



# LUNDS UNIVERSITET

Lunds Tekniska Högskola

LTH:s kansli  
Faculty Office

## Guidelines for external PhD faculty opponents and examination committee members

This document is a description of the procedures for PhD examinations at the Faculty of Engineering (LTH) at Lund University

### Introduction

You are appointed as participant in the examination process based on your distinguished competence relevant to the thesis discipline and your contribution is of great value in the quality assurance of PhD approvals.

This document includes a description of the different actors in the examination process and describes the different stages of the PhD defence including the preparation, the public defence, and the closed committee meeting. General examples are given of typical procedures, but deviations may occur. Please consult the supervisor or chairman of the PhD defence to discuss the procedures in your particular case.

### Some useful terms

#### *Swedish*

Avhandling

Betygsnämnd

Disputation

Doktorand

Suppleant i betygsnämnd

Försvar

Handledare (Huvud-)

Opponent (fakultets-)

#### *English*

Thesis

Examination committee

The act of defending the thesis

PhD student / postgraduate student

Examination committee deputy member

Defence

Supervisor (Main)

Opponent (appointed by the faculty)

Opposition	Opposition of the thesis
Ordförande i betygsnämnd	Chairman of the Examination committee
Ordförande vid disputation	Chairman of the PhD defence
Ordförande i forskarut- bildningsnämnd	Chairman of the Board of Postgraduate Studies
Respondent	The PhD student defending the thesis

## **Actors during the PhD defence**

The *faculty opponent* is appointed by LTH. He/she is a specialist in the scientific field of the thesis, competent to assess the thesis and the respondent. The faculty opponent is the main person scrutinizing the thesis. Please note that the term “opponent” is not the same as the English term “external examiner”. The “opponent” should limit his/her examination, i.e. questions, discussion points etc., to a scrutiny of the scientific work presented in the thesis and the publications included therein. The respondent has already been examined on his/her knowledge of the subject in connection with compulsory courses during the PhD studies.

An *examination committee* of 3 or 5 persons is appointed by LTH for each PhD defence. They are elected with the mandate of judging the quality of the oral defence as well as the written thesis. The committee may reflect different scientific aspects of the thesis as well as aspects relevant to interests of the society. It is the examination committee who decides whether the respondent should “pass” or “fail”.

In addition to the regular 3 or 5 members, one *deputy member* is also appointed that can replace any member of the committee in case of impediment. The deputy member is included on equal terms with the regular members in the preparation process as well as the actual defence (but not in the decision of the examination committee).

The examination committee selects a *chairman of the examination committee* among themselves.

The *chairman of the PhD defence* is selected from the faculty members of LTH, as appointed by LTH. He/she makes the agenda for and directs the performance of the public defence in accordance with common practice of LTH.

**Audience.** The defence is open to the public and is usually held in a lecture hall with plenty of space for the audience. There are usually a good number

of department members, other researchers, students, friends and relatives.

## **Different stages of the whole PhD defence**

### *Preparations for the defence*

The faculty opponent and the examination committee members have to consider partiality in relation to the respondent as well as the supervisors. See enclosure 1.

The doctoral thesis must be printed and distributed at least 3 weeks and 3 days prior to the date of the defence. Normally the opponent and the examination committee will obtain preprints of the thesis or copies of it in manuscript form prior to this formal date.

The examination committee and the faculty opponent should read the thesis in good time, and should have formed a basic opinion on it at least one week in advance of the examination.

In rare cases, it may be found that the thesis has such serious shortcomings that the opponent may recommend it to be not approved or committee members may consider not approving it. In such cases, please contact the supervisor as soon as possible.

### *The defence*

After consultations with the opponent and the respondent, the chairman decides on the introductory part of the agenda of the defence, in accordance with common practice of LTH or the particular department the defence act is opened by the Chairman of the PhD defence, who introduces the respondent, the opponent, the examination committee and the supervisors, presents the agenda of the defence and explains a few formalities. The respondent is then given the opportunity to point out printing errors, etc., in the thesis.

A usual introduction is as follows: To put the work into perspective the defence often starts with a review of the work presented in the thesis especially in relation to the overall research field. This review may be given by the opponent, but also by the respondent. Typically it takes 10 to 15 minutes and shall be kept at a reasonably general level so that it can be understood at least by other scientists from the faculty. The review should relate to other work in the field and also include a discussion about the relevance and the contribution of the work presented in the thesis.

The respondent then often gives a short prepared presentation on the most important aspects of the thesis or summarises his/her work. This presentation

time varies but usually takes about 20 minutes.

After these preliminaries the actual defence starts. The opponent asks questions about, discuss important issues of, or criticises, the thesis, and the respondent answers and defends his/her work. If there are several authors of the published papers, the opposition should be concentrated on the part of the work that the respondent was primarily responsible for. Normally, this should be clear from the summary of the thesis, but if not the opponent should consult the respondent's main supervisor. This part of the defence usually takes about an hour.

The opponent's questions should aim to highlight the key contributions, the relevance of the work, and also possible misconceptions and erroneous results. The questions may be general or more detailed in nature, or both. It is also appropriate to bring up questions concerning the relevance of the assumptions that the author makes. The respondent should be given the opportunity to demonstrate his/her understanding of the problem. One way is to ask fairly brief questions concerning arguments in proofs or statements that are made in the thesis. The opponent is free to select any aspect for discussion entirely at his/her own discretion. However, all the issues must be of relevance to the thesis, since the procedure is *not* meant to be the equivalent of an oral examination.

At the end of the dialogue the opponent is supposed to sum up his/her impressions. If appropriate, the opponent usually congratulates the respondent to his/her work.

When the opponent has finished, the chairman gives the examination committee members the opportunity to ask questions. The opponent may again participate at this point. The committee members usually ask a few questions each. The audience is then given the opportunity to oppose *ex auditorio*. After this, the chairman closes the defence.

The time limit is flexible and there is no formal time limit. The whole defence act usually lasts about two hours.

After the defence the examination committee meets.

Finally, a summary of the proceedings:

1. The chairman of the PhD defence introduces the respondent and the opponent, the examination committee and the supervisors (often in Swedish).
2. The respondent is given the opportunity to point out printing errors etc. in the thesis
3. Introduction (optional) by the opponent

4. Introduction (optional) by the respondent
5. The main discussion and defence
6. Questions and comments from the examination committee
7. Questions and comments from the audience
8. The chairman of the PhD defence closes the proceedings
9. The examination committee meets

### *The examination committee meeting*

Finally, the examining committee has a closed meeting. This meeting is also attended by the opponent, the respondent's supervisors, and the deputy member. Although they are invited to give their opinions and for clarification of roles (supervisors), they do not take part in the decision. The chairman of the PhD defence sometimes also participates but has no formal obligations or influence at this stage.

The meeting starts by the committee members appointing a chairman amongst themselves. The chairman (of the examination committee) normally asks the opponent if he/she has additional remarks or comments which were not presented at the defence and to provide recommendations about approval or disapproval of the written thesis and the defence. The opponent may state the strengths and weaknesses of the work. Then the chairman might ask the supervisors about the respondent's contribution to papers co-authored by others, about the respondent's working methods and anything else of importance in the decision. The members of the examination committee now give their opinion, especially in their areas of expertise. This may be followed by a discussion. When the chairman thinks that the members are ready to vote, each of the members of the examination committee is asked to give their vote. Each of them has to vote "pass" or "fail". The decision of the majority prevails. The decision is stated in pre-prepared minutes brought to the meeting by the supervisor and is signed by the members of the committee. No record is kept of the discussions at this meeting. The decision is based on both the thesis and the oral defence.

In the case that any of the committee members announces a deviating opinion she/he can have this opinion stated in the protocol of the meeting.

In the case that the committee comes to the decision "fail", it must prepare a protocol where its conclusion and the reason for the decision are clearly stated, but at this stage failure is extremely uncommon.

No grades are awarded; the respondent either passes or fails.

After the meeting of the examination committee the respondent is informed of the decision by, for example, the chairman (of the examination committee).

## **General information**

Nowadays, there is no strict dress code at a PhD defence. Usually a suit and tie, or equivalent, are recommended. The opponent and committee members are recommended to consult the chairman of the defence or the supervisor about how to dress.

Further questions about facilities in the lecture hall or about the procedure should be addressed to the chairman of the defence or the supervisor.

### Enclosure 1

The issue of partiality applies to relationships with the respondent and the supervisors.

## **Partiality**

The opponent and the members of the examining committee shall themselves decide whether they are partial or not. Each of the persons involved, as mentioned above, is to decide whether he or she is partial in kind of relation to the respondent or the supervisors of the respondent.

The regulations regarding partiality are laid down in the Swedish Code of Statutes

(1986:223, sections 11 and 12).

Circumstances that may lead to partiality are:

- Personal or economic interests in the outcome of the matter
- Family or other relationships
- Connection with private companies, associations or similar organisations that have a special interest in the outcome of the matter
- Other relationships that may cause doubt as to whether impartiality can be ensured, for example, in relation to:
  - co-authorship,
  - other close scientific or working collaboration, or
  - friendship/enmity.

*Co-authorship* need not automatically imply partiality. The following determine

whether a person can be considered partial or not:

- the extent of co-authorship,
- the point in time, or
- the importance of the work in question in the present assessment.

If there is any doubt, the examining committee may decide to obtain a testimonial in order to evaluate the importance of co-authorship in the question of partiality.

*Other close scientific or working collaboration.* This does not in itself result in partiality in the evaluation of a person with whom the examiner/committee member has had professional collaboration (e.g. in the role of supervisor).

*Friendship/enmity.* To constitute partiality, it must be proven that there is a close friendship or a substantial degree of enmity between the parties. General work-related friendship or general scientific disagreement between the parties is not in itself grounds for partiality. This is, however, based on the requirement that the examiner/committee member takes a professional, neutral and impartial approach in regard to the respondent.

As is evident from the above, concrete steps must be taken to ensure that there is no doubt regarding the impartiality of the partners concerned.