

GUIDELINES FOR DOCTORAL THESIS OPPONENTS

A doctoral thesis in Tallinn University of Technology (TalTech) is an independent research work that presents a novel solution to a significant problem in the research field of the doctoral study programme and demonstrates the candidate's ability to conduct independent research. The results of the research work have to be published in internationally distributed scholarly publications.

A doctoral thesis shall be written either (1) based on research publications, (2) as a monograph or (3) as creative research.

As a rule, doctoral thesis based on research publications consists of three research publications (peer-reviewed scientific journal and conference papers published or accepted for publication) and a summary that integrates them into a coherent whole, following the structure of a scientific article. At least one of the research publications must be a journal article. The doctoral candidate must be the lead author of at least one of the publications. The doctoral candidate has a right to include one additional submitted manuscript that is in the peer-review process and does not have the decision.

A research publication means a peer-reviewed research paper published in a source indexed in Scopus or Web of Science databases.

Preparations for the defence

A doctoral candidate, who wishes to defend the thesis, must submit the thesis to the head of the department where the research was carried out. The head of the department appoints two pre-reviewers who hold a doctoral degree or an equivalent qualification in the relevant field. At least one of the pre-reviewers must be from outside TalTech and preferably from outside the Republic of Estonia. The pre-reviewers' task is to determine whether the thesis complies with the requirements for doctoral thesis. Pre-reviewers issue a statement for the purpose of granting permission to publish and defend the thesis. After the pre-review, doctoral candidate will submit the thesis, a defence application approved by the supervisor and the positive assessments of two pre-reviewers to the dean of the School. Within two weeks, the dean decides whether to permit the thesis for publishing and defence.

At least one month before the defence the dean appoints two opponents, defence committee members and sets the time and place for the defence. Usually, the opponents are part of the defence committee.

According to the regulations of TalTech the opponents should be the recognized specialists in their fields of research, should come from outside TalTech, and at least one of them from outside the Republic of Estonia. The opponents should not have conflict of interest with the doctoral candidate or his/her supervisors. This includes personal and economic interests, the supervisory relationship between the supervisor and the opponent, as well as joint publications with the doctoral candidate or his/her supervisor published within the last five years.

If the opponents have not been in a role of the pre-reviewers, they are requested to send their written opinions to the chairman of the defence committee not later than 5 days before the defence. The opponent's written report may use the TalTech template or may be freely formulated. It should include a clearly reasoned assessment of the scientific value of the dissertation.

Based on dean's decision the thesis shall be published online at least one month prior to the defence date.

Defence procedure

The role of the defence committee is to make a decision about awarding the PhD degree to the doctoral candidate.

A doctoral thesis is usually defended at a public meeting of the defence committee. If necessary, a closed meeting will be announced by the chairman of the defence committee pursuant to the dean's decision.

The language of the defence shall correspond to the language in which the thesis is written, which is usually English.

The chairman of the defence committee leads the defence procedure. The chairman introduces the doctoral candidate, the opponents, the defence committee and the supervisors and presents the agenda of the defence.

The defence procedure includes:

- opening and introduction by the chair;
- presentation by the doctoral candidate – 20-30 min.,
- an academic discussion between the doctoral candidate and the opponents – typically but not limited to 1-2 hours;

It is up to the opponents to decide in which order they want to examine the candidate: one by one, or intermittently. The opponents are free to select any aspect of the thesis they consider relevant for discussion. The candidate will respond to the comments and questions, defending his/her choices, conclusions and results. It is recommended for opponents to conclude their examination with a short statement summarizing strengths and weaknesses and the importance of thesis with simple words understandable for the audience.

- answering questions of the members of the defence committee;
- a general discussion with the audience (all those present may ask questions and give their opinions);

- final word by the supervisor;
- making a decision and drawing up a defence record.

The defence committee will decide in a closed meeting by secret ballot, whether to award a doctoral degree to the candidate. A doctoral degree is awarded if more than 50% of the members of the defence committee who participated in the meeting vote in favor. No grades are given.

Role of the opponents

The role of the opponents is to scrutinize the doctoral candidate's scientific work to assess whether he/she meets the quality criteria of the PhD degree, including the importance of the research subject, relevance of the formulation of scientific questions and hypotheses, how familiar is the doctoral candidate with the scientific literature of the subject field, are the research materials and methods relevant and justified, what is the quality, novelty and reliability of the research results, are the relevant issues critically discussed, the significance of conclusions, and general composition and logical organization of the thesis as a whole. The examination should also reveal candidate's ability of independent scientific thinking and scientific maturity, including the ability to plan and implement the research independently.

As most publications could be co-authored, it is important to assess the candidate's individual contribution to the research.

Communication between the doctoral candidate and the opponent prior to the defense is not regulated, as long as the opponents' judgement remains unbiased. If there is a need for additional analysis or verification of facts, some questions could be submitted in their written reports.

General information

The dress code of the defence is business formal or business casual.

Opponents travel and living expenses are covered by university.

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