equipped with some benefits. One is student discount through <u>Mecenat</u>. To get access to this benefit, you need to pay an annual fee of 250 SEK.