

Study Handbook for PhD Studies

| | |
|--|----|
| Study Handbook for PhD Studies | 1 |
| 1. Purpose and Outcomes of the PhD studies | 3 |
| 2. Admission to PhD Studies..... | 3 |
| 2.1 General provisions..... | 3 |
| 2.2 Admission to PhD Studies | 4 |
| 2.2.1 Eligibility | 4 |
| 2.2.2 General entry requirements | 4 |
| 2.2.3. Specific entry requirements | 4 |
| 2.3 Admission procedure..... | 5 |
| 2.3.1. Establishment and announcement of PhD position..... | 5 |
| 2.3.2 Assessment of eligibility and selection | 5 |
| 2.4. Decision on admission | 6 |
| 2.4.1 Decision on admission to licentiate degree | 6 |
| 2.4.2 Decision on admission with external funding | 7 |
| 2.4.3 Decision on admission with external employment | 7 |
| 2.5 After admission..... | 7 |
| 3. Study funding..... | 7 |
| 3.1 General information on study funding | 7 |
| 3.1.1 Financing through PhD employment..... | 8 |
| 3.1.2 Financing through other employment | 8 |
| 3.1.3 Financing through other funding..... | 8 |
| 3.2 Employment of a PhD student | 8 |
| 4. Supervision..... | 9 |
| 4.1 General | 10 |
| 4.1 Supervisors and examiners | 10 |
| 4.1.1 Change of supervisor | 10 |
| 4.1.2 Supervisors and examiners | 11 |
| 5. Study syllabus | 11 |
| 5.1 Degree..... | 11 |
| 5.1.1 PhD degree..... | 11 |

| | |
|--|----|
| 5.1.2 Licentiate degree | 12 |
| 5.2 General study plan | 12 |
| 5.3 Individual study plans | 12 |
| 5.4 Courses | 14 |
| 5.5 Mandatory courses | 14 |
| 5.6 Credit transfer | 15 |
| 5.7 Registration of study results | 16 |
| 5.8 PhD schools | 16 |
| 5.9 The academic year for PhD studies | 16 |
| 5.10 Issues and responsibility | 17 |
| 5.11 Interruption of the studies | 17 |
| 6. Thesis and degree | 17 |
| 6.1 Thesis | 18 |
| 6.1.1 The cover of the thesis | 18 |
| 6.1.2 Title Page (Spikblad) | 19 |
| 6.1.3 Other pages included in the thesis | 20 |
| 6.1.4 Confidentiality | 21 |
| 6.1.5 Withdrawing a thesis | 21 |
| 6.1.6 Electronic publishing | 21 |
| 6.2 Licentiate degree | 21 |
| 6.2.1 Preliminary review of licentiate theses | 21 |
| 6.2.2 Public disclosure of licentiate thesis | 22 |
| 6.2.3 Application for licentiate seminar | 22 |
| 6.2.4 Time and place for the licentiate seminar | 23 |
| 6.2.5 Licentiate seminar | 23 |
| 6.2.6 Grading of licentiate thesis | 23 |
| 6.3 PhD degree | 24 |
| 6.3.1 Preliminary review of PhD thesis | 24 |
| 6.3.2 Public defence and grading doctoral thesis | 25 |
| 6.3.2.1 Announcement of thesis (Naling) | 25 |
| 6.3.3 Applying for public defence | 26 |
| 6.3.4 Time and place of the public defense | 26 |
| 6.3.5 Public defence | 27 |

| | |
|--|----|
| 6.3.6 Examination and the examination board..... | 27 |
| 6.4 Degree title..... | 28 |
| 6.5 Degree certificate..... | 29 |
| 6.5.1 Licentiate certificate..... | 29 |
| 6.5.2 PhD Degree certificate..... | 29 |
| 6.6 Double and joint degrees | 29 |
| 6.7 Promotion..... | 29 |
| References and Links | 30 |
| 7. Effective date..... | 30 |

1. Purpose and outcomes of the PhD studies

The PhD studies at the Faculty of Science and Engineering, LiU, aims to train candidates with the ability to independently carry out research and development work within or outside academia and to create and disseminate technology and natural science knowledge for the benefit of society and industry. The completed PhD candidate or licentiate is expected to have the ability to independently and with a scientific approach identify and formulate problems and questions, as well as handle and critically review these in relation to both existing knowledge and future needs. The education aims not only at deep specialist knowledge in a limited subfield, documented in a thesis of such quality that it can partially or fully be published in an international scientific journal in the field, but also at broad knowledge within the research area and familiarity with scientific methodology in general. In addition, the PhD studies aim to develop the ability to make research ethical assessments, an understanding of the possibilities and limitations of science, its role in society and how it is applied, and the ability to communicate research and research results both orally and in writing, within and outside the scientific community.

2. Admission to PhD Studies

2.1 General provisions

National regulations

The number of third-cycle students admitted to third-cycle courses and study programmes may not exceed the number that can be offered supervision and otherwise acceptable conditions for study and who have student finance (Chapter 7, Section 34, Higher Education Act).

Local regulations

Admission to PhD studies may only take place if the necessary conditions for study financing, access to supervision, and the resources required to ensure an internationally high-quality degree are available.

From May 1, 2002, admission may be made both for a PhD degree and a licentiate degree within PhD studies. Admission to licentiate education should normally occur only if the intention is to complete PhD studies with a licentiate degree.

2.2 Admission to PhD Studies

2.2.1 Eligibility

To be admitted to PhD studies at the Faculty of Science and Engineering, the applicant must both have general eligibility and the specific eligibility required by the faculty board for each research subject. Additionally, the applicant must have the capability required to benefit from the education.

2.2.2 General entry requirements

National regulations

A person meets the general entry requirements for third-cycle courses and study programmes if they have

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

The higher education institution may permit an exemption from the general entry requirements for an individual applicant, if there are special grounds. (Chapter 7, Section 39, Higher Education Act)

Local regulations

Decisions on exceptions from the general entry requirements are made at the faculty level and may be delegated to the head of department.

2.2.3. Specific entry requirements

National regulations

The stated specific entry requirements must be essential for a student to be able to assimilate the course or study programme. These requirements may comprise

1. knowledge from one or more higher education courses and study programmes or corresponding courses and study programmes,
2. specific professional or vocational experience, and
3. necessary language skills or other conditions determined by the course or study programme. (Chapter 7, Section 40, Higher Education Act)

Local regulations

Specific entry requirements is prescribed in the general study plan for each research subject. The applicant must have sufficient knowledge of English to be able to benefit from mandatory English language literature, write and, if necessary, defend the thesis in English. Requirements for knowledge of Swedish may also be set. Decisions on exceptions from specific eligibility requirements for PhD studies are made by faculty board of PhD Studies and may be delegated to the head of department.

2.3 Admission procedure

2.3.1. Establishment and announcement of PhD position

National regulations

Decisions relating to admission are made by the higher education institution. A person who wishes to be admitted to a third-cycle course or study programme must apply within the time prescribed and in compliance with the procedures established by the higher education institution.

When a higher education institution intends to admit one or more third-cycle students, information must be provided by the institution through advertising or some equivalent method. Information need not, however, be provided

1. when admitting a third-cycle student who is to complete the course or study programme within the framework of employment by an employer other than the higher education institution,
2. when admitting a third-cycle student who has previously begun third-cycle studies at another higher education institution, or
3. if there are similar special grounds. (Chapter 7, Section 37, Higher Education Act)

Local regulations

All PhD positions should be advertised in the broadest possible way so that the admission process is competitive. Advertisements should be made to the university's recruitment system.

2.3.2 Assessment of eligibility and selection

National regulations

Selection between applicants who meet the requirements stated in Sections 35 and 36 must consider their ability to assimilate the course or study programme.

The higher education institution decides which assessment criteria will be used in determining the ability to assimilate the course or study programme.

However, during selection, the fact that an applicant is assessed as able to transfer credits from prior courses and study programmes or for professional or vocational experience may not give the applicant priority over other applicants. (Chapter 7, Section 41, Higher Education Act).

Local regulations

Eligibility is assessed for all applicants according to:

- An applicant who meets both general eligibility and the specific eligibility prescribed in the general study plan is considered eligible. Selection is made only among eligible applicants.
- Selection criteria are described in the PhD position advertisement.
- After selection, potential candidates will be invited for an interview.
- A recruitment group is formed, typically consisting of potential supervisors, the head of the department, HR staff, and in some cases, the director of PhD studies.

2.4. Decision on admission

Local regulations

Decisions on admission to PhD studies at the Faculty of Science and Engineering are normally made by the head of department, delegated by the faculty board. In the decision on admission, the head of department also decides on the main and co-supervisors. The head of the relevant department makes the admission decision based on the recommendation by the recruitment group/supervisor.

2.4.1 Decision on admission to licentiate degree

Local regulations

Admission to a licentiate degree should normally only occur when the intention is to complete PhD studies with a licentiate degree. In cases where PhD students are admitted to licentiate studies, the differences in rights compared to PhD studies with a PhD degree as the goal should be clearly communicated in writing to the PhD student.

To differentiate between the two educational paths and facilitate study planning, the requirements for licentiate and PhD degrees must be specified in the individual study plan. It

must also be clear from the advertisement what degree the education is aiming for, e.g., "PhD position with appointment until licentiate degree."

A person admitted to the licentiate degree can be admitted to PhD studies later after issuing the licentiate degree (so-called admission to the later stage).

2.4.2 Decision on admission with external funding

Local regulations

Decisions on admission with external funding (e.g., scholarship, fully or partially) are made by the dean or pro-dean.

Admission of PhD students with scholarship funding is not allowed if the funding plan requires repayment.

2.4.3 Decision on admission with external employment

Local regulations

When admitting a PhD student with external employment (such as an industrial PhD student), an agreement must always be made between the department and the external employer.

2.5 After admission

Local regulations

PhD students at the Faculty of Science and Engineering should be provided with a good introduction and promptly assigned a workspace with access to a computer, phone, and email. The PhD student should be informed about the department's and faculty's organization, including preparatory and decision making bodies. Information should also be provided on the general study plan for the research subject, the courses included in the studies, the department's research, seminar activities, as well as the rights and responsibilities of the PhD student, and where to turn in case of perceived discrimination.

3. Study funding

3.1 General information on study funding

National regulations

Higher education institutions may establish specific posts for third-cycle students to enable them to complete their third-cycle studies. (Chapter 5, Section 1, Higher Education Act)

Local regulations

Admission to PhD studies may only take place if the applicant is deemed to have acceptable study funding for the entire period of study. At the technical faculty, employment as a PhD student is the normal way to finance PhD studies.

3.1.1 Financing through PhD employment

Local regulations

When a department intends to admit PhD students who are fully or partially funded through PhD employment, this must be advertised. However, this does not apply to PhD students admitted at a later stage, or PhD students who have started their studies at another institution, or if there are other similar special reasons.

3.1.2 Financing through other employment

Local regulations

The department may also admit applicants who have other study funding, provided that this is considered secured for the entire program and the student can dedicate enough time to complete the program within eight years for a PhD degree and four years for a licentiate degree. Acceptable forms of financing include other employment (e.g., from a company or another institution) with at least a 50 percent reduction for studies, as well as externally awarded scholarships. An agreement between the institution and the funding party should be established to reduce the risk of funding being withdrawn. A template for such an agreement is available in the local regulatory collection.

3.1.3 Financing through other funding

Local regulations

Decisions regarding admission that involve other types of funding, other than salary, should be made by the dean or deputy dean, as stated in Section 2.4 Admission decision.

3.2 Employment of a PhD student

National regulations

A person appointed to doctoral studentship must primarily dedicate time to their own studies. However, an employee may work to a limited extent with education, research, artistic research and administration. Before a doctorate or a doctorate in the fine, applied and performing arts has been awarded, however, duties of this kind may not comprise more than 20 per cent of a full-time post. (Chapter 5, Section 2, Higher Education Act)

Only a person who is or has been admitted to third-cycle education may be employed on a doctoral studentship. (Chapter 5, Section 3, Higher Education Act)

A doctoral studentship must be a full-time position. If a third-cycle student requests it, the position may be part-time but at no less than 50 per cent of a full-time position. (Chapter 5, Section 3a, Higher Education Act)

Employment on a doctoral studentship must be until further notice, but no longer than a given date and never longer than one year after the award of a doctorate or doctorate in the fine, applied and performing arts.

The initial appointment may apply for no longer than one year. An appointment may be extended by no more than two years at a time.

A person may be employed on a doctoral studentship for a total of no more than eight years. However, the total period of employment may be no longer than that equivalent to full-time third-cycle studies of four years. For studies that conclude with the award of a licentiate degree or a licentiate degree in the fine, applied and performing arts the total employment period may not exceed the time corresponding to full-time third-cycle study for two years. The time spent studying by the third-cycle student while not appointed to a doctoral studentship must be deducted from these periods.

The total period of employment may, however, exceed that stated in the third paragraph if there are special grounds. Such grounds may comprise leave of absence because of illness, leave of absence for service in the Swedish defence forces or an elected position in a trade union or student organisation, or parental leave. (Chapter 5, Section 7, Higher Education Act)

Local regulations

Decisions regarding the establishment and appointment of PhD student positions are made by the board of each department. Those who already have a PhD student position and have successfully engaged in PhD studies are given priority when reappointment is made.

4. Supervision

4.1 General

National regulations

At least two supervisors must be appointed for each third-cycle student. One of them must be appointed principal supervisor. The third-cycle student is entitled to supervision during their studies unless the vice-chancellor has decided otherwise with the support of Section 30. Upon request, a third-cycle student must be allowed to change supervisor. (Chapter 6, Section 28, Higher Education Act)

Local regulations

The main and co- supervisors are appointed by the department head or the body to which the department head has delegated the task. The main supervisor must be at least an associate professor. The co- supervisor must have a PhD or equivalent scientific competence. The main supervisor must be someone who holds or maintains an employment at Linköping University and is appointed as an associate professor. Exceptions can be made:

- If the main supervisor's employment at Linköping University ends before the PhD student graduates. In this case, the main supervisor can continue as the main supervisor after a decision by the faculty board has been made.
- For national research schools where several universities collaborate through agreements. In such cases, a principal supervisor whose primary service is at another university can be appointed.
- If there are exceptional reasons.

Exceptions to the rule must be decided by the faculty board. This task cannot be delegated. The PhD student has the right to supervision for the total duration considered necessary for the prescribed education of 240 credits or 120 credits. The main supervisor is responsible for specifying the knowledge requirements for each PhD student in the individual study plan.

4.1 Supervisors and examiners

4.1.1 Change of supervisor

Local regulations

If a PhD student requests a change of supervisor, a new supervisor should be appointed by the head of the department. Information about supervisors, co-supervisors, and any change of supervisors should be documented in Ladok.

4.1.2 Supervisors and examiners

Local regulations

Courses and other exams included in PhD studies are graded with either a pass or fail. The grade should be determined by an examiner. The faculty board of PhD studies has ultimate responsibility for appointing the examiner for each course or exam. The decision to appoint an examiner applies indefinitely unless stated otherwise and can be revoked at any time. The task of appointing an examiner is usually delegated to the department head or the body to which the department head has delegated the task. Only those who hold or maintain a teaching position at Linköping University that requires a PhD or equivalent scientific competence, and those who are appointed as associate professors, may be appointed as examiners. Approved exams are registered in Ladok by the course-offering department at LiU. The main supervisor decides, and if necessary certifies, when all degree requirements have been met, except for the mandatory courses decided by the faculty board of PhD studies.

5. Study syllabus

5.1 Degree

5.1.1 PhD degree

National regulations

A PhD degree is awarded after completing an education of 240 higher education credits in a subject for PhD studies. For a PhD degree, the student must have a scientific dissertation of at least 120 higher education credits approved. For a PhD degree with a specific orientation, additional requirements specified by each university apply within the framework of the degree description. (Appendix 2, Higher Education Act)

Local regulations

The PhD degree is awarded in a subject specified by the faculty. The scope of the dissertation is indicated in the general study plan for the subject. The dissertation is graded with either a pass or fail by an examination board appointed by the faculty's PhD studies board.

5.1.2 Licentiate degree

National regulations

A licentiate degree is awarded after completing an education of at least 120 higher education credits in a subject for PhD studies, or after completing at least 120 higher education credits of a PhD studies that will conclude with a PhD, if the university decides that such a licentiate degree can be awarded. The student must have a scientific thesis of at least 60 higher education credits approved. For a licentiate degree with a specific orientation, additional requirements specified by each university apply. (Appendix 2, Higher Education Act)

Local regulations

The licentiate degree is awarded in a subject determined by the faculty. The PhD student must have completed the required exams in the education and have their scientific thesis of at least 60 higher education credits (licentiate thesis) approved. The scope of the thesis is indicated in the general study plan for the subject. The thesis is graded with either a pass or fail by a designated examiner.

5.2 General study plan

National regulations

Each subject that provides third-cycle education must have a general syllabus. (Chapter 6, Section 26 Higher Education Act)

A general syllabus must state the following: the main content of the study programme, specific entry requirements and any other necessary regulations. (Chapter 6, Section 27 Higher Education Act)

Local regulations

The faculty board decides on the research subjects given at the faculty. A research subject may be established at one or more departments at Linköping University, and for each research subject, a general study plan is created. The content is determined by the PhD studies board in consultation with the relevant departments. The general study plan includes details such as the main content of the education, prerequisites, and the organization of the education, including mandatory subject specific courses.

5.3 Individual study plans

National regulations

An individual study plan must be drawn up for each third-cycle student. This plan must include the obligations of the third-cycle student and the higher education institution and a timetable

for the third-cycle student's study programme. The plan must be adopted after consultation between the third-cycle student and their supervisors.

The individual study plan must be reviewed regularly and amended by the higher education institution as necessary and after consultation with the third-cycle student and their supervisors.

The period of study may only be extended if there are special grounds for doing so. Such grounds may comprise leave of absence because of illness, leave of absence for service in the Swedish defence forces or an elected position in a trade union or student organisation, or parental leave. (Chapter 6, Section 29, Higher Education Act)

Local regulations

The main supervisor, co-supervisor, and the PhD student should together, as soon as possible, create an individual study plan, i.e., a plan for the entire study path leading to the intended degree. The individual study plan must be prepared no later than one month after admission and revised at least once a year. The individual study plan should contain a timeline for the PhD student's education, details about how the supervision is organized, a description of the commitments of the PhD student and the faculty board/department/supervisors during the course of education, and anything else necessary for the education to be conducted efficiently. The individual study plan must be approved by the head of the department.

The individual study plan must include the following:

- The PhD student's personal details, research education subject, and intended degree.
- Information about the principal supervisor and the co-supervisor.
- Division of responsibility and authority for the principal and co-supervisors, as well as the forms for and approximate extent of direct supervision.
- Information about the study funding the PhD student is expected to have throughout the entire study period.
- Planned and completed PhD courses.
- The extent and focus of the PhD student's departmental duties and pedagogical education during the study period. Departmental duties include assigned tasks such as teaching, preparing teaching materials, grading exams, supervising theses and essays, parts of pedagogical education not counted as PhD studies, administrative tasks, system operations, and trust assignments. For those PhD students taking the basic university pedagogical course, at least 3 higher education credits must count towards the education. The remaining time/credits are counted towards departmental duties or PhD studies, as decided by the department.
- A description of the planned research task/research focus, including a timeline and publication strategy.
- Information that an appropriate workplace and other resources are available for the PhD student.
- A description of how the learning objectives will be met during the education. The description should either use the annex in the common faculty template or an equivalent method.

The study plan must be signed by the PhD student, the principal supervisor, the co-supervisor, and the head of the department.

The individual study plan must be established and followed up at least once a year by the respective head of the department or by the body delegated by the head. During the follow-up, the PhD student and supervisor should inform the head of the department about the progress of the studies. The head may then, or when necessary, make any changes needed to the individual study plan. Both the PhD student and the supervisor must confirm in writing that they have reviewed the individual study plan and any changes made to it. The PhD student should, as far as possible, have the right to conduct their dissertation work with the primary focus outlined in the individual study plan, even if they change supervisors.

5.4 Courses

Local regulations

The purpose of the course component is to achieve knowledge and understanding in the research area for the licentiate degree, including current specialist knowledge within a defined part of it. For the PhD degree, the student must also demonstrate broad knowledge of and a systematic understanding of the research area, as well as deep and current specialist knowledge within a defined part of the research area.

The scope and focus of the course component may vary between different subjects and are stated in the general study plan for both the PhD and licentiate degrees. The planning for how the course requirements will be fulfilled should, as far as possible, be stated in the individual study plan.

Course requirements and other examinations for both the licentiate and PhD degrees must be approved by the principal supervisor at the time of presentation. Reported course credits must be listed in connection with the application for the dissertation/licentiate seminar. If there are special reasons, exemption may be granted by the PhD studies Committee.

5.5 Mandatory courses

Local regulations

All students admitted to PhD studies from July 1, 2007, onwards must complete courses in scientific theory, methodology, and ethics, or equivalent courses worth at least 6 higher education credits. After completing these courses, the student should be familiar with scientific methodology in general, have demonstrated intellectual independence, scientific integrity, the ability to make ethical research assessments, and have gained deeper insight into the possibilities and limitations of science, its role in society, and human responsibility for its use.

All PhD students who teach must complete a basic pedagogical course. At least 3 higher education credits from this course must count towards PhD studies, and any remaining credits should be counted as departmental duties. Other mandatory components that may be part of the education are listed in the general study plan for the subject.

5.6 Credit transfer

National regulations

If a student at a higher education institution in Sweden has passed a course or study programme of higher education, they are entitled to transfer the awarded credits to a course or study programme at another higher education institution. This does not apply, however, if there is a substantial difference between these courses or study programmes.

The same applies for students who have successfully completed a course or study programme

1. at a university or higher education institution in Denmark, Finland, Iceland or Norway,
2. at a university or other higher education institution of a signatory to the Council of Europe's Convention of 11 April 1997 on the Recognition of Qualifications concerning Higher Education in the European Region,
3. at a university or other higher education institution of a signatory to the UNESCO's Global Convention on the Recognition of Qualifications concerning Higher Education from 25 November 2019, or
4. at Nordiska högskolan för folkhälsovetenskap (NHV – The Nordic School of Public Health). (Chapter 6, Section 6, Higher Education Act)

A student is entitled to transfer credits from a course or study programme other than that stated in Section 6 if the nature and extent of the knowledge and skills cited by the student are such that they generally correspond to the course or study programme for which the credits are to be transferred. A student may also be given credit for the equivalent knowledge and skills acquired in a vocational or professional capacity. (Chapter 6, Section 7, Higher Education Act).

The higher education institution must assess whether credits can be awarded for prior education or prior professional or vocational experience.

Credits may only be awarded to someone who is a student, unless otherwise stated in a statute or ordinance. (Chapter 6, Section 8, Higher Education Act)

Local regulations

Courses can be recognized upon application from the student if they are relevant for the studies of the PhD student. Recognition of mandatory educational courses from the faculty is done upon application by the PhD student. The student submits his/her application to the board of PhD studies. The application for recognition is made using the designated form, and the student attaches proof of completed courses along with the course syllabus or other descriptions of the course to be credited. The decision regarding recognition is made by the chair of the Board of PhD studies. The applicant may appeal the decision within three weeks of the decision.

Applications for the recognition of non-compulsory faculty courses is made by the student using the designated form; the application is either approved or rejected by the main supervisor, and any positive decision regarding the recognition is made by the director of PhD studies. A rejection of a request for recognition cannot be made by the director of PhD studies, but only by the Board of PhD studies. A request for recognition that is not approved by the director of PhD studies must be forwarded to the PhD studies Board. Decisions regarding rejection can be appealed.

5.7 Registration of study results

Study results are registered in Ladok. At the end of the fall and spring terms, universities (via Ladok) report data to the Swedish Statistical Central Bureau and the Swedish Higher Education Authority (UKÄ), including information about study activity in PhD studies.

5.8 PhD schools

At LiTH, there are several PhD schools. These are established to create efficient PhD programs of high quality and broader scope. The PhD school emphasizes the value of a cohesive PhD studies. After completing the education, the PhD student should not only have deep insights into their dissertation topic but also be well-versed in adjacent fields. All PhD students in a PhD school are also enrolled in a PhD subject and must meet the requirements set out in the general study plan. Many PhD schools are conducted in cooperation with other faculties or other Swedish institutions. Anyone involved in a PhD school is always enrolled in a subject where PhD studies is organized.

5.9 The academic year for PhD studies

Local regulations

The academic year for PhD studies begins on August 16 and ends on the Friday before Midsummer's Eve. Licentiate seminars and PhD defenses must take place during term time. If there are special reasons, the dean can decide that a defense may occur outside term time. The dean may also grant permission for a licentiate seminar to be held outside term time if there are specific reasons for this.

5.10 Issues and responsibility

If problems arise with the studies that cannot be resolved jointly by the supervisors and the PhD student, these problems should, in the first instance, be handled within the respective department. If it concerns social matters related to studies, the director of PhD studies should be contacted. If it concerns employment or personal related matters, the department head or HR consultant should be contacted. In the second instance, one can contact the Board of the PhD studies and finally, the faculty board. Union representatives, the student health service, or occupational health services can also provide advice and support.

5.11 Interruption of the studies

Local regulations

A student can take a temporary break from studies, such as for parental leave. Consideration should be given to this when reporting activity for the relevant term. The individual study plan must be updated annually, even during a study break.

An interruption should be registered in Ladok for those who inform in writing that they are interrupting their studies. For studies to be resumed, a new admission decision and a decision regarding the supervisor are required.

6. Thesis and degree

6.1 Thesis

Local regulations

A PhD or licentiate thesis at the Faculty of Science and Engineering can only be presented if it has been published in a faculty approved thesis series at least three weeks before the presentation. These three weeks must fall within the academic year.

- For PhD thesis: Linköping Studies in Science and Technology, Dissertations
- For licentiate thesis: Linköping Studies in Science and Technology, Licentiate Thesis

The thesis can also be part of other series (departmental series, PhD school series, etc.), but it can only be part of another Swedish thesis series if it concerns a joint degree. *See also dual and joint degrees, Section 6.6.*

The thesis should be printed in S5 format (165x242 mm) and can either be a unified scientific work (monograph) or a collection of scientific papers with an introduction to the field (compilation thesis). In a compilation thesis, it should be clearly stated what the PhD student has contributed to and what any co-authors have contributed. The dissertation should be written in English, Swedish, or another Scandinavian language unless the faculty grants an exception. For the Faculty of Science and Engineering, the dissertation is normally written in English.

The author should refrain from messages (in text as well as illustrations) that are not relevant to the content of the thesis. Obviously offensive or offensive material that has nothing to do with the content of the thesis may not be published in the faculty's thesis series. It is also not permitted to use copyrighted material without the owner's permission.

Compilation theses normally contain parts where the copyright has been transferred to another party by agreement. In such cases, the first page of such a part, alternatively the place of printing page (see below), must contain information about the copyright owner and the text "Reprinted with permission" or the equivalent. Keep in mind that illustrations are generally protected by copyright law and cannot be used without permission. Information about the author can be given in connection with the work or on the place of printing page.

6.1.1 The cover of the thesis

Local regulations

For PhD thesis is not published through commercial publishers, the decision "Cover of Dissertations - Common LiU Identity", Dnr LiU-2011-01572 (2011-10-31) applies. The cover of the licentiate thesis should also follow this decision.

The front cover of the thesis should contain the following information, and only this:

- The full title of the thesis, including any subtitle, and the author's name
- Information about the thesis series and serial number:
 - For PhD thesis, "Linköping Studies in Science and Technology. Dissertations. No NNN" (this should appear at the top of the front cover)
 - For licentiate thesis, "Linköping Studies in Science and Technology. Licentiate Thesis. No NNN" (this should appear at the top of the front cover)
- The Linköping University logo

The back cover of the thesis should contain the Linköping University logo and address, and the thesis spine should feature the LiU seal and year, according to the example in the decision Dnr LiU-2011-01572.

No other logos or seals should appear on the cover, except for references on the title page (page 1 of the dissertation). The title page can also include the author's organizational affiliation (department, division/group, or PhD subject).

The cover can feature an illustration (drawing, photograph, etc.) relevant to the thesis' content. Details about the illustrations should be placed on the imprint page (page 2 of the thesis). On this page, the permanent link to the thesis on Linköping University Electronic Press should also be listed.

Both licentiate and PhD theses should have a serial number and an ISBN number. ISBNs for thesis in the series, as well as series numbers, are obtained from the university library – contact persons can be found at <www.bibl.liu.se> (A-Ö, ISBN).

6.1.2 Title page (Spikblad)

Local regulations

The thesis should contain a loose title page (spikblad) with information relevant to the announcement of the presentation. The title page should include:

- The full title of the thesis.
- The respondent's name.
- Date, time, and location (room, building, town) for the presentation.
- The PhD education subject and whether the thesis pertains to a degree in technology, economics, or philosophy.
- The thesis abstract.
- The thesis series and serial number, ISBN, and ISSN numbers.

Additionally, the title page may include information about the opponent, examination committee, supervisor, department, PhD school, etc. The title page is written in Swedish, except for the title, abstract, and keywords, which are typically written in English. The title

page, in A5 format (148x210 mm), is inserted loosely inside the front cover of the thesis. If the thesis is published electronically in LiU E-Press, the title page should include a URL to the thesis.

6.1.3 Other pages included in the thesis

Local regulations

Page 1 of the thesis (the first page after the cover) typically contains the full title of the thesis, the author's name, and the "place of publication" and year.

The page after the title page (page 2) is called the imprint page and should include:

- The full title of the thesis.
- The author's name.
- The thesis series and number.
- The text "Copyright" followed by the copyright symbol, year, and the author's name if it is a monograph, and the addition "unless otherwise noted" for compilation theses.
- ISBN and ISSN numbers.
- The publisher's name.
- Place of printing and year.
- For licentiate theses, the imprint page should state: This is a Swedish Licentiate Thesis. The Licentiate degree comprises 120 ECTS credits of postgraduate studies.

The imprint page may also contain information about the funding agency, tools used in the preparation of the thesis, etc. If the thesis contains copyright-protected material, this may be stated on the imprint page if it is not already stated elsewhere.

The thesis must, regardless of language, include an English-language abstract, including the English title. If the thesis is written in Swedish, there must also be a Swedish version of the abstract. All theses must also include a Swedish popular science summary of the thesis. The popular science summary should be placed immediately after the abstract.

In addition to the pages mentioned above, a thesis usually includes a table of contents, a dedication ("To NN"), or acknowledgements ("Acknowledgements"). One may also include a list of included figures and tables, a preface, and potentially finish with an index. It is also beneficial to include a list of the published contributions that the thesis is based on, as well as an account of the author's contribution to these if this is not evident otherwise. Any errata should be included as loose sheets with the title page.

6.1.4 Confidentiality

No part of the thesis or its defence can be covered by confidentiality.

The thesis must be defended orally at a public dissertation. This means that all material the grading committee/examiner must consider for grading purposes must be public – including the entire thesis. Although it is possible (and in some cases necessary) to refer to confidential information in the thesis, it is what is stated in the thesis and what is said during the public defense that must form the basis for grading. Therefore, it is not possible to delegate the assessment of certain confidential parts to a closed session of the grading committee.

6.1.5 Withdrawing a thesis

If a thesis is rejected or the presentation is canceled after the thesis has been announced, the faculty management must be immediately notified, and the library must be contacted to limit the spread of the thesis. The same applies to LiU E-Press if the thesis has been electronically published.

6.1.6 Electronic publishing

The Faculty of Science and Engineering strongly encourages electronic publication of both licentiate and PhD theses through Linköping University Electronic Press. Monographs are typically published in full, while the publication of compilation theses is usually limited to the cover (introduction), while the included contributions are linked separately. Electronic publishing allows the thesis to reach a much larger audience both geographically and over time (the publisher guarantees that the published contributions will remain available for 25 years).

6.2 Licentiate degree

6.2.1 Preliminary review of licentiate theses

Preliminary review of licentiate theses is mandatory for all presentations at the Faculty of Science and Engineering. The review is performed by the examiner and opponent at the request of the Board of PhD Studies. The examiner and opponent will receive information from the faculty about the preliminary review and what is expected of them in connection with this, once they are appointed. The review only concerns whether the reviewers believe the thesis meets the necessary quality to be presented and defended at a public licentiate seminar, and is not a guarantee that the licentiate thesis and its defense will be approved. The review will not be justified unless it is negative, in which case a brief justification will be required.

An electronic version of a nearly final draft (i.e., including all manuscripts and the essential part of the cover) of the licentiate thesis must be sent to the examiner and opponent no later than 7 weeks before the licentiate seminar. The PhD student sends the manuscript to the examiner and opponent, with a copy to the Board of PhD Studies. No later than four weeks before the presentation, the examiner and opponent send their reviews to the PhD Education Committee (fun.lith@liu.se), which then informs the main supervisor of the result.

6.2.2 Public disclosure of licentiate thesis

Local regulations

The licentiate thesis must be published on Linköping University Electronic Press no later than three weeks before the intended presentation. The seminar must be announced in the LiU calendar, and information about it should be distributed in a manner similar to the announcements of dissertations.

A printed version of the licentiate thesis must be available no later than three weeks before the presentation. A printed copy should be delivered to the university library. The PhD student retains five copies, and one copy is archived at the department. The size of the printed edition beyond this is decided by the department.

6.2.3 Application for licentiate seminar

The following rules apply to the notification of a licentiate seminar at the Faculty of Science and Engineering at Linköping University. The standard form for the licentiate seminar notification can be found on the faculty website.

The main supervisor must notify the Board of PhD Studies in writing about the desired licentiate seminar. The supervisor should propose an opponent and examiner for the seminar. The full email addresses of the involved individuals must be included in the notification. The person who has been the supervisor for the respondent, or who has another conflict of interest (with the respondent or the supervisor), may not be the examiner or opponent. The opponent must come from another university. Both the examiner and the opponent must hold a PhD degree. The notification must contain a proposed degree title. If the proposed title deviates from the standard practice (see Section 6.4), the main supervisor must provide a justification for this. The notification must always include the title of the thesis and the PhD student's academic title (e.g., "Master of Science in Engineering").

The notification must be accompanied by a summary of the content of the thesis and, if applicable, a presentation of the included publications/papers, including the author's contribution to these (this also applies to monographs). Furthermore, a list of completed course credits (printout from Ladok) should be attached. The choice of faculty opponent and examiner should be justified, and the Board of PhD Studies (or the chairperson) will then decide on this. The Board of PhD Studies will send an excerpt from the minutes to all concerned parties.

The notification should be submitted to the Board of PhD Studies during the semester and no later than three months before the licentiate seminar. It should be sent electronically (in PDF

format) and receipt will be confirmed. The deadline for submitting the notification for the licentiate seminar during the first three weeks of the autumn semester is April 1.

6.2.4 Time and place for the licentiate seminar

Local regulations

The mandatory seminar must take place during the semester and must be announced no later than three weeks in advance. If there are special reasons, the dean may grant exceptions. Announcements should be made during the semester. For information about semester periods, see Chapter 5.9.

6.2.5 Licentiate seminar

Local regulations

The Faculty Board decides whether a licentiate degree should be offered in a specific subject and establishes the study plan. The study plan should be designed according to the same guidelines as those for PhD study plans. The rules for eligibility, admission, and selection are the same, regardless of whether the degree is a licentiate or PhD degree.

Before a grade (pass or fail) is given for the scientific thesis (licentiate thesis), it must have been defended at a public seminar, where an opponent and a specifically appointed examiner must participate. Both must hold a PhD degree.

6.2.6 Grading of licentiate thesis

Local regulations

The grading of the licentiate thesis, including its defense, is normally carried out by a designated examiner. For the grade to be pass, the PhD student must have demonstrated the necessary competence to independently participate in research and development work and to work independently in other qualified fields, as well as current specialist knowledge in a specific area of this. The student should also have shown the ability to critically, independently, and creatively, and with scientific precision, identify and formulate research questions, plan and implement a limited research project and other qualified tasks within given time frames, thereby contributing to the development of knowledge, and evaluate this work. Finally, the student must demonstrate the ability to identify their need for further knowledge and take responsibility for their own knowledge development.

6.3 PhD degree

National regulations

The doctoral thesis must have been orally defended at a public defence. An external reviewer must be appointed for the public defence. (Chapter 6, Section 33, HEA).

At least one person who participates in grading the doctoral must be someone who does not have a position at the higher education institution awarding the degree. (Chapter 6, Section 34, HEA).

A higher education institution may issue regulations on the grading system to be used and on public defences and grading in other respects. (Chapter 6, Section 35, HEA).

Local regulations

The subject of the PhD thesis is determined by the main supervisor in consultation with the PhD student. The thesis should normally be of such quality that it can be partially or fully published in a high standard international scientific journal.

6.3.1 Preliminary review of PhD thesis

Local regulations

A preliminary review of PhD theses is mandatory at the Faculty of Science and Engineering. The review is carried out by the regular examination committee members at the request of the Board of PhD Studies. The examination committee members will, when appointed, receive information from the faculty about the preliminary review and what is expected of them. The review will only assess whether the reviewers believe the thesis is of sufficient quality to be presented and defended at a public defence, and is not a guarantee that the thesis and its defence will be approved. The review will not be justified unless it is negative, in which case a brief justification will be required. The examination committee members will send their reviews to the Board of PhD Studies, which will then inform the main supervisor of the result. A nearly final version (i.e., including all included manuscripts and the essential part of the cover) of the thesis must be sent to the examination committee no later than four weeks before the thesis is publicly announced. The PhD student sends an electronic version of the manuscript to all regular examination committee members, with a copy to the Board of PhD Studies (fun.lith@liu.se).

6.3.2 Public defence and grading doctoral thesis

Local regulations

It is recommended that the PhD student contact the publisher for the thesis well in advance of the thesis. The costs for printing the thesis are paid by the department. PhD theses are printed in at least 80 copies (at least 70 copies if the thesis is made available electronically on LiU E-Press).

At least three weeks before the defence, during the semester, the printed thesis should be distributed as follows:

- 40 copies should be delivered to the university library (acquisition department). The library will issue a receipt confirming the delivery. For theses published electronically on LiU E-Press, the delivery may be reduced to 5 copies.
- At least 40 copies should be delivered to the PhD student's department, of which approximately 10 copies are for the opponent, examination committee, and public announcement.

The PhD student retains 10 copies. If the thesis is not published electronically on LiU E-Press, about 10 copies should be delivered to sister institutions in the country. The remaining copies should be available to the public before and during the presentation. The PhD student will receive a receipt for the delivery.

6.3.2.1 Announcement of thesis (Naling)

Local regulations

The dean/vice-dean must be contacted in good time for signing two copies of the thesis. One of these copies should be posted by the PhD student on the LiTH wooden post outside lecture hall C2 in building C no later than three weeks before the dissertation, during the semester. These three weeks should fall within the semester. For PhD students at ITN, Campus Norrköping, the posting is done at the library, Kåkenhus.

During the meeting with the dean/pro-dean, the PhD student will also submit to the Faculty Office:

- One copy of the thesis signed by the dean/vice-dean
- Another copy of the thesis.

A hammer and nail can be collected from the Faculty Office (TFK), Building D, Ground Floor, or from the department head at ITN, if posting is done in Norrköping.

The department is responsible for announcing the defence in the university's calendar. The department is also responsible for notifying other universities and higher education institutions active in the corresponding subject area that the thesis is available. LiU's communications department will assist in preparing media information about the thesis.

6.3.3 Applying for public defence

Local regulations

The following rules apply for the dissertation announcement at the Faculty of Science and Engineering at Linköping University. A standard form for applying for the defence can be found on the faculty website.

The main supervisor must submit an application to the Board of PhD Studies. In the application, they should propose an opponent, members of the examination committee, and a chairperson for the defence. The full email address of all involved parties should be provided in the announcement. Guidelines for the composition of the grading committee can be found on the faculty website. Please note that the examination committee must always include at least one member from another university/higher education institution.

The application should include a proposed degree title. If the proposed title deviates from the standard (see Chapter 6.4), the main supervisor should provide justification for this. The announcement must include the title of the thesis and the PhD student's academic title (e.g., "Master of Technology").

It should also specify the subject in which the PhD student intends to defend the thesis. The application should be accompanied by a summary of the content of the thesis, and if applicable, a report on included publications/parts, including the student's contribution to them (this also applies to monographs). Additionally, a list of completed credits (a transcript from Ladok) must be attached. The application must be submitted to the secretary of the Board of PhD Studies during the semester and no later than three months before the defence. It is submitted electronically (PDF). The final date to apply for defence for the first three weeks of the autumn semester is April 1st.

The main supervisor is called to a meeting with the Board of PhD Studies (or a delegated meeting with the committee chair) to discuss the matter and will briefly explain the content of the thesis and other relevant information for the committee. The choice of faculty opponent and examination committee must be justified, and the Board of PhD Studies (or the chairperson) will then make a decision. The Board of PhD Studies sends an extract from the meeting minutes to all parties involved.

6.3.4 Time and place of the public defense

Local regulations

The public defence should take place during academic year at a time and place specified by the Vice-Chancellor. The department is responsible for booking the venue. The defence may only take place outside the academic year if there are compelling reasons and it is approved by the dean. For information the academic year, see Chapter 5.9.

6.3.5 Public defence

Local regulations

The PhD thesis must be defended at a public defence. The defence act will be led by a chairperson, and the opponent will also be present. These individuals are appointed by the Board of PhD Studies.

The order of events at the dissertation defence is as follows: The chairperson opens the defence and welcomes the attendees. The chairperson introduces the respondent and the title of the thesis, the faculty opponent, and the members of the examination committee. The chairperson will also outline the procedure for the defence. The floor is then handed over to the respondent, who will address any corrections to typographical errors or other changes in the thesis. The content of the thesis will then be presented. This part usually takes 15–45 minutes, and several formats are possible:

Example 1: The chairperson hands the floor to the opponent, who summarizes and interprets the content of the thesis. The respondent is then given a chance to comment on the summary.
Example 2: The chairperson hands the floor to the respondent, who presents the thesis. A discussion follows where the opponent presents their questions and comments on the methods and results. This is the central part of the dissertation defense, and the respondent's ability to answer questions forms the basis for grading. The grading committee will then have the opportunity to ask questions. (This discussion typically lasts 1–2 hours.)
Afterward, the floor is open to the audience, who can ask questions to the respondent in the order set by the chairperson. The respondent should be given the chance to respond to each comment. The chairperson will thank the participants and declare the dissertation defense concluded. The grading committee will then meet.

6.3.6 Examination and the examination board

Local regulations

The PhD thesis is graded as either "Pass" or "Fail." When grading, both the content of the thesis and the defence will be considered. The assessment will evaluate whether the respondent has demonstrated the ability to make a significant contribution to knowledge development through their own research. The respondent should also demonstrate familiarity with research methods, the ability for scientific analysis and synthesis, and independent critical evaluation and assessment of new and complex phenomena, issues, and situations, as well as the ability to identify the need for further knowledge.

Furthermore, the respondent should have shown the ability to critically, independently, creatively, and scientifically identify and formulate research questions, plan and conduct

research using appropriate methods, and critically review and evaluate the work. The grade for the PhD defence is determined by a examination committee with three or possibly five members appointed by the Board of PhD Studies. Committee members should normally be at least at the level of associate professor, and the majority of the members should be from a different institution than the respondent unless there are special reasons otherwise. At least one member should be from outside LiU and, unless there are special reasons, should be from another university.

The examination committee will appoint a chairperson. The committee is quorate when all members are present. The decision of the committee will be the opinion that the majority agrees with. The faculty opponent has the right to be present at the committee meeting and to participate in the discussions but not in the decision. The main supervisor should attend the entire meeting but will only participate in the discussions, not the decision. Co-supervisors may attend unless the examination committee decides otherwise.

Normally, the examination committee will meet immediately after the thesis defence. If the defence is approved, the reasons will not be recorded in the minutes. The same applies if a member of the committee dissents. If the defence is failed, the reasons must be stated, and a member of the committee may also record their dissent. If the defence is failed, the supervisor can also submit a separate statement.

The minutes template for the examination committee's meeting is available on the faculty website.

6.4 Degree title

Local regulations

The degree titles at the PhD level at the Faculty of Science and Engineering consist of a prefix (either "technologie," "filosofie," or "ekonomie") and the degree itself (Doctor of Philosophy). The diploma also contains information about the research area the student was admitted to.

The PhD student applies for either the prefix "technologie" or "filosofie" when submitting the notification for the defense. For subjects in the fields of economics/management, the prefix "ekonomie" can also be used. To use the prefix "technologie," the PhD student must have a technical background that includes both depth within their own field and breadth beyond it in their undergraduate or PhD studies.

The English translation for the Licentiate of Technology degree is "Degree of Licentiate of Engineering (Lic. Eng.);" according to an agreement among technical universities and a decision by the university board. The translations for the Licentiate of Economics and Licentiate of Philosophy degrees are "Degree of Licentiate of Economics" and "Degree of Licentiate of Philosophy," respectively. The Doctor of Philosophy degree is always translated as "Degree of Doctor of Philosophy (Ph.D.)," regardless of the Swedish prefix.

6.5 Degree certificate

6.5.1 Licentiate certificate

Local regulations

Once the mandatory seminar has been held at the department and all other requirements for the licentiate degree have been met, the PhD student can apply for the degree certificate. The application is submitted via [Ladok for students](#).

6.5.2 PhD degree certificate

Local regulations

After the dissertation defence, the supervisor submits the minutes from the grading committee's meeting to the registrar. Once all requirements for the PhD degree have been met, the student can apply for the degree certificate. The application is submitted via [Ladok for students](#).

6.6 Double and joint degrees

It is possible to obtain a double degree within PhD studies, and since July 1, 2010, joint degrees are also possible.

A double degree results from two partially overlapping programs where common elements are recognized, and the degree requirements for both programs must be met. The education leads to two separate certificates.

A joint degree is a program organized jointly by at least two institutions, with a mutually agreed study plan, and where examination can be done by other institutions without the need for recognition. The education leads to two degrees in a joint certificate. In practice, Swedish PhD studies is regulated in such a way that it is difficult to organize programs that lead to a joint degree.

6.7 Promotion

PhD promotion is arranged for all who have obtained their degree certificate by a certain date. All are invited to participate in the upcoming promotion ceremony. Participation is voluntary. Those who participate in the promotion receive a special diploma.

References and links

Regulations and Policies

- The Higher Education Act, available from the Swedish Government's legal databases (<http://rkrattsbaser.gov.se/sfsr>)
- The Higher Education Ordinance, available from the Swedish Government's legal databases (<http://rkrattsbaser.gov.se/sfsr>)
- Admissions Regulations for Linköping University regarding PhD studies, see LiU Regulations Collection <<https://stydokument.liu.se/Regelsamling/>, search term "admissions regulations".
- PhD studies, see LiU Regulations Collection <https://stydokument.liu.se/Regelsamling/>, search term "PhD studies".

7. Effective date

The Study Handbook comes into effect on October 8, 2024.