

Information on the public defence of a doctoral thesis – Faculty of Arts and Sciences

This text is designed to primarily help international opponents and examining committee members who are not so well versed in Swedish doctoral education. The text focuses on the thesis defence but also intends to describe Swedish doctoral education more broadly in order to put the doctoral student, the thesis and the public defence into context. Some information needs to be added by the supervisor as there are differences between the doctoral programmes.

Doctoral education in Sweden

Doctoral education in Sweden involves four years of full-time study, and in most cases the doctoral student is also employed as a doctoral student at the university where the doctoral education is conducted. Although doctoral education corresponds to four years of full-time study, it can be carried out over a longer period of time when studies are combined with other work within or outside the university.

The doctoral programme comprises 240 higher education credits, of which at least 120 credits must consist of thesis work. In most cases, the thesis is between 150 and 180 credits. The supervisor informs the opponent and the examining committee of how many credits the thesis in question covers. Other credits consist of courses that the doctoral student has taken to acquire both a broad and deep understanding of the subject area of the doctoral programme.

At least two supervisors are appointed for each doctoral student, one of whom has the primary responsibility.

Doctoral thesis

The thesis can be written either as a monograph or as a compilation thesis. A compilation thesis consists of a number of individual publications/articles which are usually also summarised in a “kappa” (introduction to the thesis). The supervisor will inform the opponent and the members of the examining committee about the form of the thesis in question and what quality criteria apply, for example the number of publications, co-publishing with other researchers, any requirements on sole authorship, etc.

During work on the thesis, the thesis manuscript has been reviewed on various occasions. A final review of the thesis manuscript, with an external reviewer, will have been made at the final stage of writing the thesis. However, this review does not have an examination function and is only advisory in order to help the doctoral student complete the writing of the thesis.

At the public defence, the thesis is reviewed and the doctoral student is examined. Before the public defence, the thesis will have been completed and printed. This means that the opponent and members of the examining committee cannot request additions or corrections to the thesis, as it is the completed and printed thesis that is to be reviewed and discussed at the public defence. The internal quality assurance processes of the doctoral programme are to ensure that the quality standards that can be placed on a thesis are met prior to a public defence.

Before the public defence

Opponent and examining committee

When a doctoral student is approaching the final phase of their thesis work, the principal supervisor books a date for the public defence of the thesis and reports this to the Research Programmes Board of the Faculty of Arts and Sciences. The Research Programmes Board then decides who should be appointed as the opponent and which members should be included in the examining committee, including a substitute, based on the proposal received from the supervisor. A substitute is appointed so that there is someone who can stand in, in the event that an ordinary examining committee member falls ill and is thereby prevented from participating.

Those appointed as opponent and members of the examining committee must be qualified as a *docent* (or be judged to have equivalent scientific competence), senior associate professor or professor from different institutes of higher education. All of them should have specialised knowledge in the area covered by the thesis.

When the opponent and members of the examining committee are appointed, it is important that all those appointed have the relevant scientific competence to be able to examine and assess the thesis. It is also important that issues of conflict of interest are taken into account so that there is no conflict of interest between the supervisor and the opponent or members of the examining committee, and that there is no conflict of interest between the doctoral student and the opponent or members of the examining committee. It is also recommended that the doctoral student has no close contact with either the opponent or members of the examining committee, such as dinner/lunch or other activity, before the public defence.

Publication of the thesis

No later than three weeks before the public defence, the thesis must be printed and published, which means that anyone who wishes to read the thesis can do so. The thesis is distributed by the university. No later than three weeks before the public defence, a printed version of the thesis will be sent to the opponent and examining committee members, but usually the opponent and examining committee members will be able to read the thesis in electronic form earlier in conjunction with the thesis manuscript being handed over to the printers (about six weeks before the date of the public defence). Such advance planning aims to give both the opponent

and the members of the examining committee good conditions to prepare for the public defence.

The quality assurance review that will have taken place at different stages during the doctoral education period is to contribute to the thesis meeting the quality requirements that can be placed on a thesis, in accordance with the Swedish system, before a public defence takes place. If the opponent and/or members of the examining committee have doubts about whether the thesis meets the quality requirements that should be placed on a thesis, it is recommended that the opponent/examining committee member contact the supervisor before the public defence. If there are doubts about the quality of the thesis, it is possible to withdraw the thesis and cancel the public defence.

The public defence

The thesis defence is public and anyone who wishes to attend a thesis defence is welcome. The audience at a thesis defence is usually composed of close colleagues, senior researchers as well as fellow doctoral students, family, good friends and other interested parties. The audience thus consists of people who are well versed in the research field as well as those who are not at all familiar with it and who may not have any previous experience of how a thesis defence is carried out. It is difficult to predict how large the audience will be at a defence, but the venue will be large enough to accommodate everyone who wishes to attend.

The main actors at the public defence are the doctoral student, the opponent, the members of the examining committee and the chair of the public defence. The examining committee must be complete (three members) when the public defence is carried out; otherwise, the examining committee is not quorate.

A public defence usually lasts about two hours, but there is no fixed end time for the defence, so if more time is needed for the discussion, the defence may last for a longer period.

Start of the public defence

The public defence begins with the chair (often the doctoral student's principal supervisor, but it may also be another senior researcher) opening the public defence by welcoming everyone and presenting the doctoral student, opponent and examining committee. The chair also provides information about how the public defence will proceed. Among other things, the audience are informed that they will have the opportunity to ask questions after the opponent and the members of the examining committee have asked their questions. (introduction max. 5 minutes.)

The chair then gives the floor to the doctoral student, who is given the opportunity to comment on or correct any minor errors identified in the thesis after it has been printed. Sometimes an errata list can be added to the thesis. (max. 5 minutes)

Summary of the thesis

The next part of the public defence is a presentation of a summary of the thesis. The summary can be made either by the opponent or by the doctoral student. The supervisor will inform the opponent which of the two is to present a summary of the thesis.

In the event that the opponent is to provide a summary of the thesis, the opponent should give an introduction to the research field of the thesis and position the thesis within the field by making a summary of the thesis's aims, relevance and contribution to the research field, methodological points of departure and main results. The purpose of the opponent presenting a summary of the thesis is to ensure that they have correctly understood the thesis, so that the doctoral student and the opponent have a common basis for their further discussion. After the opponent has given their summary of the thesis, the doctoral student is given the opportunity to react to what the opponent has said and, if necessary, comment on and correct any misconceptions. A further purpose of presenting a summary of the thesis is that the audience, who may not have read the thesis in its entirety or be particularly familiar with the research field, will also gain an understanding of the issues raised and the results that have emerged.

The summary of the thesis is to be presented orally and presentation slides can be used as support. The summary of the thesis should take about 20 minutes.

Public discussion and examination

The opponent then proceeds to discuss the thesis, both in its entirety and in its parts, with the doctoral student. The opponent leads the discussion by putting questions to the doctoral student. By answering the opponent's questions, the doctoral student "defends" their choices, positions, conclusions, etc. The opponent should strive to maintain a high scientific level in the conversation and through their questions critically examine the thesis and the doctoral student's work. Both the strengths and merits of the thesis and its weaker points should be highlighted and discussed. It is desirable that the conversation between the opponent and the doctoral student is conducted in a constructive manner. This part of the public defence usually takes about 60 minutes. The opponent concludes the public discussion and examination by giving their summarising comments about the thesis and thanking the doctoral student for the discussion.

When the opponent has finished, the chair turns to the members of the examining committee to give them the opportunity to ask supplementary questions or to ask for further clarifications from the doctoral student. Normally, each member of the examining committee asks the doctoral student a maximum of one or two questions, but more questions may be asked if necessary to clarify specific questions about the thesis that have not been sufficiently addressed by the opponent.

When the examining committee has no more questions to ask, the chair turns to the audience, who are given the opportunity to ask questions to the doctoral student. The chair then concludes the public defence and announces that the

examining committee will withdraw for discussion and a final assessment of the thesis.

While the examining committee has withdrawn for discussion and assessment, the doctoral student and the audience are usually invited to mingle and partake of refreshments.

The examining committee meeting

When the public defence has been concluded, the examining committee meets behind closed doors. The meeting begins with the examining committee appointing a chair from among its members. The doctoral student's supervisor will be present to answer questions and provide supplementary information to the examining committee before it makes its decision. The opponent is to be present at the meeting and may provide advice to the examining committee but does not have any voting rights when it comes to deciding whether the thesis and the completed thesis defence is to be awarded a pass grade or not. Only members of the examining committee are to make the decision whether or not the doctoral student receives a pass grade. A substitute on the examining committee, if one is present and has been present at the public defence, is also entitled to attend the meeting but is not to participate in the decision.

At the end of the meeting, the examining committee sum up their assessment of the thesis and how the doctoral student has defended their work. The thesis and its defence are assessed and graded "pass" or "fail". The minutes are signed by all members of the examining committee. If the thesis and defence are deemed to be graded as "fail", the grounds for failing must be motivated in the minutes of the meeting. Decisions on grades are often made by consensus, but, if necessary, a vote can be taken and a majority decision made. A member who is of a different opinion may express their reservation on the decision, which is then noted in the minutes.

When the examining committee has made its decision, the examining committee goes to the location where the doctoral student and the audience have been waiting during the examining committee's meeting. The chair of the examining committee announces the decision, and, in the case of a pass grade, the doctoral student is congratulated and, if appropriate, a toast is made.

Practical matters

The public defence takes place on Linköping University premises, either at Campus Valla (Linköping) or at Campus Norrköping. The public defence is held on a weekday during normal Swedish office hours (8:00-17:00 UTC+1)

An administrator will contact the opponent and members of the examining committee to assist with practical matters such as booking travel and, if necessary, also a hotel. LiU will cover these costs. An opponent or a member of the examining committee who is not able to take part in person can participate via video conferencing. Requests to participate via video conferencing should be made when the opponent/examining committee member is asked to take on the assignment.

A fee determined by LiU will be paid to the opponent. No fee is payable to the members of the examining committee.