Additional conditions for awarding doctoral degrees in the Faculty of Science and Technology

Adopted based on clause 98 of the Regulations for Doctoral Studies, adopted by the University of Tartu senate regulation no. 8 of 27 May 2022 and amended by regulation no. 1 of 1 March 2024.

I. General principles

- 1. In the Faculty of Science and Technology ("faculty"), doctoral degrees are awarded based on the Regulations for Doctoral Studies ("regulations") and the following conditions.
- 2. If the faculty council has established specific provisions for awarding doctoral degrees for institutes, the conditions established for the institute where the doctoral candidate's supervisor in charge is employed apply.

II. Requirements for doctoral thesis

- 3. The articles constituting the doctoral thesis as an integrated collection of research publications as referred to in clause 107 of the regulations must be in English. If articles published in other languages are used, the full translations of these articles into English must be included in the doctoral thesis.
- 4. Generally, an article may be used in up to two doctoral theses of the same specialisation. If one article has been used in two doctoral theses, the contribution of both doctoral candidates to the thesis must be substantial and described in detail in the thesis. Using one article in more than two doctoral theses is only permitted based on a reasoned decision of the council awarding doctoral degrees ("council").
- 5. If an article has two or more lead authors, the doctoral candidates in the role of the lead author may only use it in their doctoral thesis as an article complying with clause 110 of the regulations by the reasoned decision of the council.
- 6. In the case of a doctoral thesis defended at the Institute of Physics and the Institute of Chemistry, at least three articles in a doctoral thesis as an integrated collection of research publications referred to in clause 108.2 of the regulations should be ETIS classification 1.1 articles, or two ETIS classification 1.1 articles and two classification 3.1 or 1.2 articles.
- 7. A doctoral thesis defended at the Institute of Molecular and Cell Biology and the Institute of Technology may, in addition to articles referred to in clause 107 of the regulations, include manuscripts of unpublished articles and other published articles. If unpublished results are used, it must be clearly indicated in the text of the doctoral thesis that the data have not yet been published.

III. Requirements for submitting documents to the council

8. If an opponent or a peer reviewer may have a conflict of interest in performing the duties, the supervisor in charge must, when appointing an opponent or a reviewer, fill in a questionnaire to prevent conflicts of interest and submit it to the council together with the documents referred to in clause 122 of the regulations.

- 9. At the Institute of Genomics, an opponent of the doctoral thesis must declare that none of their previous roles affects their being an opponent and impartial performance of the role, and that there is no conflict of interest. The opponent and the supervisor(s) sign a conflict of interest form, which is submitted with documents referred to in clause 122 of the regulations to the council for making a reasoned decision.
- 10. At the Institute of Molecular and Cell Biology, the doctoral candidate will submit to the council, together with the documents referred to in clause 122 of the regulations, the opponent's curriculum vitae in English with a list of publications and, if necessary, permission from the journal editors allowing articles included in the thesis and drawings published by other authors to be used in the doctoral thesis.
- 11. At the Institute of Ecology and Earth Sciences,
 - 11.1. the application to allow the doctoral thesis to be defended must include a confirmation that the doctoral candidate has informed the co-authors from the University of Tartu of using the joint article(s) in the doctoral thesis;
 - 11.2. the defence meeting is generally organised by the department or centre where the doctoral thesis was completed.

The Department of Zoology also organises the defences of doctoral theses of the Estonian Marine Institute.

12. According to clause 134 of the regulations, at least 15 copies of the doctoral thesis are printed. The council determines the final number of the printed copies of each doctoral thesis.

IV. Peer review, preliminary defence and opponent

- 13. If, before allowing the doctoral thesis to be defended, the council sends it to be peer-reviewed under clause 125.2 of the regulations,
 - 13.1. at the Institute of Computer Science, Institute of Molecular and Cell Biology, Institute of Technology and Institute of Ecology and Earth Sciences, the council, and, for the doctoral theses of the doctoral curriculum Environmental Technology and the specialisation Environmental Technology of the doctoral programme Engineering and Technology, the council chair, generally appoints an internal reviewer from the University of Tartu as the reviewer of the doctoral thesis. At the Institute of Ecology and Earth Sciences and the Institute of Ecology and Earth Sciences, the internal reviewer is generally appointed from among the members of the council. For doctoral theses of the doctoral curriculum Environmental Technology and the specialisation Environmental Technology of the doctoral programme Engineering and Technology, the chair of the joint council awarding doctoral degrees appoints a council member or a researcher outside the council who meets the requirements of clause 131 of the regulation as the internal reviewer. The reviewer verifies the compliance of the thesis with the requirements, and submits a written opinion to the council;
 - 13.2. at the Institute of Mathematics and Statistics, the council appoints a researcher from outside the University of Tartu who meets the requirements of clause 131 of the regulations as a peer reviewer.

The doctoral candidate responds to the comments received during the peer review and gives answers and explanations to both the peer reviewer and the council;

13.3. the doctoral theses of the doctoral curriculum Environmental Technology and the specialisation Environmental Technology of the doctoral programme Engineering and Technology, together with the reviewer's opinion and the academic secretary' assessment, are first submitted for a recommendation vote to the scientific council of the institute where the doctoral candidate's supervisor in charge is employed. The joint council awarding doctoral degrees

- takes the results of the recommendation vote into account when making the decision referred to in clause 126 of the regulations.
- 14. At the Institute of Computer Science, a preliminary defence is held, where also the internal reviewer participates, if the council has appointed one.
- 15. At the Institute of Molecular and Cell Biology, the opponent of the doctoral thesis must be an independent researcher who is at least at stage R3 according to the European Commission's framework of research careers and has experience in supervising doctoral students.

V. Defence meeting

- 16. The length of the doctoral candidate's presentation (*lectio praecursoria*), referred to in clause 148.2 of the regulations, is up to 30 minutes.
- 17. At the Institute of Genomics, the supervisor(s) are given the opportunity to take the floor before the doctoral candidate's presentation (*lectio praecursoria*), referred to in clause 148.2 of the regulations.
- 18. At the Institute of Mathematics and Statistics,
 - 18.1. the council secretary introduces the doctoral candidate as provided in clause 148.1 of the regulations, giving an overview of the doctoral candidate's academic career and confirms that the prerequisites of the defence and the formal requirements of the defence meeting have been met;
 - 18.2. the council members and the opponent or opponents may after the doctoral candidate's presentation, referred to in clause 148.2 of the regulations, ask the doctoral candidate questions about it;
 - 18.3. the supervisor(s) have the opportunity to take the floor before the discussion referred to in clause 148.5 of the regulations.
- 19. At the Institute of Molecular and Cell Biology and the Institute of Technology,
 - 19.1. in addition to the provisions of clause 148.1, the chair of the meeting gives the floor to the supervisor(s) of the doctoral thesis to introduce the doctoral candidate;
 - 19.2. the chair of the meeting introduces the opponent or opponents before the remarks referred to in clause 148.3.
- 20. A recording made of the defence, referred to in clause 147 of the regulations, will be retained for six to twelve months.