



6 September 2018

## INFORMATION FOR PRE-EXAMINERS OF DOCTORAL DISSERTATION

### **The setting**

In the Faculty of Science and Engineering at the University of Turku, there are three-level degrees: Bachelor's degree (normative duration 3 years of full time studies), Master's degree (normative duration 2 years) and Doctoral degree (normative duration 4 years). The doctoral degree titles are Doctor of Philosophy and Doctor of Technology.

An accepted doctoral dissertation is an essential requirement for getting a doctoral degree. The dissertation may consist of either a single monography or a collection of several publications (or unpublished manuscripts intended for publication) together with an in-depth introduction to the work. The articles may be co-authored, provided that the doctoral candidate has made independent contribution to them. A thesis supervisor writes a statement about the contribution of the author in joint publications.

Two external pre-examiners will first evaluate the proposed dissertation in order to decide whether the proposal constitutes an acceptable dissertation that may be published. On the basis of pre-examiners' recommendations, the faculty council will make the final decision in this matter. In the positive case, the dissertation will be published and the author will defend the thesis in a public examination where there is one opponent nominated by the faculty.

### *Quality requirements*

The purpose of the pre-examination is to establish whether the proposed manuscript satisfies the quality requirements of a doctoral dissertation (quality control). Therefore, particular attention should be paid to the following aspects:

1. A dissertation must contain new scientific findings in its field of research.
2. Theoretical developments, experimental set-ups, measurements, and the data presented in a dissertation should withstand the scrutiny appropriate to scientific research.
3. The author must be able to present his/her achievements and assertions in a clear scientific manner.

The pre-examiner should approach a collection-dissertation as a whole, even if the separate articles have been accepted for publication in refereed series. If one or more of the individual manuscripts, included in the collection for the thesis, have not gone through the refereeing process in a journal, the examiner should make certain that these manuscripts individually satisfy the scientific standards expected for a publication. As indicated above, the thesis supervisor should describe the author's role in joint publications, and this information should be taken into account by the examiner.

When examining a dissertation manuscript, the pre-examiner should, if possible, compare it against the standards set for dissertations in Finnish or Swedish universities.

### **Corrections and revisions**

If necessary, the pre-examiner may discuss the thesis with the doctoral candidate or with the supervising professor in order to confirm and possibly correct statements presented in the thesis. Owing to the time limit imposed on the pre-examination, the examiner should not embark on an actual supervision of the doctoral candidate's research.





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The pre-examiner may propose additions, corrections and deletions to the thesis in the final statement. If the required changes are small, the pre-examiner may leave their supervision to the student's thesis supervisor (indicating this in the statement). If major changes to the thesis are necessary before the printing permission can be granted (such changes typically involve flaws in the interpretation of results, lack of data supporting the conclusions etc.), the pre-examiner should discuss the matter with the student and the thesis supervisor. In such a case, the student should make corrections and additions to the thesis, based on the pre-examiner's advice and send a new version of the thesis to him/her before a final statement about granting a printing permission for the revised thesis manuscript is sent to the faculty.

### **On the form of the pre-examiner's statement**

The typical statement is 2-3 pages long and should discuss the proposed dissertation in some detail.

The pre-examiner should also estimate whether the candidate's contribution to the dissertation has been sufficient.

Toward the close of the statement, the pre-examiner should clearly state whether a permission to publish the dissertation can be granted.

Doctoral theses are graded as "accepted with honours", "accepted" or "rejected". The grading of doctoral theses is performed on the basis of the statements from the official examiners (two pre-examiners and an opponent). If all examiners estimate in their statements that the doctoral thesis is on the same level as the top 10 % of theses in its field internationally, the thesis can be accepted with honours. We ask the pre-examiner to state explicitly whether or not the doctoral thesis is in the top 10% of theses in its field internationally.

### ***Grading criteria***

At least the following items must be considered when grading a doctoral thesis

- the significance, originality or novelty of the research setting in relation to other completed and ongoing research in the field in question;
- the justifiability of the chosen research methods, the originality of the methodology and the development of new methods;
- the quality, impact and theoretical or practical significance of the research results;
- proof of familiarity with the field of research in question and the candidate's ability to critically examine his or her own and other research; and
- the coherence, clarity and other issues concerning the style of the presentation.

### **Time limit**

The pre-examiner should present the statement within one month from the initial receipt of the official request.

