

# **Graduation Thesis Requirements and Procedure for Defence in the Institute of Education**

## **I. Graduation thesis requirements**

1. The bachelor's thesis or master's thesis (hereinafter referred to as the graduation thesis) is a pedagogical research paper of either empirical or theoretical nature that meets the requirements of an academic paper (see Appendix 1).
2. The graduation thesis can also be an article belonging to categories 1.1, 1.2 or 3.1 (based on the Estonian Research Information System classification scheme) that meets the graduation thesis assessment criteria (see Appendix 2), provided that the person defending the thesis is the first or only author of the article.
3. The objective of the graduation thesis is to enable students to find a research-based solution to a problem related to learning, teaching or subject content by providing them with skills of independent research.
4. The graduation thesis can have one or several authors (e.g. a paper on a similar topic or using the same original sources). In the latter case, all authors must identify their own original contribution to the thesis.

## **II Topic and supervisor**

5. Students shall choose a supervisor and inform the programme director of their choice in the semester preceding the defence by 30 September at the latest if the thesis is defended in spring or by 30 April at the latest if the thesis is defended in winter. The supervisor may be a person who has at least a master's degree or an equivalent. If the supervisor does not have an employment contract with the university or works for another faculty of the university, a co-supervisor must be appointed from among the academic staff of the Institute of Education.
6. The student shall specify the topic of their graduation thesis in collaboration with the supervisor and write a graduation thesis project that meets the mandatory requirements (see Appendix 3). The project shall be submitted to the academic affairs specialist in the semester preceding the defence by 31 October at the latest or 31 May at the latest.
7. If the student wishes to write and/or defend their thesis in a language other than Estonian, they must provide an adequate justification in their project.
8. If the project does not meet the requirements, the student will be asked to improve it and/or find a co-supervisor. The graduation thesis project shall be either approved or rejected by the programme director by 30 November at the latest or 15 June at the latest, involving experts in the field if necessary.
9. The programme directors shall submit information about the supervisors of the graduation theses for approval by 1 December or 15 June at the latest. The supervisors shall be approved by the directive of the head of the institute not later than six months before the planned defence of the thesis.
10. The supervisor is responsible for the following:
  - 10.1. helping the student to choose the topic and advising them in all stages of the graduation thesis;
  - 10.2. explaining the timeline of the thesis and requirements for the thesis;
    - 10.2.1. evaluating the compliance of the thesis with the graduation thesis requirements and giving the consent to allow the thesis to be defended if the requirements are met, confirming it by their digital signature.

### **III. Submission of the graduation thesis and approval for defence**

11. The graduation thesis shall be submitted to the academic affairs specialist not later than 10 workdays before the defence in an electronic format (as a PDF file), signed digitally by both the author of the thesis and the supervisor. As part of the graduation thesis, a non-exclusive licence is presented in the same file which grants the university the right to publish the thesis in an electronic format. As an exception, if it is not possible to sign the thesis digitally, the thesis can be signed on paper.
12. Completion of all the other courses in the curriculum by the student is a prerequisite for defending the thesis, unless the curriculum provides otherwise.
13. The thesis shall be checked by a plagiarism detection system to prove its originality.
14. The thesis shall be approved for defence by the defence committee at least 5 workdays before the defence. In case the thesis is not approved for defence, the chair of the defence committee shall notify the academic affairs specialist via e-mail, who, in turn, shall inform the student.
15. The supervisor shall make a proposal to appoint a reviewer. A reviewer must be competent in the given field of research and have at least a master's degree or an equivalent. The reviewer shall be approved by the programme director.
16. The thesis shall be submitted to the reviewer by the academic affairs specialist at least 5 days before the defence.
17. The reviewer shall submit the review of the thesis to the academic affairs specialist at least two days before the defence, who shall forward the review to the student not earlier than a day before the defence. The reviewer shall send the proposed grade to the academic affairs specialist in a separate e-mail.
18. The author of the thesis has the right to withdraw the thesis at least one workday before the commencement of the graduation thesis defence in the given curriculum.

### **IV Procedure for defence and assessment**

19. The graduation thesis can be defended twice a year: in January and in May-June.
20. The duration of the defence is up to 30 minutes in the case of a bachelor's and up to 45 minutes in the case of a master's thesis.
21. The graduation thesis may only be defended if the person defending the thesis is present at the defence. If the reviewer is unable to attend the defence, one of the defence committee members shall act as a reviewer.
22. The defence of the graduation thesis shall take place in the form of a public academic debate in the following stages:
  - 22.1. an overview of the thesis by the student (up to 7 minutes in the case of a bachelor's, and up to 12 minutes in the case of a master's thesis);
  - 22.2 an academic debate between the reviewer and the student;
  - 22.3 a public discussion and questions to the student;
  - 22.4 closing remarks by the student (optional).
23. The graduation thesis shall be assessed by the thesis defence committee with the reviewer having the right to an advisory vote. The assessment of the thesis (incl. a thesis in the form of an article) is based on the achievement of desired learning outcomes set out in the assessment criteria (see Appendix 2).

24. The members of the defence committee are appointed based on the proposal of the programme director. If the student is awarded an occupational qualification, the composition of the defence committee must be coordinated with the occupational qualifications committee according to the agreed workflow.
25. The defence committees are approved by 15 December of each academic year by the directive of the head of the institute. During the academic year, changes can be made to the composition of the defence committees and dates of the defences, if necessary.
26. The defence committee consists of at least three members. The committee is competent to act if more than half of the committee members are present.
27. In order for the thesis to get a positive result, all learning outcomes must be achieved at least for grade E and the general assessment of the thesis as a whole must be positive. The final grade is composed of grades given by the committee members.
28. If the supervisor is a member of the defence committee, they shall not participate in the assessment of the thesis that they supervised.
29. If the defence committee decides that the thesis and the defence do not comply with the requirements, the thesis will receive the grade “insufficient”. In that case, the student is entitled to one second defence. The second defence of the graduation thesis must take place within one year as of the end of the semester in which the first defence of the thesis took place. For the second defence, the graduation thesis must be improved or re-written according to the assessment criteria.
30. The grades of the theses are announced directly after the minutes of the defence have been signed, but not later than within one workday after the defence.
31. If the student does not agree with the result of the defence, they must follow the procedure set out in clause 215 of the university’s Study Regulations.

## Appendix 1. Structure and formatting of the thesis

### I. Structure and main components of the thesis

The graduation thesis is written as an article (incl. development projects, theses focusing on the development of teaching materials, etc.). The structure and main components of the article format are listed below. The requirements are based on APA guidelines (*Publication Manual of the American Psychological Association, 6. Ed*).

- Title page (page 1, but no page number on the title page). See the format of the title page at the end of the requirements.
- Abstract (page 2)
- Table of contents

Main text (beginning on a new page):

- Introduction, incl. theoretical background
  - Method
  - Results
  - Discussion
  - Acknowledgments
  - Author's declaration
- 
- List of references (beginning on a new page)
  - Appendices (beginning on a new page; each appendix on a new page)

**Abstract.** The abstract is a short and concise overview of the thesis (up to 120 words). The abstract includes a short description of the following: the phenomenon under investigation, the research problem, the objective of the study, the methods used, the most important results obtained, and the conclusions based on the results. Impersonal style is recommended in this part of the thesis, with no interpretations concerning the results. The abstract starts with the title of the thesis and ends with keywords.

**Table of contents:** a table of contents is presented in the thesis (a difference from APA).

**Introduction.** The chapter provides an overview of the research problem and its theoretical background. Here, a justification for the choice of the topic and importance of the research problem is presented and an overview is given of the previous relevant studies. Through synthesis and discussion, aspects relevant to the current research are brought out. A connection between the theories, previous studies and the given thesis is demonstrated. The introduction may contain several subchapters (which may have headings). In the introduction, the objective of the thesis is stated and hypotheses or research questions are formulated.

**Method.** The chapter describes and justifies the research methods and ideologies (quantitative, qualitative or combined) and also explains how the research was designed and conducted. This part contains information that allows the reader to get a detailed overview of research methods and replicate the study, if necessary. The chapter is usually divided into subchapters.

- *Sample:* principles of forming a sample; number of the respondents; other information about them relevant to the study.
- *Instruments* (tests, questionnaires, observation records, etc.): a list and short description of the applied instruments; principles behind their choice or design; how validity and reliability were ensured. The instruments and their exact descriptions are presented in the appendices.

*Procedure:* a brief overview of how the empirical study was conducted, e.g., instructions presented to the respondents, division of the respondents into subgroups, etc. A detailed description is only necessary if the method is novel. An overview is given of the principles of data processing and methods used.

The chapter must be detailed enough for the reader to replicate the study.

In the case of using a qualitative method, it is advised that the chapter is divided into the following subchapters: *Sample, Data Collection, Data Analysis*; in each subchapter, the corresponding part of the procedure should be described.

**Results.** The chapter presents an overview of the collected data and the data analysis. Presented data and the results of the analysis must be sufficiently reliable to justify the later conclusions. All major results must be presented, including those that are controversial. No interpretations of the results are given in this chapter. Tables and figures are used for a clearer presentation or illustration of the results.

**Discussion.** Here the results are interpreted in the light of the research questions and/or hypotheses and in relation to the theoretical background. The discussion should start with a clear statement as to whether the proposed hypotheses were confirmed or not; and whether the answers to the research questions were obtained. The discussion should not repeat

the results but interpret them. Similarities and differences between the results obtained in the given study and data presented in the literature are pointed out, explained and justified. The validity of the generalizations and conclusions is discussed as well as the strengths and limitations of the study. Possible implications of the results are presented and recommendations for further research are given. The results and discussion may also be presented in one chapter.

**Acknowledgements.** Here all people (except for the names of the respondents of the study) who helped the author of the thesis are acknowledged and grants and/or participation in research projects are indicated.

**Author's declaration.** The following text is added at the end of the body of the thesis: *I hereby declare that I have written this thesis independently and that all contributions of other authors and supporters have been referenced. The thesis has been written in accordance with the requirements for graduation theses of the Institute of Education of the University of Tartu and is in compliance with good academic practices.*

The text is followed by the name and signature of the author of the thesis and the date.

**List of references.** All references in the thesis must be presented in the list of references and vice versa. The list of references should not be exaggerated but it must include enough sources for understanding the author's viewpoints and the conducted research. If the thesis contains analysis of texts (e.g., textbooks, newspapers) or other materials (e.g., films), a separate list of these sources is presented with a corresponding subheading.

**Appendices** are numbered and presented in the order in which they were referred to in the text. Appendices have headings and are included in the table of contents. Pages are not numbered in the appendices.

## **1.1. Solution to a practical task as a graduation thesis**

**1.1.1. Action research** is conducted with the aim of improving the quality of a certain pedagogical activity. It is important to describe clearly the cycles of the action research (incl. information about the sample, data collection and data analysis).

**1.1.2. Design research or design-based research** consists of stages which should clearly be described in the thesis.

## **1.2. Compiling a study aid or study material**

A study aid or study material can be compiled as part of action research following its cycles. If a study aid or study material is not compiled as part of action research, then a problem indicating the need for creating such an aid or material is pointed out. The thesis gives a theoretical overview of the principles of designing the study aid or material, its content,

quality criteria, etc. In addition to compiling a study aid or study material, an empirical study is conducted to obtain expert opinions of the materials. The time dedicated to compiling the study aid or material is considered as part of volume of the thesis.

### **1.3. A journal article**

If a journal article is defended as a master's thesis, the article is presented together with its requirements (the latter in a separate document). Compliance with the graduation thesis requirements is assessed according to the requirements for the article. Extended chapters related to different parts of the article which were not published due to limitations of the article length can be presented (e.g., a more thorough overview of the method chapter, extension of the results and discussion chapters). An explanation of the author's contribution to writing the article is included.

## **2. Text formatting**

### **General formatting requirements**

The recommended volume of a bachelor's thesis is 20–30 pages, and 30–55 pages of a master's thesis, excluding appendices.

- The thesis is submitted in A4 format.
- The thesis should be in 12-point Times New Roman font with 1.5 line spacing and 2.5 cm margins.
- The thesis should be left-aligned and words should not be hyphenated at the end of a line.
- The running head should be placed in the right-hand upper corner together with the page number.
- The pages should be numbered consecutively through the thesis in Arabic numerals, counting from the title page, which should be counted, but not numbered. Thus, the visible numbering starts from the second page. The pages of the appendices are not numbered.
- An additional line space should be left between chapters and subchapters.
- The paragraph following the title of a chapter or subchapter is not indented. For the following paragraphs, indentation of 5–7 spaces is used.

**Headings.** Headings of different levels are used in the thesis. Throughout the text, all subchapters of equal importance must have headings of the same level, formatted identically. This helps the reader to understand the hierarchical structure of the paper. Numbers in front of the headings are optional. Headings are not followed by a full stop unless the heading is the first sentence of a paragraph.

**Referencing.** All works and authors whose ideas or viewpoints are used must be referenced. The references must be formatted in a way which enables the reader to unmistakably understand which ideas belong to the author of the paper and which come from outside sources. If possible, referencing primary sources should be used. Referencing secondary sources (someone else's interpretation of what another author has written) should be avoided. The author (authors) and the year of publication are indicated in the text.

A quotation is the exact, word-for-word presentation of the original text. A quotation is enclosed in quotation marks and followed by the name of the author, year of publication and page number in brackets. If part of the cited text has been omitted from the quotation, an ellipsis (a punctuation mark consisting of three dots) in brackets is used in the place of the omitted text. A quotation should be long enough to convey the meaning and be relevant to the context. Longer quotations are separated from the rest of the text by using a different font or by placing the quotation in a free-standing, indented block with no quotation marks with single line spacing.

Proper referencing is essential to avoid any possible accusation of plagiarism.

**A list of references** is placed at the end of the thesis and is organised alphabetically according to the last name of the first author. Generally, each entry includes the following: name(s) of the author(s); year of publication; title; publishing information. If the author is not identifiable, the title of the work is referenced. The information in the list of references is necessary for retrieving the specific source. For an electronic document, the entry must contain the author and title of the text, home page and URL.

For more information see *Purdue Online Writing Lab*, accessed at <http://owl.english.purdue.edu/owl/resource/560/01/>

With good reason, a format other than APA can be used for referencing. However, it is important to use the chosen format consistently throughout the paper.

### **Tables and figures**

Tables and figures are numbered in the order in which they are referred to in the text. Each table has a title that is placed above the table. The table must be understood without reference to the text. All abbreviations must be explained in the notes below the table. The table must contain properly placed headings and labels for columns and rows. Single spacing should be used and tables should be placed in the text as near as possible to where they are first referred to. Only those horizontal lines that separate important parts of the table are left visible when formatting the table. An informative table supplements the text – it does not duplicate it. Each table must be referred to in the text, and the main aspects which the reader should look for in it should be

indicated in the text. Only the most important information in the table should be emphasized in the text.

A figure is any type of illustrative material other than a table. A figure may be a graph, drawing, photo, etc. The main formatting requirements are the same as for tables, except that figures have captions.

## **Format of the title page**

University of Tartu  
Faculty of Social Sciences  
Institute of Education  
Curriculum: ....

Given name and surname  
TITLE OF THE THESIS  
MA thesis

Supervisor: academic position and given name and surname (e.g., Prof. Ivana Lernalot)

Tartu, 20...

## Appendix 2. Assessment criteria

Outcome 1. The student states a research problem and designs the research according to the requirements of an academic paper.

Criterion	E ( <i>poor</i> )	D ( <i>satisfactory</i> )	C ( <i>good</i> )	B ( <i>very good</i> )	A ( <i>excellent</i> )
<b>1. Topicality of the research problem</b>	The research problem has been formulated.	The research problem has been clearly brought out.	The research problem has been clearly brought out and comprehensibly formulated.	The research problem has been clearly brought out and comprehensibly justified and formulated.	In the introduction, the problem has been clearly brought out and, based on literature, comprehensibly formulated, and its topicality (novelty, i.e. it has not been treated before or has not been treated from this perspective), importance and practical relevance have been justified.
<b>2. Formulation of the objective of the research</b>	The objective of the research has been formulated.	The objective of the research has been brought out and clearly and comprehensibly formulated.	The objective of the research has been brought out, clearly and comprehensibly formulated and connected to the problem.	The objective of the research has been clearly brought out, comprehensibly formulated and connected to the problem consistently throughout the paper.	Proceeding from the problem, the objective, which has been unambiguously formulated, has been clearly brought out and is consistent throughout the paper.
<b>3. Formulation of research questions and/or hypotheses</b>	Research questions and/or comparative/associative hypotheses have been formulated and are, in broad terms, in accordance with the objective.	Research questions and/or comparative/associative hypotheses have been formulated and connected to the objective.	Research questions and/or comparative/associative hypotheses have been correctly formulated and connected to the objective.	Research questions and/or comparative/associative hypotheses have been correctly and comprehensibly formulated and connected to the objective.	Research questions proceeding from the objective have been posed, and, based on the research questions, necessary and meaningful comparative/associative hypotheses have been correctly formulated (proving the hypotheses produces new knowledge).
<b>4. Compliance of the research with ethical requirements</b>	The research has been conducted in compliance with ethical requirements.	The research has been conducted in compliance with ethical requirements; the procedures connected to ensuring ethics have been described without discussing the ethical aspects.	The research has been conducted in compliance with ethical requirements; the procedures connected to ensuring ethics have been described, ethical aspects have been mentioned in the paper.	The research has been conducted in compliance with ethical requirements, ethics and ensuring ethics have been discussed in the paper.	The research has been conducted in compliance with ethical requirements; the student discusses ethics and ensuring ethics also based on literature.

Outcome 2. The student can search for, systematize and analyse, synthesize and generalize relevant literature and theoretical positions and research findings presented therein.

<b>Criterion</b>	<i>E (poor)</i>	<i>D (satisfactory)</i>	<i>C (good)</i>	<i>B (very good)</i>	<i>A (excellent)</i>
<b>5. Relevance and contemporariness of literature</b>	The literature used in the paper is, in broad terms, relevant and contemporary.	The literature used in the paper is mostly relevant and contemporary.	The literature used in the paper is relevant and contemporary; mostly, scientifically reliable sources have been used.	The literature used in the paper is relevant and contemporary and scientifically reliable.	The literature used in the paper is representative, relevant, contemporary and scientifically reliable.
<b>6. Sufficiency of the overview</b>	A certain overview has been given of the topic under investigation based on a justified number of Estonian and foreign language sources which, in broad terms, is in accordance with the title and the inquiry part of the paper.	A satisfactory overview has been given of the topic under investigation based on a justified number of Estonian and foreign language sources which, in broad terms, is in accordance with the title and the inquiry part of the paper.	A good overview has been given of the topic under investigation based on a justified number of Estonian and foreign language sources which is in accordance with the title and the inquiry part of the paper.	A very good overview has been given of the topic under investigation based on a justified number of Estonian and foreign language sources which is in accordance with the title and the inquiry part of the paper. Several sources have been used to support the ideas.	An excellent overview has been given of the topic under investigation based on a justified number of Estonian and foreign language sources which is fully in accordance with the title and the inquiry part of the paper. Several sources have been used to support the ideas.
<b>7. Knowledge of approaches (theories and concepts)</b>	The main concepts and theories have been pointed out in the paper.	The main concepts have been defined and theories have been pointed out in the paper.	The main concepts have been defined and theories have been approached in the paper.	The main concepts have been defined and relevant theories have been coherently approached in the paper.	The main concepts have been clearly brought out and defined (alternative definitions have been presented) and relevant theories have been coherently approached in the paper.
<b>8. Level of analysis and synthesis</b>	Previous studies and/or theoretical viewpoints have been presented.	Previous studies and/or theoretical viewpoints have been treated.	Previous studies and/or theoretical viewpoints have been coherently treated.	Previous studies and/or theoretical viewpoints have been compared and contrasted.	Previous studies and/or theoretical viewpoints have been analysed and synthesised convincingly and fluently.
<b>9. Substantive logicity of the treatment of the topic</b>	The parts of the theoretical overview are, in broad terms, connected.	The parts of the theoretical overview are, in broad terms, connected, with no substantive contradictions or repetitions.	The parts of the theoretical overview are well connected.	The parts of the theoretical overview are logically and fluently connected.	The parts of the theoretical overview are logically and fluently connected and give an exhaustive overview of the background of the research.

Outcome 3. The student chooses a suitable method for data collection and analysis, and conducts research

Criterion	E ( <i>poor</i> )	D ( <i>satisfactory</i> )	C ( <i>good</i> )	B ( <i>very good</i> )	A ( <i>excellent</i> )
<b>10. Adequacy of the data collection method and justification for the choice</b>	The data collection method used is, in broad terms, in accordance with the objective of the research.	The data collection method used is in accordance with the objective of the research.	The data collection method used is in accordance with the objective of the research, the choice has been justified.	The data collection method used is in accordance with the objective of the research, has been sufficiently described, the choice has been justified, and limitations have been discussed.	The data collection method used is suitable for proving the hypotheses in the best possible way, has been sufficiently described, the choice has been justified, and limitations have been discussed. The validity and reliability of the research instruments have also been analysed.
<b>11. Accordance of the sample with the objectives</b>	In broad terms, the sample is in accordance with the objectives, hypotheses and/or questions of the research, the sample and the principles of forming the sample have been described shallowly.	In broad terms, the sample is in accordance with the objectives, hypotheses and/or questions of the research, the sample and the principles of forming the sample have been described comprehensively.	In broad terms, the sample is in accordance with the objectives, hypotheses and/or questions of the research, the sample and the principles of forming the sample have been described comprehensively and clearly.	The sample is sufficient and suitable for meeting the objectives of the research, the student has explained the principles of forming the sample and presented demographic data relevant to the research.	The sample is sufficient and suitable for meeting the objectives of the research, the student has thoroughly explained the principles of forming the sample and presented demographic data relevant to the research.
<b>12. Description of the research procedure</b>	The research procedure has been described shallowly.	The research procedure has been described, but in an order that is not logical.	The research procedure has been comprehensibly described .	The research procedure has been described thoroughly enough, but with some minor inaccuracies.	The research procedure has been described clearly and thoroughly enough and enables repeating the study.

Outcome 4. The student processes and analyses the research data and interprets the results.

Criterion	E ( <i>poor</i> )	D ( <i>satisfactory</i> )	C ( <i>good</i> )	B ( <i>very good</i> )	A ( <i>excellent</i> )
<b>13. Accordance of data analysis with research questions/hypotheses. Execution of data analysis</b>	The data analysis methods used have been brought out, but they are insufficient or not well suited for solving the research problem. The execution of data analysis is partially adequate.	The data analysis methods used are, in broad terms, suitable for proving the hypotheses and/or answering the research questions. Some mistakes occur in the execution of the data analysis.	The data analysis methods used are, in broad terms, suitable for proving the hypotheses and/or answering the research questions. The choice of methods has been justified. Some inaccuracies occur in the execution of the data analysis.	The data analysis methods used are suitable for proving the hypotheses and/or answering the research questions. The choice of methods has been justified. Some minor inaccuracies occur in the execution of the data analysis.	The data analysis methods used are suitable for proving the hypotheses and/or answering the research questions. The choice of methods has been justified based on the used sources. The data analysis has been executed adequately and skilfully.
<b>14. Presentation of the results</b>	The results of the data analysis have been presented and are, in broad terms, connected to the objective of the research (results have not been clearly structured, tables and/or figures are either missing or excessive).	The results of the data analysis have been presented, in broad terms, in a logical order and in accordance with the objectives of the research. Illustrative materials have been used, with some shortcomings (there is less or more data than necessary, symbols have been used incorrectly, headers and/or footers do not contain all necessary information).	The results of the data analysis have been presented clearly and in a logical order and are in accordance with the objectives of the research. Illustrative materials have been used with some minor substantive shortcomings.	The results of the data analysis have been presented clearly and in a logical order and are in accordance with the objectives of the research. The illustrative materials used help to understand the obtained results.	The results of the data analysis have been presented in enough detail to justify the later conclusions. The results have been presented clearly and concisely and in a logical order, taking into account the hypotheses and/or questions. The illustrative materials are correct.
<b>15. Sufficiency/adequacy of the interpretation of the study results</b>	Some study results have been interpreted in the discussion part and their connection to the objectives of the research has been presented.	Some study results have been interpreted in the discussion part, their connection to the objectives of the research has been presented, the conclusions are mostly based on the results.	The study results have been interpreted in the discussion part based on the objectives of the research and research questions/hypotheses, connected to previous studies/theories, and the conclusions are mostly based on the results.	The study results have been interpreted in the discussion part based on the objectives of the research and research questions/hypotheses, connected to previous studies/theories, and the conclusions are directly based on the results.	All important study results previously mentioned in the thesis have been sufficiently interpreted in the discussion part based on the objectives of the research and research questions/hypotheses and sufficiently connected to previous studies and/or theories.
<b>16. Presentation of answers to research questions</b>	Some adequate answers to research questions or confirmation/rejection of	Adequate answers to research questions or confirmation/rejection of	Adequate answers to research questions or confirmation/rejection of hypotheses have been	Adequate answers to research questions or confirmation/rejection of	Adequate answers to research questions or confirmation/rejection of hypotheses have been brought out with substantive

<b>and/or confirmation/rejection of hypotheses</b>	hypotheses have been brought out.	hypotheses have been brought out.	brought out with some degree of justification.	hypotheses have been brought out with substantive justification.	justification based on literature or peculiarities of the given research.
<b>17. Connection to theories and previous studies</b>	The discussion creates a certain picture of the connections between the results as well as connections to previous studies and theories.	The discussion creates a satisfactory picture of the connections between the results as well as connections to previous studies and theories.	The discussion creates a clear picture of the connections between the results as well as connections to previous studies and theories and does not contain any material irrelevant to the results (the researcher's own opinions or experiences).	Connecting the study results to previous studies and/or theories has been done in a thorough and structured way, containing no material that is irrelevant to the results (the researcher's own opinions or experiences) and creating a picture of connections between the results.	Connecting the study results to previous studies and/or theories has been done in an exhaustive and well-structured way, containing no material that is irrelevant to the results (the researcher's own opinions or experiences) and creating a clear picture of connections between the results.
<b>18. Pointing to the applicability of the results</b>	Some applications of the results/conclusions drawn from the results have been brought out.	Some applications of the results/conclusions drawn from the results have been brought out that correspond to the objective of the research.	Some applications of the results/conclusions drawn from the results have been brought out that correspond well to the objective of the research.	Several applications of the results/conclusions drawn from the results have been brought out that correspond well to the objective of the research.	Several applications of the results/conclusions drawn from the results have been brought out that correspond well to the objective of the research and are based solely on the results of the given research.
<b>19. Pointing to the limitations of the research</b>	A limitation has been pointed to in the paper.	Some limitations have been brought out.	Various limitations of the research (connected to data collection, sample, etc.) have been brought out.	Most of the various important limitations of the research (connected to data collection, sample, etc.) have been brought out.	All important limitations of the given research have been brought out.

Outcome 5. The student uses academic language in writing and complies with the formatting requirements of an academic paper, thus creating a wholesome paper in written format.

<b>Criterion</b>	<i>E (poor)</i>	<i>D (satisfactory)</i>	<i>C (good)</i>	<i>B (very good)</i>	<i>A (excellent)</i>
<b>20. Accordance of the research with the volume of a bachelor's thesis or master's thesis</b>	Both the substantive and formal volume of the paper meet the requirements in broad terms.	Both the substantive and formal volume of the paper meet the requirements.	The formal volume of the paper is substantively justified and meets the requirements.	The formal volume of the paper is substantively justified and meets the requirements well.	Both the substantive and formal volume of the paper fully meet the requirements.
<b>21. Language used in the paper</b>	The paper partially meets the language and style requirements of an academic text.	In broad terms, the paper meets the language and style requirements of an academic text. In broad terms, spelling corresponds to norms.	Language and style are consistent throughout the paper, and the paper meets the requirements of an academic text. Spelling mostly corresponds to norms.	Language and style used in the paper are well thought through, consistent and meet the requirements of a good academic text. Spelling corresponds to norms.	The paper is verbally and stylistically polished and fully meets the language and style requirements of a good academic text. Spelling corresponds to norms.
<b>22. Accordance with the formatting requirements</b>	The paper partially meets the formatting requirements.	In broad terms, the paper meets the formatting requirements.	The paper meets most of the formatting requirements.	The paper meets the formatting requirements, single typographical errors occur.	The formatting of the paper fully meets the thesis requirements.
<b>23. Accordance with the referencing requirements</b>	Mostly, the student has proceeded from the requirements for in-text referencing and formatting the list of references. A few sources referenced in the text are missing from the list of references, or the list of references contains sources that have not been referenced in the text.	Mostly, the student has proceeded from the requirements for in-text referencing and formatting the list of references.	In-text referencing and formatting of the list of references meet the requirements. All used sources are referenced in the paper and available in the list of references.	In-text referencing and formatting of the list of references meet the requirements well. All used sources are referenced in the paper and available in the list of references.	In-text referencing and formatting of the list of references fully meet the requirements. All used sources are correctly referenced in the paper and correctly listed in the list of references.
<b>24. Logicity of how the treatment of the topic is structured</b>	In broad terms, the structure of the paper meets the requirements, there is a substantive connection between different parts of the paper (incl. the title).	In broad terms, the structure of the paper meets the requirements, there is a satisfactory substantive connection between different parts of the paper (incl. the title).	The structure of the paper is substantively justified, there is a sufficiently good substantive connection between different parts of the paper (incl. the title).	The structure of the paper is substantively justified and logical; different parts of the paper (incl. the title) are well connected.	The structure of the paper is substantively justified, logical and complete; different parts of the paper (incl. the title) are very well connected, creating a wholesome paper.

Outcome 6. The student presents the paper and defends it at the public defence.

Criterion	E ( <i>poor</i> )	D ( <i>satisfactory</i> )	C ( <i>good</i> )	B ( <i>very good</i> )	A ( <i>excellent</i> )
<b>25. Clarity of the public presentation of the paper</b>	During the allotted time (in the allotted volume in the case of a poster presentation), the student gives an overview of the more important parts of the paper. Visual aids have been used to support the presentation, and the presentation is comprehensible.	During the allotted time / in the allotted volume, the student gives an overview of the more important parts of the paper. Visual aids have been correctly used to support the presentation, and the presentation is comprehensible. In broad terms, the presentation focuses on the topic of the paper.	During the allotted time / in the allotted volume, the student gives a substantive overview of the more important parts of the paper. Visual aids have been correctly used to support the presentation, and the presentation is clear. The presentation focuses on the topic of the paper.	During the allotted time / in the allotted volume, the student gives a substantive overview of the more important parts of the paper. The presentation is clear and correctly illustrated by visual aids. The presentation focuses on the topic of the paper.	During the allotted time / in the allotted volume, the student gives a substantive overview of the more important parts of the paper. The presentation is clear and captivating and creatively illustrated by visual aids. The presentation focuses on the topic of the paper.
<b>26. The level of answering the reviewer's questions and participating in the discussion with the reviewer</b>	In broad terms, the student answers the questions; little argumentation is provided by the answers, and the discussion is weakly connected to the topic of the paper and the theoretical background.	In broad terms, the student answers the questions; satisfactory argumentation is provided by the answers, and the discussion has a satisfactory connection to the topic of the paper and the theoretical background; the student understands the critique of the paper.	The student gives relevant answers to the questions; good argumentation is provided by the answers, and the discussion is connected to the topic of the paper and the theoretical background; the student understands the critique of the paper.	The student gives relevant answers to the questions; substantive argumentation is provided by the answers, and the discussion is connected to the topic of the paper and the theoretical background; the student understands the critique of the paper.	The student gives relevant answers to the questions; justification and good argumentation is provided by the answers, and the discussion is connected to the topic of the paper and the theoretical background; deeper and broader understanding of the topic is revealed by the discussion; the student understands the critique of the paper and discusses it.
<b>27. The level of answering the committee's questions and participating in the discussion with the committee</b>	In broad terms, the student answers the questions; little argumentation is provided by the answers, and the discussion is weakly connected to the topic of the paper and the theoretical background.	In broad terms, the student answers the questions; satisfactory argumentation is provided by the answers, and the discussion has a satisfactory connection to the topic of the paper and the theoretical background; the student understands the critique of the paper.	The student gives relevant answers to the questions; argumentation is provided by the answers, and the discussion is connected to the topic of the paper and the theoretical background; the student understands the critique of the paper.	The student gives relevant answers to the questions; substantive argumentation is provided, and the discussion is connected to the topic of the paper and the theoretical background; the student understands the critique of the paper.	The student gives relevant answers to the questions; justification and good argumentation is provided by the answers, and the discussion is connected to the topic of the paper and the theoretical background; deeper and broader understanding of the topic is revealed by the discussion; the student accepts the critique of the paper and discusses it.

**Appendix 3.** Form for the graduation thesis (bachelor's thesis / master's thesis) project

Student (given name, surname, curriculum, year of entry)

Initial title of the thesis

Supervisor(s) (given name, surname, degree, position, contact information)

Justification for the choice of topic and the research problem

Objective of the thesis

Hypothesis/hypotheses and/or research questions of the thesis

Research methods: description of the sample, instruments, procedure of the research

Thesis timeline (estimated allocation of time)

Signature of the student: (signed digitally)

Student's email address:

Signature of the supervisor: (signed digitally)