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**UNIVERSITY OF LATVIA**  
**FACULTY OF ECONOMICS AND SOCIAL SCIENCES**

**METHODOLOGICAL GUIDELINES**

**FOR THE DEVELOPMENT AND DEFENCE OF THE  
FINAL THESIS**

2025

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# **REQUIREMENTS FOR THE WRITING AND DEFENCE OF BACHELOR'S AND MASTER'S THESES**

## **1.General terms**

These requirements are based on the rules related to final examination at the University of Latvia (UL), as approved by the Senate of the UL by Decision No 183, December 27, 2011, as amended by the UL Senate by Decision No. 231, July 2, 2012 and UL Senate Decision No 45, December 28, 2013. The rules regulate unified UL requirements about the content, form and defence of theses. There are specific requirements in various sectors when it comes to the theses, and these are regulated by study programme councils and the faculty council. The faculty has the right to set rules for theses regarding issues that are not addressed in this document.

## **2.Selection of the topic and stages of work**

2.1. There are several stages in the preparation of theses, and these include specific jobs and co-operation with the academic supervisor for the thesis<sup>1</sup>:

2.1.1. The selection of the topic, an introduction, a theoretical section, a practical section (analytical and practical (empirical) research), development of the thesis and pre-defence of the thesis during the next-to-last study semester;

2.1.2. Preparation of the final thesis and submission to the academic supervisor for his or her evaluation;

2.1.3. Submission of the thesis for defence, taking into account recommendations from the pre-defence commission and the academic supervisor;

2.1.4. Defence of the thesis during the last study semester in bachelor's and master's programmes.

2.2. The student must submit an application to the study programme director who has been authorised by the Dean of the faculty (see Annex 10 in a separate document), stating the topic of the thesis, as agreed with the academic supervisor. The supervisor by signing application agrees to supervise development of final thesis on student's chosen topic.

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<sup>1</sup> Detailed information about the stages of developing a master's thesis and a bachelor's thesis can be found in Appendices 8 and 9 of the Methodological Guidelines.

2.3. Topics for theses are approved by the study programme director no later than 10 weeks before the pre-defence.

2.4. If a topic is rejected, the study programme director must inform the student as to why that is and set a deadline for the submission of a new topic.

\* More detailed information about the stages of writing master's and bachelor's theses can be found in Annexes 8 and 9 of the methodological guidelines.

2.5. The titles of the theses in Latvia and English, academic supervisors and reviewers are confirmed by the Dean of the faculty no later than one week before the pre-defence of the thesis.

2.6. During the process of theses development, the formulation of the topic can be adjusted.

2.7. The student and the academic supervisor must agree on the goal and tasks of the thesis. Before the student starts to plan the thesis, he or she must learn about the literature that will be used and prepare a list thereof. The description of some issues must be subordinated to the whole topic, and individual issues must be linked. The student presents the initial plan to the academic supervisor. An important part of the process is the gathering of information. Students must partly process and systematise the necessary data and make sure that there is enough information. This means a careful and overall examination of theories related to the research stated problem, as well as an examination of the literature and practical materials. The academic supervisor can ask for a detailed schedule for the work and agree when the draft of the thesis has to be submitted. During the process, the student may consult with other faculty members, but it is the academic supervisor who is responsible for the supervision of the work on final thesis.

2.8. The pre-defence of the thesis includes:

2.8.1. Definition of the goal and tasks of the research, the realisation of the process and the development of planned content for the thesis;

2.8.2. An examination of scientific literature, the selection thereof, analysis, argumentation and preparation of a list of the literature that will be used;

2.8.3. Formulation of the research stated problem and hypothesis, selecting appropriate research methods on the basis of an analysis of the literature. This information students prepare as part of the practical research of the research project after analysis of the relevant literature;

2.8.4. Preparation of the plan for the theoretical part of the thesis;

2.8.5. Writing and formation of the introduction and the first parts of the theoretical part;

2.9. To increase the scientific meaning and the practical applicability of the

student's thesis and the amount of work that has been done, students must test the results of their research by participating in students scientific conference. This is mandatory for academic master's degree students.

Final thesis can be:

- Master's thesis;
- Bachelor's thesis (in professional study programmes, a diploma thesis)

### **The master's thesis**

A master's thesis represents the summarised results of research conducted independently by the student. It involves data analysis in one of the areas of science, as well as the scientific preparation of knowledge and skills gained in the master level studies according the requirements for the master thesis. The thesis must comply with the relevant requirements. The thesis confirms the student's academic maturity and contains the elements of novelty in aspects of fundamental and applied research. Thesis indicates the ability to conduct research, work with scientific literature, to skilfully present and prove a hypothesis, the ability to study linkages and the correlative links between the influence of factors, the ability to use appropriate statistical methods for data analysis, and the ability to adhere ethics of scientific work.

The goal of the master's thesis is to facilitate the development of the intellectual potential of students so that they can evaluate their own work and develop scientific research skills. The tasks related to the development and defence of a master's thesis include:

- The ability to deepen and strengthen theoretical knowledge;
- Better abilities to use knowledge to deal with specific theoretical and practical questions and to determine and test the hypothesis;
- The ability to formulate scientific thinking in literary language;
- The ability to develop the ability to work rationally with information and to prepare instruments for the research;
- The ability to learn how to develop conclusions and proposals of the research in a reasoned manner.
- To focus the attention of evaluators on the economic and public importance of the research results.

The master's thesis must also comply with fundamental requirements for scientific work:

- There must be scientific research in the relevant area of science;
- The results must be based on the relevant literature, other information sources and materials on personally conducted research;

- The process of the research must be logical and successor, and the result must be generalizable and unambiguous;
- There must be unified terminology in the thesis, and abbreviations must comply with standards;
- The author of the thesis must ensure that his or her views can be differentiated from those of other authors;
- The content must be precise, clear, logical and concrete;
- The thesis must be developed in proper and literary Latvian language or English language if the student is foreigner and studies are conducted in English.

The student develops the thesis in accordance with his or her area of specialisation, interests, scientific work and experience. Essential conditions towards the author is to ensure that there is access to literature and sources, along with foreign language skills, professional competence and erudition.

The justification of chosen topic is based on the study programme, the appropriateness in terms of the area and direction of science, and the student's professional experience. If, for instance, the topic is "Change Management at the Organisation," the justification might be professional experience and a focus on timely problems in the economy, the effectiveness of human resources, and the personnel management culture. Sources of information for such research might include the results of a quality audit of the company's personnel administration processes, how these influence innovations and changes at the company, etc.

### **A bachelor's thesis**

A bachelor's thesis is an independently developed scientific research within the study programme field. Developing and defending a bachelor's thesis means the end of the relevant bachelor's degree studies.

The aim of the bachelor thesis is to systematise, expand and strengthen theoretical knowledge and practical skills.

A bachelor's thesis must contain both a theoretical and a practical section, including analytical and research elements. In the theoretical part, the student must be able to research and deal with specific theoretical problems that must be linked to the analytical and research part of the thesis. The conclusions and proposals must relate to the research results.

A bachelor's thesis must comply with the following requirements:

- It must involve independent research into a specific and current issue;

- It must reflect skills related to familiarity and analysis of respective special literature, economic information and other sources;
- It must be based on modern research methods, technical resources, computer software, economic mathematical methods, etc.;
- Within research, there must be a precise, clear and logical outline of the research process and results, concluded with the author's conclusions and proposals based on the results of the research;
- The student must demonstrate his or her ability to work creatively when conducting scientific research.

The steps in a bachelor's thesis development have various stages that complies with the pre-defence requirements: 1) Choice of the topic, 2) working plan preparation, 3) information and data collections according to the developed plan, 4) research and systematisation of the materials within the determined key issues of the topic, 5) thesis development and layout.

The student independently determines the topic and asks for the approval of his or her academic supervisor. The topic must current (current is defined by relevance to economic trends, tasks of specified companies, level of acquired information and traineeship requirements etc.) Student develops the thesis in accordance with his or her specialisation, interests, scientific work and experience. The recommendation is to continue research in areas about which the student has written previous papers or in which he or she has conducted scientific research. When choosing a topic, the student must look at the availability of information, data and literature, as well as the interests of the specific company or place of employment. The recommendation is for the student to consult with his or her academic supervisor or potential supervisor to make sure that the topic of the thesis complies with the bachelor's study programme.

Before development of the plan of the bachelor's thesis, it is necessary to study the literature and prepare a list of it. Students must remember that the description of individual issues must be subordinated to the revelation of the entire topic. This means that the issues must be linked. The student must present the initial work plan to his or her academic supervisor. Gathering information is an important part to writing the thesis. Students must partly process and systematise the data and make sure that there is sufficient information. In this sense, the student must thoroughly and carefully study theoretical options related to dealing with the problem, and take a critical look at the sources of literature and practical materials.

After the preparatory stage, the plan and schedule ensure that the student will independently

write the bachelor's thesis. Particular attention must be focused on the need to ensure that conclusions and proposals must be of practical use. The draft of the bachelor thesis in appropriate design must be submitted to the academic supervisor, and once it has been reviewed, it is edited, supplemented and prepared for the final version.

### **3.The structure and scope of the thesis**

The structure of the thesis must be the same as the structure of a scientific work. Typically, the thesis has the following components:

- The title page (see Annex 1)
- Annotations and keywords
- A table of contents (Annex 2)
- A list of designations and abbreviations
- The introduction
- The theoretical part of literature analysis (chapters and subchapters)
- The research part and scientific research part (chapters and subchapters)
- Conclusions
- Proposals
- Used literature and sources
- Annexes (not part of mandatory amount of pages)
- Gratitude (if necessary, not part of mandatory amount of pages)
- Documentary form (not part of mandatory amount of pages)

A master's thesis must be no less than 80 pages without annexes (one page = 1,800 characters), but no more than 100 pages.

The recommended structure for a master's thesis:

- Annotations
- The introduction (up to 5% of the total amount)
- The theoretical part with analysis of the literature (35%)
- The scientific and research part (53%, with all chapters balanced and of an approximately equal length)
- Conclusions, proposals and the used literature and sources (7%)
- Annexes

A bachelor's thesis must be no less than 60 pages (without annexes) and no more than 80 pages.

The recommended structure for a bachelor's thesis:

- Annotations
- The introduction (4%)
- The theoretical part (till 34%)
- The analytical part (55%, with all chapters being balanced and of an approximately equal length)
- Conclusions, proposals and used literature and sources (7%)
- Annexes.

#### **4. The content of the thesis**

**4.1. The title page** must be prepared according to the example (see Annex 1).

The title page includes the name of the educational institution, faculty and department, the title of the thesis in Latvian and English, type of the final work (bachelor's thesis or master's thesis), the study programme, the name, surname and student ID number of the author, the name, surname, academic degree and economic title of the academic supervisor, the place where the thesis was developed and the year when it was developed. If the development of the thesis involved a consultant, then his or her name, surname, academic degree and academic title must also be stated. The title page is the first page of the thesis, but it is not indicated number on it.

**4.2.** The annotation is written in Latvian and English. With the approval of the study programme director, there can also be an annotation written in the official language of another European Union member state. The content of the annotation includes the determined problem that is being researched, the goal(s) of the research and the results of the research. The annotation is no more than **850 characters long**, including spaces.

**Keywords** describes the topic, results and methods of the thesis -- between four and eight keywords are recommended. The keywords are enlisted after the annotation.

**4.3. The table of contents** lists all of the parts of the thesis (Annex 2). The titles in the table of contents must be identical to the titles of chapters. The table of contents first includes a list of designations, but if there are no designations, then the table of contents includes the titles of the introduction and all of the chapters and subchapters in numerical order, also indicating the page on

which the relevant text is found. Pages are numbered with Arabic numerals. Chapters are numbered with one Arabic numeral, while subtitles are numbered with two numbers, the first of which is the number of the chapter. Further parts of subchapters are numbered with three numbers, with a period after each one. All titles in the table of contents must be the same as the titles in the text, and they must be on the pages that are indicated in the table of content. At the end of the table of content, there is a bibliography of literature and sources. Annexes are numbered separately and with Arabic numbers.

#### **4.4. The list of designations and abbreviations**

The list of abbreviations and conditional designations is listed on a separate page if there is a large number of abbreviations. In other cases, they are listed in the text when they are mentioned for the first time. Universally known abbreviations such as EU for the European Union, EUR - euro do not have to be explained.

#### **4.5. The introduction**

The introduction of a master's thesis:

- An explanation of why the topic was chosen, why topic is current, with a description of the researcher determined problem(s) and proposed hypothesis or hypotheses;
- A formulation of the goals and tasks of the thesis, as well as the object and subject that has been studied;
- A list of research methods that have been used;
- A brief description of the sources of theoretical and factual materials;
- A description of the period of research;
- A brief description of the structure of the thesis.
- Limits to the researched determined problems if the topic is broad and not all aspects thereof can be included in the thesis.
- The nature of the thesis in terms of whether it is more theoretical or practical.

The introduction of a bachelor's thesis:

- An explanation of why the topic was chosen, why topic is topical, with a description of the researcher's determined problem(s);
- A formulation of the goals and tasks of the work, as well as the object and subject that has been studied.
- A list of research methods that have been used.

- A brief description of the sources of theoretical and factual materials.
- A description of the period of research.
- A brief description of the structure of the thesis.
- Limits to the researched determined problems if the topic is broad and not all aspects thereof can be included in the thesis.
- The nature of the thesis in terms of whether it is more theoretical or practical.
- Limits on the topic and schedule (if necessary).

**The choice and importance of the topic** must be explained in all these from the perspective of current economic problems in terms of scientific or practical views. The author must demonstrate the importance of the problem that is the topic of the thesis in terms of resolving economic problems at a company, sector or the country. The topicality of the topic must also be based on the idea that the issue has not been researched sufficiently in the past. Perhaps the issue has not been reflected adequately in existing specialised literature, or, perhaps, there are gaps or shortcomings in practice. That is why the introduction must briefly describe the most important publications, also indicating to which issues have not been addressed completely and to the direction of research that the author has intended. The introduction (only of a master's thesis) must also include an appropriate hypothesis in terms of predicted assumptions about how to resolve the problem. The hypothesis is tested during the research process, and the assumptions are either confirmed or rejected. The hypothesis will be scientifically justified if the following terms are met:

- 1) The formulation of the hypothesis must be maximally precise and comparatively simple, without any ambiguously interpreted terminology and concepts;
- 2) It must be fundamentally possible to test the hypothesis;
- 3) The hypothesis must speak to the whole spectrum of the relevant phenomena.

If the author is interested in gaining new information, as opposed to testing an assumption, then he or she must state the research determined problem, which relates to the unknown part of the reality that is being studied. Data in such research can be quantitative or qualitative (descriptive).

The author defines the **goal** of the work on the basis of the topicality of the topic. The goal is to ensure the result of the work that has been predicted by the student or the practical result that is obtained during the research process. The formulation of the goal and the research object must be concrete, short and precise, and it must be based on the explanation of why the thesis is topical. This formulation must not move the thesis into a descriptive version with words such as "consider,"

"review" or "describe." The goal of the thesis also cannot be formulated as a list of issues that are to be addressed. It must be formulated as the final goal.

An example: *"The goal of this bachelor's thesis is to analyse data about the operations of commercial banks in Latvia, to identify the most important problems with credit policy and to develop proposals to its improvement."*

Based on the determined research goal, the next is to identify the **research tasks** that must be realised to reach the goal. These tasks relate to the phases of the research, starting with theoretical analysis and finishing with an identification of the situation in practice. These steps also make more concrete the pace at which the goals of the thesis are achieved, sequentially presenting the relevant data processing and the analytical work. The tasks also reflect the content of the thesis.

An example:

- *"Using specialised literature to examine the experience of foreign commercial banks in the area of credit policy".*
- *"Analyse and evaluate recommendations from the Finance and Capital Markets Commission about the credit policy for commercial banks", etc.*

The object of research is the focus of the process. The subject of the research is the researched part of the object that is examined for the specific purposes of the thesis.

**The explanation of the structure of the thesis** must indicate why the paper will have these chapters and not others and why the discussion will be about these issues and not others. It is not permissible to justify the structure with a brief report of the titles of the chapters and subchapters or the issues that will be reviewed in the process. The justification must answer the question "why?", and not to the question "what?".

The **description of research methods** include indications to the methods that are chosen and why they have been chosen to reach the goal of the thesis. Students may use economic analysis, statistical analysis, economically mathematical methods, other methods, as well as methods, which the author himself or herself has identified and prepared.

**The research period** is the period during which the research object is examined and its data are analysed. The introduction of the thesis must explain which this involves this period of time and not another one.

A **justification of narrowing or expanding the topic** is necessary if the author of the thesis plans to ignore some aspects of the topic or plans to review an issue that is not directly part of the

topic. In both cases the student must explain why this has been done.

The **description of literature and data sources** explains the types of literature and data sources that have been used to conduct the research and preparation of the thesis.

The **introduction** presents the structure of information sources and the sources of factual sources. The list of the literature and other sources does not have to include all of the sources that have been used, instead indicating the groups of literature and data sources that have been accessed - fundamentally scientific research, the laws and government decisions of Republic of Latvia or another country, scientific publications, general and special literature, statistical data and periodicals. Author must list those organisations and companies that have provided previously unpublished data to him/her. If the author has conducted surveys, experiments, etc., then he or she must describe them and inform when they have been conducted.

The introduction should also describe the level at which the problem was analysed and indicate authors who have conducted similar research. In presenting the hypothesis, the author should focus attention on the predicted results of the research.

The introduction also includes a brief description of the pace, methods, terminology, basic concepts and context of the research. The context is the broader understanding of the area of research and an explanation of the relevant areas of science.

**Statements about the specifics of using references** are necessary if the factual materials are all from the same source, and so there is no reason to make frequently references to it in the text. In that case, the author can write that all of the materials came from the annual reports of Company ABC, and so references in the thesis as such are not presented. The first version of the introduction which formulates the goal and tasks of the research, the structure of the work and the research methods must be written before work begins on the thesis as such, and the draft introduction can be updated once the research work is done.

#### **4.6. The theoretical and practical parts**

The topic of the thesis must be divided up into chapters, each of which is devoted to a specific part of the topic. Each chapter must be about an aspect of the research issue, and it must be organically linked to other chapters. The succession of chapters must be base for the structure of the research, as determined by the basic issue that is being considered. The number of chapters and the need for discussions will depend on the specifics of the thesis. If the chapter is devoted to a complex problem or a broad range of issues, the recommendation is to divide it up into subchapters. A basic requirement is that at least one chapter in the thesis must have subchapters, though very short subchapters (one paragraph or half a page) are not recommended.

The titles of the chapters must be the same in the text as in the table of content.

Each chapter must end with brief conclusions, and the content must also indicate what will be discussed in the next chapter.

The **theoretical part** must be based on referential analytical materials, conceptions and comparison of theories and judgments. The author must present a conceptual structure related to the issue. When conducting referential analysis, the author must offer his or her evaluation, position and justification. All issues described in the theoretical part must be linked to the goal and tasks of the research project. They must also be in line with the topic of the thesis and ensure the needs of the empirical section.

The review of literature is a critical evaluation of what has been researched in the past and what has not been researched to a sufficient degree. The author must use the theoretical materials to choose the methodology of the research and the techniques that relate to empirical research. The author must determine the relationship between theoretical assumptions and the methodology, also evaluating the advantages and shortcomings of possible methods when it comes to researching the specific topic.

When work begins on the thesis, the first step is to examine the relevant literature and sources such as scientific papers, scientific monographs, the results of scientific research, the scientific literature of the sector, general literature, universal and sector-specific encyclopaedias, encyclopaedic dictionaries in Latvian and foreign languages, statistical data, dictionaries, etc.

When working on the thesis, students must make use of the broad offer of the UL library and other libraries, which offer scientific journal databases such as *Science Direct*, *Springer Link*, *Scopus*, *Web of Science*, *Sage Journals Online*, *Sage Research Methods database*, *Emerald*, *Taylor and Francis*, *ProQuest Dissertations and Theses*, *EBSCO*, etc. There are also statistical and informative databases such as *MarketLine*, *Orbis*, *Passport*, *ProQuest*, *the Business Premium Collection*, the systematic catalogues of libraries, collections of bibliographic information, specialised referential journals, collections of papers, etc. There are also UL databases (<https://www.biblioteka.lu.lv/en/resources/subscribed-e-resources/>), which are available at the Website of the UL under section "My Portal." When analysing sources, attention must be focused on the addressee of the source and the goal of publications. It is important to determine whether it is an original source or it has been quoted from another source. Sources are divided up between unique and mass ones. The use of unique sources does not create doubts, while mass information must be evaluated on the basis of how much they correspond to scientific generalisations. It is mandatory to indicate the use of artificial intelligence – see the *Guidelines for the Use of Artificial Intelligence at the University of Latvia*<sup>2</sup>.

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<sup>2</sup> University of Latvia (UL) (2025). Artificial Intelligence in University of Latvia, available at <https://www.lu.lv/en/studies/study-process/artificial-intelligence-in-ul/> and [https://www.lu.lv/fileadmin/user\\_upload/LU.LV/www.lu.lv/Studijas/Vadlinijas\\_MI\\_izmantosanai\\_LU.pdf](https://www.lu.lv/fileadmin/user_upload/LU.LV/www.lu.lv/Studijas/Vadlinijas_MI_izmantosanai_LU.pdf)

When working with scientific literature, the author must note the most important facts, fact processing methods and theoretical ideas that relate to the topic. Theoretical ideas must be evaluated from the author's perspective, with the author pointing out differences. Quotes must be evaluated with a critical eye and presented only with special purposefulness.

On the basis of theoretical materials about the topic, the **practical part** of the thesis involves situation analysis and empirical research to analyse the socioeconomic aspects of the issue. This is the central part of the thesis, in which the author proves the ability to engage in scientific research and the make use of learned knowledge related to applied research.

The research must use quantitative and qualitative analytical methods. When processing practical materials, maximal use must be made of statistical methods, computer software, legal assurance materials, and tools used to conduct services such as *QuestionPro*. This tool is available if the author uses their UL email address to send a request to aptauja@lu.lv. For more detailed information, please visit the LU “My Portal” after registration with the University of Latvia login and password go to section *IT Service – For Authorized Users*, etc. The results of the research must be presented in tables and graphics so that the results are transparent and characterised as briefly as possible (tables and graphics must be prepared according to design requirements).

A clear, but unambiguous statement about the research methodologies must be presented. If the author has chosen a universally known and tested methodology, it is not necessary to describe it in detail; instead, make a reference to the algorithm. If the methodology has been prepared by the master's degree student or if the author of the methodology has supplemented the methodology of other authors, then that must be indicated.

If the author finds during the research process that it is not possible to find information to solve determined problem, then he or she must state the reason as to why it was not possible to examine the issue in greater depth. In that case, the author must offer proposals on what to do to ensure that the research of the problem will enhance the level of credibility.

In using the results of the research, the author formulates well-argued and proper theoretical and/or practical conclusions and proposals (as linked to the referential analysis that has been offered in the theoretical part).

It is recommended that the theoretical and practical results of the thesis can be used not just by the research object, but also at a generalised and abstract level.

#### **4.7. Conclusions and proposals**

Conclusions and proposals are based on the research and presented as theses (statements). They are

presented in the same sequence as the issues that are discussed in the thesis. Conclusions and proposals must be numbered.

Conclusions and proposals have to present the author's thoughts, findings, and opinions. They cannot involve quotes from the work of other authors, legal acts, normative documents, or ideas that have not been analysed in the thesis or that are unrelated to the topic.

In **conclusions**, the author evaluates the economic or social importance of the thesis, the extent to which the goals of the process have been achieved, and the extent to which the hypothesis has been proven. This also demonstrated the author's creative investment and the practical importance of the work for the specific research object. In the final conclusions, as opposed to those that are offered at the end of each chapter, the author must offer a broader generalisation about the theoretical and research parts of the thesis. In more extensive researches, it is recommended that the conclusions be structured.

**Proposals** must be specific and must follow from the text of the thesis and the conclusions. They must also be justified by the results of the research. Proposals must relate to theoretical and practical part of the thesis, and suggest about the further research. This means that the proposals must indicate to "who," "what," and "how" something must be done.

The author can express **gratitude** to people who offered organisational or financial support for the research, eased access to necessary materials, offered methodological recommendations or provided moral support to the author. This section is not necessary for the defence of the thesis and it is up to author's choice to add this or no.

#### 4.8.Used literature and sources

The list of used literature and sources includes all of the sources that have been used by the author in development of respective thesis. These are indicated in the language in which they were written. The list must be in alphabetical order on the basis of the author's surname or the first letter of the title of the source if the author is not indicated. The list is written in the Latin alphabet in Latvian, English, German and other languages. *The APA<sup>3</sup> style* is used. (There are examples on references to papers from scientific journals<sup>4</sup>, electronic papers from scientific journals<sup>5</sup> books<sup>6</sup>, statistical data<sup>7</sup>, materials from the Internet<sup>8</sup>,

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<sup>3</sup> APA (American Psychological Association) style, widely used worldwide in the social sciences, official website: <http://www.apastyle.org/>

<sup>4</sup> Hemsley-Brown, J., Izhar-Oplatka, I. (2006). Universities in a Competitive Global Marketplace. *International Journal of Public Sector Management*, 19(4), 316 – 338.

<sup>5</sup> Laidroo, L., Koroleva, E., Kliber, A., Rupeika-Apoga, R., Grigaliuniene, Z. (2021). Business models of FinTechs – Difference in similarity? *Electronic Commerce Research and Applications*, 46, 101034

<sup>6</sup> Agresti, A., Finlay, B. (2014). *Statistical Methods for the Social Sciences*, 4<sup>th</sup> edition, Pearson Education, p. 245

<sup>7</sup> Official Statistics Portal (OSP) (2025). Breakdown of number of employees by monthly gross income by sector. OSP data base, available DSN010m [observed 31.08.2025].

<sup>8</sup> Investment and Development Agency of Latvia (Latvijas Investīciju un attīstības aģentūra) (LIAA) (2023). Support for Export, available <https://www.liaa.gov.lv/en/article/businessgovlv-offers-entrepreneurs-easier-access-state-support-and-exports> [observed 31.08.2025]

normative documents (in Latvian or a translation of texts in English)<sup>9</sup>, or Cabinet of Ministers regulations<sup>10</sup>). After these, used sources in Russian language are listed in alphabetical order.

Authors can use various sources such as laws and Cabinet of Ministers regulations, statistical data, scientific publications, theses from scientific conferences, dissertations, master's and bachelor's theses, Guidelines, methodologies, Guidelines, recommendations, computer software, electronic sources of information or unpublished information (an example is given in Annex 3). The list of used literature and sources must not include sources that are not referenced in the thesis as such.

#### **4.9. Annexes**

A thesis should have annexes that include additional information about the research so that readers can better understand the results of the research. These can include statistical data, statistical data that has ensured the grouping of foundations, extensive analytical calculations, the intermediary results of calculations, regulations, illustration, photographs, methodologies, completed documents or survey forms, etc.

Annexes is not a part the page amount of the thesis. They are numbered with Arabic numbers, and each one must have a title that preferable responds to the questions *what? where? when?* and used information sources must be indicated. All annexes must be mentioned in the text of the thesis.

#### **4.10. The documentary page**

The documentary page (see Annex 4) includes: the title of the thesis; the name of the faculty; the author's declaration confirming that the thesis was completed independently, that only the information sources indicated in the work were used, and that the electronic copy of the thesis corresponds to the printed version (if requested); the supervisor's statement on whether the thesis is recommended for defense, received from the dean's office via the LU email system (electronic confirmation); information about the responsible person and the reviewer (name, surname, position, academic degree); the date of the final examination committee meeting and the protocol number.

### **5. The technical representation of the thesis**

#### **5.1. The language of the thesis**

Theses is written in proper and literary Latvian. Other languages might be used in the following cases:

- Foreign students,
- students who are studying languages or cultural studies,

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<sup>9</sup> Augstskolu likums (*Law of Higher Education Institutions*), pieņemts (adopted) 02.11.1995.

<sup>10</sup> Doktora zinātniskā grāda piešķiršanas (promocijas) kārtība un kritēriji (*Procedure and criteria for awarding a doctoral degree (doctorate)* – official translation is not available), Latvijas Republikas MK noteikumi Nr. 1001, 27.12.2005 (*Regulations of the Cabinet of Ministers of the Republic of Latvia No. 1001, 27.12.2005*)

- in other cases that are foreseen in regulations.

In scientific research cannot include statements written in the first person ("*I believe*" or "*In my opinion*"). Instead the author should use "*according to the author's opinion*" etc. When choosing forms of expression, the author of the thesis must make sure that readers will understand which views are his/hers and which are as reference to the authors from used sources.

## **5.2. The format of the thesis**

The thesis is written on a computer and printed out on A4 format pages, printed one-sided per page. The font is *Times New Roman*, the size is 12 points for the text and 14 points for titles. Use 1.5 spaces between lines. Page margins 30 mm from the left side, 20 mm from the right side, and 20 mm from the top and the bottom. Each paragraph is indented by 1.25 to 12.7 cm (five characters). A page cannot end with a title. A chapter or subchapter cannot start after a reference, table or graphic, each of which must be followed by at least one sentence from the author.

Titles of chapters are written in capital letters, while titles of subchapters are written in lower case letters, but in bold font. There is no punctuation point after the title. The distance from the title from the previous and subsequent text is two spaces between lines. Pages are numbered at the bottom centered and with Arabic numbers, starting with the page that follows the title page. The documentary page must be at the very end and after the annexes.

## **5.3. Titles**

The titles of sections and chapters are written in **CAPITAL LETTERS** and in bold on the upper part of the page. They must be centred. Use a 14-point font size to distinguish the titles. Subchapter titles are written in lower case letters and in bold (except for the first capital letter).

Example:

### **1. TITLE OF CHAPTER (14 POINTS)**

#### **1.1. Title of subchapter (12 points)**

## **5.4. Tables and figures**

Each table must have a sequential number and a title. Tables are numbered as part of each chapter in italic script on the upper right corner above the table. *Table 2.3.*, for instance, refers to the third table in the second chapter. The title of each table is placed above the table in **11-point letters in bold and centred**. The title of each table must answer the questions *what, where* and

*when* (if possible), and the source of data must be indicated after the table. Indicators in the table are placed in a dynamic row. A table cannot have just one indicator. The content of the table is divided up in columns. Each has a title that starts with a capital letter. Sub-column titles, if any, are written in lower case letters.

Tables must be placed as close as possible to the part of the thesis where they are mentioned. This also applies to figures. Tables must be easy to read in the direction of the page or by rotating it by 90° clockwise. Avoid big numbers in tables, instead using enlarged measurement units.

A table cannot be at the start or end of a chapter. There must always been an introductory sentence to refer to the table. After each table, the numbers that are in it must be analysed and interpreted, but it is not necessary to repeat the information that is the table.

Figures (*Fig.*) include drawings, photographs, schemes, diagrams and other illustrations. Under each figure the number is presented in italic (e.g., *Fig. 2.1.*), with a title in 11 points and in bold. The number is based on the chapter and the sequential number of the figure in that chapter. No period after the titles of tables and figures (Annex 5).

Each figure must have an appropriate title that is written under the figure in the same line as the number. It is written with a capital first letter and then lower-case letters, without any splits in words, without a punctuation point at the end and with no underscoring. Figures cannot be at the start or end of a chapter, subchapter, etc. Under each figure or table, the source must be presented in *Times New Roman*, 10 points and in italic.

The information depicted in tables and graphics must be analysed in the text of the thesis. No numerical data can be added to the text without any comments. Still, a thesis should not be saturated with numerical information, because that hinders reading and comprehension. Numerical materials that are at the basis of a calculation must be presented in an annex, and text must make reference to the relevant annex. The same should be done if the table of numerical data takes up more than one page.

Each table and figure must have a title that answers the questions *what?* (what is shown in the table or figure, indicating measurement units), *where?* (where the specified numbers are found), and *when?* (the period of time to which the numbers or data refer).

### **5.5. Formulae**

Formulae in the thesis are numbered with Arabic numbers in the same way as tables and figures. The number is written on the right side of the page on the same line where the formula is presented. Under the formula, the author must explain the symbols in the sequence that is presented in the formula. The explanation of each symbol is in a separate row. If, for instance, the formula relates to profit norm invested capital and a calculation of the relationship between the profits and the total

Sum of liabilities in the balance sheet, the formula is this:

$$P_n = \frac{P}{K} \quad (2.7.),$$

Where  $P_n$  – profit norm;

$P$  – profit during the period of review in EUR;

$K$  – total capital sum in EUR.

When referring to a formula in the text, the number is shown in parentheses. For instance, "Formula 2.7 can be used to calculate..." If the formula comes from another source, reference must be made to it. If the formula is the result of the author's own work, that must be shown in a footnote, e.g., *Formula 4.2. was developed by the author.*

### **5.6. Formation of quotes and references**

Quotes, numbers, formulae and other data from published materials, as well as the conclusions and thoughts of other authors must be shown in a reference. References are based on the APA style (see Page 15) at the bottom of the relevant page, indicating the surname and initials of the author, the title of the paper, the place where it was published, the publishing house, and the page<sup>11</sup>. Such references are numbered in line throughout the thesis. If one page has more than one reference to the same source, then the full bibliographic description is indicated, but if the next reference is on the same page, then the word *Ibid.* is included, stating the page<sup>12</sup>. The page number must be stated if there is a quote from the text of the source.

When it comes to unpublished materials, references are to be indicated if they come from several sources. Otherwise the one specific source of unpublished materials is indicated at the end of the introduction. This can apply to sources such as a company's annual report, for example, Company ABC annual report for year 20XX.. If the thesis includes calculations by the author, then there must be references related to the original sources of data.

When the ideas of other authors are quoted, they are presented in quotation marks, and any missing parts are indicated with three dots in parentheses. A description of ideas from publications does not have to be put in quotation marks, but the content and essence of the ideas must not be changed. Literal rewriting of sources without references is a gross violation of scientific ethics.

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<sup>11</sup> Šneidere, R. (2009). Finanšu analīzes metodes uzņēmuma maksātspējas prognozēšanai. LID, Rīga, 77.-78. lpp.

<sup>12</sup> turpat 87.lpp.

## 5.7.Literature and sources of information

Whenever the thesis includes the work or ideas of other authors or previous papers done by the author, a reference must be made to these sources. The faculty sets out rules on bibliographic references and presentation of utilised sources, this being done in accordance with source description standards that are accepted in the relevant sector. The list of literature and sources must include all sources that have been used. No references can be made to sources that have not been used by the author. Author of theses must mostly rely on original work by foreign and Latvian authors, as well as scientific papers from accepted databases. Recommended minimal number of used literature and information sources:

- Bachelor's theses must include at least 30 sources,
- Diploma theses must include at least 40 sources,
- Master's theses must include at least 50 sources.

Textbooks should not be used as sources of information.

The list of literature and sources is presented in alphabetical order (see Annex 3).

The surnames of authors are listed in alphabetical order when it comes to books, papers and other periodicals. Sources written in the Cyrillic alphabet are presented in alphabetical order after the list that is presented in the Latin alphabet.

After the surname(s) and initials of authors, the year of publication of the sources is presented in parentheses; the title of the book is presented in *italic*, followed by the place where the book was published, the publishing house, and the number of pages in the book (for example – 500 p.). If source comes from scientific papers or international conference paper proceedings, then the list indicates the page or pages where the paper is found: pp. 159-164 (for sources in English), S. 12- 17 (source in German), p. 148-152 (source in French) and 25.-26. lpp. (source in Latvian).

When it comes to articles in journals or other periodicals, the surname (surnames) and initial (initials) of the author is followed by the year of the publication (in parentheses), the full title of the article, the name of the journal or periodical in *italics*, the volume and issue. If the paper is in the 3<sup>rd</sup> volume and 5<sup>th</sup> issue of the journal, it is indicated as "3(5)." Finally, the reference must include the first and last page of the article<sup>13</sup> or electronical article number<sup>14</sup>.

It is highly recommended to use original publications, but there can be exceptions in terms of the student listing publications that he or she has found in other sources (usually a scientific journal). The original publication must be stated along with the source of information from which the information

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<sup>13</sup> Rupeika-Apoga, R., Romānova, I., Bule, L., Thalassinou, Y.E. (2019). The impact of population ageing and social stratification: The case of Latvia. *International Journal of Economics and Business Administration*, 7(1), 49-63.

<sup>14</sup> Gudra, D., Dejus, S., Bartkevics, V., Roga, A., Kalnina, I., Strods, M., Rayan, A., Kokina, K., Zajakina, A., Dumpis, U., Ikkere, L.E., Arhipova, I., Berzins, G., Erglis, A., Binde, J., Ansonska, E., Berzins, A., Juhna, T., Fridmanis, D. (2022). Detection of SARS-CoV-2 RNA in wastewater and importance of population size assessment in smaller cities: An exploratory case study from two municipalities in Latvia. *Science of The Total Environment*, 823, 153775

has been obtained. Furthermore, when using information from a different thesis, there must be information about the author, the title of the thesis, the university and faculty at which it was written, the city where the university is located, the year when the thesis was written, as well as information about where the text can be found in the repository or an Internet site (if that is the case).

If necessary, various auxiliary materials can be placed in an **Annex**. This usually involves intermediary results in terms of calculations, illustrations, sample questionnaires, maps, descriptions of equipment, etc. The annexes are numbered with Arabic numerals. They supplement the content of the paper, and the pages are numbered. These are not a part of the overall amount of the thesis. The faculty determines requirements for annexes.

## **6. The electronic version of the thesis**

**6.1.** An electronic copy of the thesis, including annotations in Latvia and English, must be converted by the student into the PDF (*Portable Document Format*) format. PDF is uploaded to the University of Latvia's informative system (LUIS) with the use of the LATNET password. Annotations are copied or recorded in the relevant areas of the system.

**6.2.** The converted copy is saved with a title that consists of the student's name, surname and student ID number (Berzins\_Janis\_BJ93010). The title has no diacritical markings, such as specific symbols in different languages (e.g. ā, ä, etc.)

**6.3.** The thesis is uploaded and stored in a single file with a size of no more than 50 MB.

## **7. Submission of the thesis**

**7.1.** The student uploads the final thesis to LUIS (the UL Information System) without an electronic signature and to the e-studies environment under "*Submission and Defense of Final Theses (academic year)*", signed with a secure electronic signature. After uploading the thesis, the student sends an email to the responsible person confirming the submission of the work. If the Final Examination Committee requires the thesis to be submitted in printed form, it shall be submitted to the person authorized by the Dean. The final thesis must be submitted within the deadlines specified by the Dean. Theses submitted after the deadline will not be accepted.

**7.2.** The thesis supervisor provides the person authorized by the Dean with an electronic confirmation (*e-confirmation*) regarding whether the thesis is recommended or not recommended for defense.

If the supervisor does not recommend the thesis for defense, they prepare a written statement and submit it to the person authorized by the Dean.

**7.3.** If the supervisor does not recommend the thesis for defense, the student has the right to choose either to revise the thesis or to submit it for defense without any changes.

**7.4.** If the final thesis contains a trade secret (in accordance with the characteristics of a trade secret as defined in Article 2 of the *Commercial Secret Protection Law*), the student must submit an application to the Dean of the Faculty requesting that the thesis not be made public. The application must be endorsed by the thesis supervisor. The application signed by the Dean shall be submitted by the student, together with the thesis, to the person authorized by the Dean.

**7.5.** Upon receiving the final thesis, the person authorized by the Dean verifies that the electronic copy of the thesis has been uploaded to LUIS and to the e-studies environment with an electronic signature, registers the defense date, and confirms the registration of the thesis via their UL email. If the Dean of the Faculty has permitted the thesis not to be made public, the authorized person makes the corresponding note in LUIS.

**7.6.** The person authorized by the Dean performs the necessary actions in the e-studies environment in accordance with the Dean's instructions.

**7.7.** The electronic copies of the theses are available to supervisors, reviewers, and members of the Final Examination Committee.

**7.8.** The person authorized by the Dean forwards the thesis to the reviewer(s) for evaluation and ensures that students have the opportunity to familiarize themselves with their thesis review no later than 24 hours before the defense. The reviewer uploads the review to the "*Submission and Defense of Final Theses*" section in e-studies. The review form can be found in Annex 7. Submission of a presentation for the defense is mandatory.

**7.9.** All final theses undergo a plagiarism check before the defense using the Unified Computerized Plagiarism Detection System. Only theses that have passed the plagiarism check may be included in the defense protocol in LUIS. Compliance with this requirement is monitored within the LUIS system.

## **8. Evaluation of the thesis**

**8.1.** The evaluation of the thesis takes place in two stages: the **pre-defense** and the **final defense** (see Annexes 8 and 9). The pre-defense and the final defense are held before the same committee. During the pre-defense, the committee evaluates the submitted draft of the thesis and decides whether to approve or not approve it for further development into the final version. After the pre-defense, the thesis must be

supplemented with a discussion, conclusions, and any missing sections or corrections recommended by the committee.

**8.2.** For the pre-defense, the student must prepare a draft of the introduction, theoretical part, and practical part (analytical section and practical/empirical research), with a minimum length of **15 pages**. According to the approved schedule (available on the Faculty's website under *Academic Calendar*), this draft must be uploaded to the e-studies platform under "*Submission and Defense of Final Theses (academic year)*", in the section "*Final Theses.*" Upon successful upload, the student receives an automatic notification from the e-studies system.

To upload the thesis draft, the student must:

- select the faculty;
- check the assigned pre-defense committee;
- enter the title of the thesis and the author's name;
- indicate the thesis supervisor.

The requirement for the use of an electronic signature does not apply to the pre-defense. The thesis draft prepared for the pre-defense must be submitted **at least three working days** before the pre-defense date. Uploading a presentation for the pre-defense is **not mandatory**. The supervisor's feedback on the project and their evaluation of the student's cooperation throughout the development process constitute one of the pre-defense evaluation criteria.

8.3 The defense of the thesis takes place during an open session of the Final Examination Committee.

If the thesis supervisor is the Chair of the Final Examination Committee, then during the defense of that particular thesis, the session is chaired by the Deputy Chair or another member of the committee.

**The procedure for the defense** is determined by the Final Examination Committee. The defense takes place in the following order:

- The author of the final thesis presents their speech: up to **7 minutes** for a Bachelor's thesis defense and **8–9 minutes** for a Master's thesis defense.

The oral presentation should be based on the same principles as those applied in writing the thesis. The defense speech should include:

- Justification of the relevance of the topic,
- Description of the research problem,
- Subject and object of the research,
- Aim of the research,
- Research tasks,
- Hypothesis (for Master's theses),
- Description of information resources,
- Methods, data collection and processing methods, limitations, etc.

When describing empirical methods, it is recommended to specify separately the purpose of the empirical study, number of respondents, main results, and conclusions.

Research results – conclusions and proposals, which should preferably be presented in a clear and illustrative way, e.g., using figures or tables, with oral commentary. It is advisable to avoid excessive text density in the presentation.

- The members of the Final Examination Committee ask questions, to which the student provides concise, accurate, and comprehensive answers;

- The reviewer presents the contents of the review to those present and, if necessary, asks additional questions to the author of the thesis. (If the reviewer is not present at the session, the review is read by the secretary of the Final Examination Committee.);

- The author of the final thesis is given the opportunity for a closing statement, during which he/she responds to the questions and comments raised in the review. The author has the right to express opinions about the review and, with justification, may reject certain remarks.

**8.4.** The evaluation of final theses takes place in a closed session of the Final Examination Committee after all the scheduled defenses have been heard. The evaluation results are announced to the students after the session, ensuring confidentiality of the assessment.

**8.5.** Knowledge assessment during the defense.

During the final thesis defense process, in addition to the substantive and formal evaluation of the thesis, the final examination committee assesses the student's theoretical knowledge and understanding of the specific topics of the study program and the basic principles of the field.

The purpose of the knowledge test is to ensure that the student is not only able to independently develop research, but also freely navigates the theoretical foundations and current research directions of their field.

The knowledge test includes:

- answers to questions from the committee members about the theoretical and methodological basis of the work;
- the ability to explain and justify the chosen research approach;
- understanding of theoretical principles and their connection to empirical results;
- the ability to discuss the essential theoretical aspects of the study program and their practical application.

The results of the knowledge assessment are taken into account in the final evaluation of the thesis.

**8.6.** The evaluation of the final thesis takes into account:

**8.6.1.** the quality of the thesis (relevance of the topic, analysis of previous research findings, innovation);

**8.6.2.** the student's presentation (ability to present the research scientifically, concisely, and with reasoned arguments; ability to formulate conclusions and indicate possible future research directions);

**8.6.3.** the student's responses to the committee's questions and ability to engage in discussion;

**8.6.4.** the student's presentation of the research at a student scientific conference; for Master's theses in academic study programmes, such presentation is mandatory.

**8.7.** Additional evaluation criteria for final theses may be established upon the proposal of the respective Study Programme Council and must be approved by the Faculty Council.

## **9.Storage and archiving of theses**

**9.1.**After the thesis has been defended, the copy that is bound in hard covers is stored in accordance with UL requirements. The second copy is returned to the student.

**9.2.**The library of the UL enters defended theses in a database in the IS ALEPH system, ensuring bibliographic descriptions, classification and an electronic link to the thesis.

**9.3.**The bibliographic database with annotations from the Library Division of the UL portal is available to all IS ALEPH system users. The full-text versions of theses, excluding those which the dean has allowed not to be published, are accessible via the LANET user name and password

**THE UNIVERSITY OF LATVIA  
FACULTY OF ECONOMICS AND SOCIAL SCIENCES**

**\_\_\_\_\_ Department**

*(The department at which the thesis has been prepared)*

**PĀRMAIŅU VADĪBA UN TĀS LOMA UZŅĒMĒJDARBĪBĀ  
Change Management and its Role in Business**

**BACHELOR'S THESIS**

\_\_\_\_\_ study programme

\_\_\_\_\_ sub-programme

Author: **Jānis Piemērs**

Student ID Number: jp13001

Academic supervisor: *Dr.oec.* Professor Inta Kalniņa

RIGA (year)

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## LITERATURE AND SOURCES (in alphabetical order)

1. Cekuls, A. (2015). Leadership Values in Transformation of Organisational Culture to Implement Competitive Trust Management: Trust Building through Organisational Culture. *European Integration Studies*, 9, 244-256.
2. Doktora zinātniskā grāda piešķiršanas (promocijas) kārtība un kritēriji, Latvijas Republikas MK noteikumi Nr. 1001, 27.12.2005. (*Procedure and criteria for awarding a doctoral degree (doctorate), Regulations of the Cabinet of Ministers of the Republic of Latvia No. 1001, 27.12.2005.*).
3. Official Statistics Portal of Republic of Latvia (OSP). (2025). Population of Latvia and key vital statistics 1995Q1 - 2025Q3 [reference on 31.08.2025.]. Available: IRS010c
4. Jegorova, V. (2014). Komandas veidošanas nosacījumi organizācijā "X" : bakalaura darbs / LU Ekonomikas un vadības fakultāte. Rīga : Latvijas Universitāte, 67 lpp. E-versija. Piekļuve ar LUIS lietotājvārdu un paroli.
5. Kaplan, R.S., Norton, D.P. (2000). *The Strategy – Focused Organization*. Harvard Business School Press.
6. Latvijas Republikas Komerclikums, pieņemts 13.04.2000. (*Commercial Law of the Republic of Latvia, adopted on 13.04.2000.*).
7. Lāce, M. (2014). Līderība A/S "DELFI" organizācijas kultūras kontekstā: maģistra darbs / LU Ekonomikas un vadības fakultāte. Rīga : Latvijas Universitāte, 67 lpp. E-versija. Piekļuve ar LUIS lietotājvārdu un paroli.
8. *LETA*, Lielākie darbaspēka nodokļu maksātāji pērn - 'UPB', 'Preiļu siers' un 'Rimi Latvia, 05.04.2018, Delfi, pieejams <http://www.delfi.lv/business/uznemumi/lielakie-darbaspeka-nodoklu-maksataji-pern-upb-preilu-siers-un-rimi-latvia.d?id=49910643> [skatīts 05.04.2025].
9. Pūķis, M., Jaunsleinis, A. (2014). *Rekomendācijas pašvaldību pakalpojumu uzlabošanai*. Rīga: Latvijas Pašvaldību savienība, 19 lpp.
10. Seimuškāne, L. (2015). Iedzīvotāju līdzdalība lēmumu pieņemšanas procesā pašvaldībās Latvijā un to ietekmējošo faktoru izvērtējums, Disertācija. LU Ekonomikas un vadības fakultāte. Rīga : Latvijas Universitāte, 170 lpp. Pieejama arī LU Repozitorijā <https://dspace.lu.lv/dspace/handle/7/31338>
11. Smith, G.W. (2011). Chromatographic Determination of Pesticides. Ph. D. thesis.

Oxford: Oxford University, 136 p.

12. The World Bank (2018). *Doing Business - Economy Rankings*, available <http://www.doingbusiness.org/rankings>
13. University of Latvia (UL) (2024). *Artificial Intelligence in University of Latvia*, available at <https://www.lu.lv/en/studies/study-process/artificial-intelligence-in-ul/>
14. Vanags, E., Vilka, I. (2005). *Pašvaldību darbība un attīstība*. Rīga: Latvijas Universitātes Akadēmiskais apgāds, 382 lpp.
15. World Economic Forum (2020). *Global Competitiveness Report Special Edition 2020: How Countries are Performing on the Road to Recovery*, available, <https://www.weforum.org/publications/the-global-competitiveness-report-2020/>
16. Unpublished materials from the ABC Company
17. 2018 annual report from SIA ABC
18. Job safety rules from SIA ABC.



**Sample table**

The basic principles of loans and an explanation of these principles can be found in Table 1.1.

Table 1.1.

**Basic lending principles**

No.	Principle	Explanation
1.	Ability to repay	The client must be able to repay the loan. In order for the bank to make sure that this is possible, it can calculate the total sum of the loan and examine the sources of income of the client, trying to learn about the income and expenditures of the client at the time of the loan request.
2.	Reasons	The bank must know why the client needs the loan.
3.	Payment for the loan	The bank's interest rates are the price of the loan.
4.	Differentiation	Bank use specific rules when it comes to loans.
5.	Repayment schedule	Loans are issued for a specific period of time.
6.	Collateral	Collateral for a loan can be corporate bonds, guarantees, surety, pledges, insurance policies, stocks, etc.

Source: Prepared by the author on the basis of Saksonova S. (2006). *Uzņēmuma finanšu vadības praktiskās metodes. Rīga, Merkūrijs Lat, lpp. 202*

If table was created by author based on Official Statistics Portal of Republic on Latvia database data – information is included in table 1.2.

Table 1.2.

**Population aged 15–74 by source of income in Latvia in 2022 and 2023**

Income	Number (thousand)		Share (%)	
	2022	2023	2022	2023
Total	1386,0	1377,7	X	X
Wage or salary	779,6	781,1	56,2	56,7
Income from business or private practice	78,3	83,2	5,7	6,0
Income from agricultural output sold	21,8	16,8	1,6	1,2
Pension (old-age, disability, service, survivor's, special State)	313,9	311,7	22,6	22,6
State social security benefit/allowance	195,1	196,9	14,1	14,3
Remuneration from paid temporary public work	...	...	...	...
Scholarship	20,9	22,6	1,5	1,6
Municipal social assistance	10,4	11,0	0,8	0,8
Guaranteed minimum income benefit (GMI benefit)	3,2	2,8	0,2	0,2
Maintenance (both paid by the state and voluntary/compulsory alimony)	22,6	23,2	1,6	1,7
Support from relatives, friends or family members (in cash or in kind)	310,8	312,9	22,4	22,7
Savings	46,0	38,2	3,3	2,8
Other	9,7	8,4	0,7	0,6

Source: Author's construction based on OSP database data NBA001

If table was used from the published source – information is included in table 1.3.

Table 1.3.

**Price changes by commodity group**  
(as per cent)

Groups	Price changes in February 2025, compared to:		
	February 2024	December 2024	January 2025
<b>Total</b>	<b>3.7</b>	<b>1.4</b>	<b>0.8</b>
food	5.7	1.6	0.9
alcohol, tobacco	8.4	2.1	1.5
clothing, footwear	0.6	-5.8	-1.0
housing	1.5	4.5	1.1
furnishings	2.4	1.4	1.2
health	4.4	0.4	-0.4
transport	0.0	0.8	1.1
communication	4.7	0.5	-0.2
recreation, culture	5.5	1.5	1.0
education	11.0	1.8	1.5
restaurants, hotels	3.7	-0.7	0.0
miscellaneous	3.4	1.6	0.2

Source: OSP published press release on 10.03.2025 available at <https://stat.gov.lv/en/statistics-themes/economy/consumer-prices/press-releases/22398-consumer-price-changes-february-2025> [viewed 31.08.2025]

Sample figure

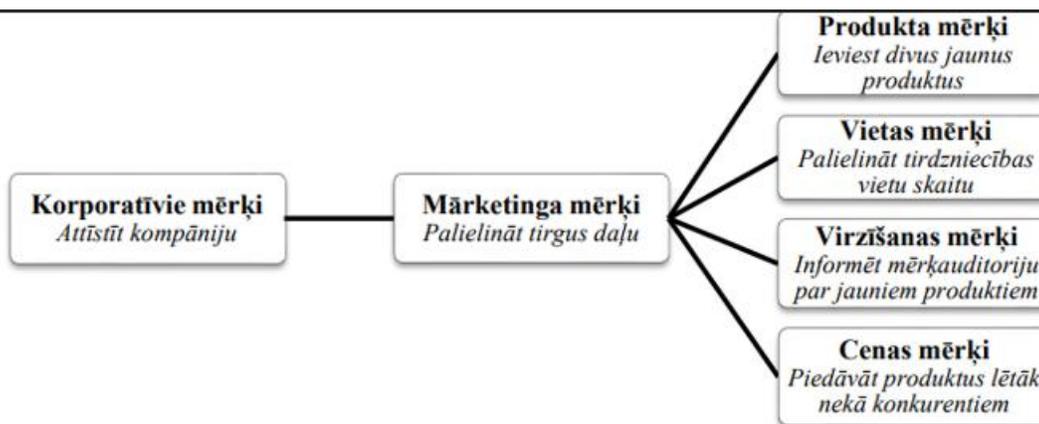
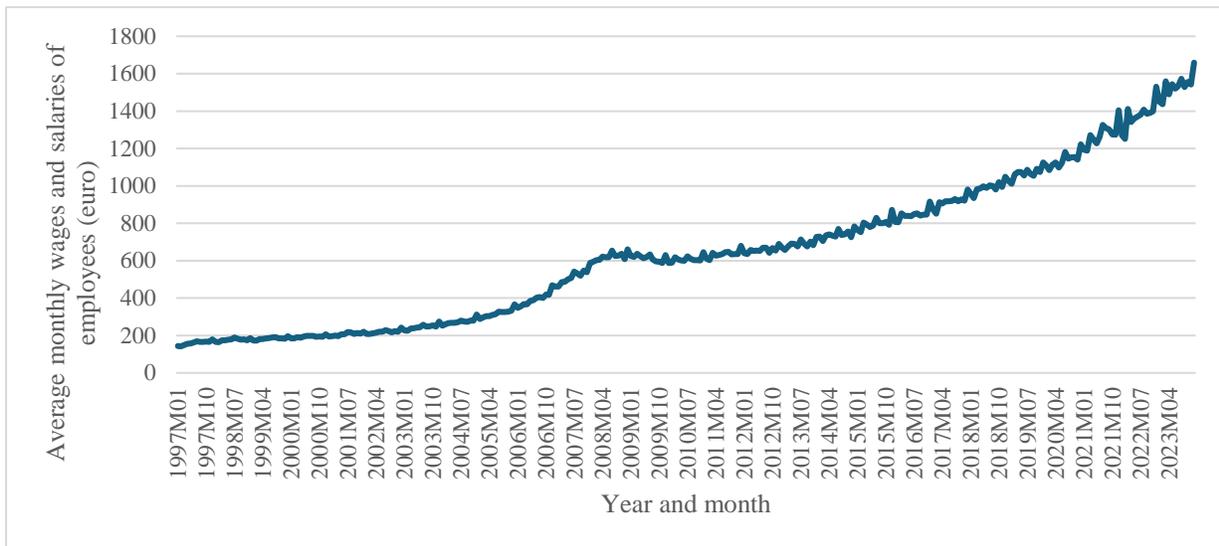


Fig. 1.3. Hierarchy of goals as interacting with marketing mix strategies

Source: Prepared by the author on the basis of Materson, R., Pickton D. (201). *Marketing: An Introduction 2<sup>nd</sup> Edition*. London: Sage Publications Inc., pp 396-397.

If the figure is created by author based on Official Statistics Portal of Republic of Latvia data – information is included in figure 1.4.

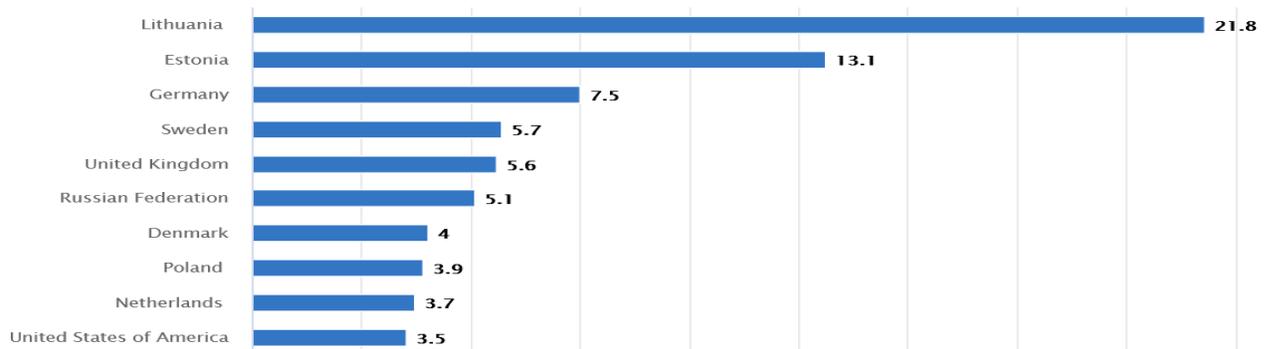


**Fig. 1.4. Average monthly gross wages and salaries of employees (euro) in Latvia January 1997 – December 2023**

Source: Author’s construction based on OSP database data DSV010m

If the figure is used from the published material – information is included in figure 1.5.

**Main export partners of Latvia in March 2022**  
(as per cent of total)



**Fig. 1.5 Main export partners of Latvia in March 2022**

Source: OSP published press release on My 11, 2024, available <https://stat.gov.lv/lv/statistikas-temas/tirdznieciba-pakalpojumi/areja-tirdznieciba/preses-relizes/8719-latvijas-areja> [viewed 31.03.2024]

**UNIVERSITY OF LATVIA**

**BACHELOR'S THESIS**

**RĪGA (year)**

Study programme: \_\_\_\_\_

Student (name and family name) ID Number: \_\_\_\_\_

Title of the thesis: \_\_\_\_\_

Evaluation criteria	Evaluation*	Comments	
<b>1. Topicality of the topic, aim, tasks and structure of thesis</b>			
1.	Topicality and selection of the topic	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2.	Formulation of the research problem, research question and /hypothesis formulation (clarity, possibility to examine / prove)	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3.	The extent to which the goal and tasks of the thesis conform to the research question or hypothesis	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
4.	Structure of thesis, it's correspondence with topic, methodology	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>2. The theoretical part of the thesis</b>			
1,	The extent to which the theoretical part is in line with the topic of the thesis	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2.	The clarity and logic of the theoretical part and appropriate selection of the methodology	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3.	The quality of literature that has been accessed (academic quality, topicality, international recognisability)	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>3. The analytical part of the thesis</b>			

1.	Use of topical information, evaluation of the quality of processing of analytical and statistical data	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2.	Clearly stated author's views about performed data analysis	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>4. The methodology and results of the research</b>			
1.	Appropriateness of methods in terms of the research problematics and/hypothesis	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2.	Description of the research process	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3.	Evaluation of scope and quality of practical (empirical research)	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
4.	Correspondence of practical (empirical) research to the theoretical explanation	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
5.	Evaluation of summary and interpretation of research results	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>5. Conclusions and proposals</b>			
1.	Correspondence of conclusions to the goal and tasks	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2.	Correspondence of proposals to the results of the research	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3.	Structure of proposals (indicated addressee, indicated implementation methods)	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>6. Technical aspects and scope of the thesis</b>			

1.	Preparation and placement of references in accordance with methodological guidelines	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2.	Technical design of the thesis, including figures and tables, in accordance with methodological guidelines	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
	<b>Corresponds with requirements for thesis are met and recommended for defence</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	

\* The criteria for the evaluation: Unsatisfactory (0-39); satisfactory (40-59); good (60-79), outstanding (80-100)

**Reviewer's questions:**

Reviewer \_\_\_\_\_

*(name, surname, academic title, position)*

Date:

Reviewer's signature: \_\_\_\_\_

## **MASTER'S THESES DEVELOPMENT PHASES**

1. Students write theses in master's study programmes according to their study plan structure: during first and second semester of a one-year programme or during the third and fourth semester of a two-year study programme;
2. There are several thesis development phases, that provisions completion of specific tasks in cooperation with the academic supervisor;
  - 2.1. Selection of the master thesis topic, development of the introduction, development of the draft of theoretical part and preparation of research draft, with preliminary defence during the 1<sup>st</sup> or 3<sup>rd</sup> semester;
  - 2.2. Preparation and submission of the final version to the academic advisor for evaluation;
  - 2.3. Submission of the final thesis for defence, taking into account recommendations from the preliminary defence commission and the academic supervisor;
  - 2.4. Defence of the thesis during the 2<sup>nd</sup> or 4<sup>th</sup> semester.
3. The phases related to preliminary defence:
  - 3.1. The student gets acquaintance with the requirements for the thesis and chooses a topic on the basis of his or her interests and knowledge in the area of economics and entrepreneurship, then formulating the topic and confirms it with the academic supervisor. Students can choose topics from a list that has been prepared and offered by faculty members at the Faculty of Business, Management and Economics.
  - 3.2. In application for the respective topic must include a brief (no more than 1,000 characters) description about the planned research object and hypothesis, the theoretical grounding of the hypothesis, the choice of research methods and the anticipated results. The study programme director reviews and confirms the application and topic and also approves the academic supervisor.
 

\*If a student has not submitted the topic by the deadline and has no reason for having failed to do so, or if the student has not started to write the thesis in cooperation with the academic supervisor, then the examination commission has the right to reduce the final grade of the thesis.
  - 3.3. Definition of the research goal and formulation of tasks, as well as planning of the research and the content of the thesis.
  - 3.4. Examination of scientific literature and previous research, selection and analysis of scientific literature, argumentation, and preparation of a list of the literature that is to be

used in the research.

Formulation of the research problem and/or hypothesis, preparation of information for empirical research in line with the planned scope of the research, selection of appropriate research methods on the basis of an analysis of scientific literature and prior research. After the academic supervisor has approved the topic, the student identifies the research object, selects research methods and analyses the relevant information. This information and the analysis of scientific literature is included in application for the master thesis draft.

3.5. The student writes a draft of the introduction and theoretical part of the thesis.

3.6. The student develops a draft thesis with an explanation of the extraction of primary and secondary data, the definition of the research population and selection of sample of and explanation of how respondents will be selected, an explanation of how information will be collected from respondents, the planned number of respondents, the data analysis methods that will be used for survey data and how the obtained data from the survey will be processed and analysed, and the results of the research. Processing of information sources and selected illustrative materials (figures, tables, etc.) in accordance with the goal and tasks of the research.

3.7. The theoretical part is defended together with the draft of empirical research.

3.8. The student incorporates the supervisor's recommendations into the prepared version of the Master's thesis for the pre-defense and submits it at least **three working days** before the pre-defense.

3.9. The master's thesis preliminary defence commission evaluates the content that has been submitted, doing so in accordance with faculty procedures and evaluation criteria. The commission recommends ways in which the thesis can be improved and approves or does not approve the draft for further work.

The introduction, theoretical part and draft research are prepared and submitted together in a single document for preliminary defence. The entire thesis is in a single document, with supplementations in each sequential version, as recommended by the preliminary defence commission. The thesis is then supplemented with a summary, conclusion and other missing parts and changes recommended by the commission. Because the same commission handles preliminary and final defence, the preparation of a single document allows commission members to track the progress of the student and make sure that their recommendations have been taken into account.

\*During all of this process, the student must regularly consult with his or her academic supervisor. The student and supervisor agree on the schedule and form of consultations, but despite the set schedule, the student must submit the draft thesis to the supervisor at least once per month.

If the student has not done this, the supervisor must inform the examination commission, which then decides on whether or not the student should be admitted to preliminary defence and final defence.

4. Preparation of the final version of the thesis and submission of it to the advisor.
  - 4.1. Writing and development the introduction and theoretical part in accordance with recommendations from the preliminary defence commission.
  - 4.2. Describing research methods and evaluating their practical applicability in terms of the thesis goal, also preparing the methodological part in accordance with recommendations from the preliminary defence commission.
  - 4.3. The research in terms of drafting a theoretical explanation for the research, then conducting empirical research in terms of the research issue and/or hypothesis and the framework of the research.
  - 4.4. Analysis and interpretation of results in accordance with research methods, the selection of appropriate literature, data processing, analysis and interpretation, as described in the thesis.
  - 4.5. Preparation of conclusions and proposals, with the submission of a final version of thesis that is appropriate in scientific and linguistic terms to the academic supervisor. The supervisor can ask a student to edit a text that has too many grammatical, orthographic or stylistic errors.
5. Submission of the thesis for defence and defence of the thesis
  - 5.1. Preparation of the thesis and presentation materials for the defence.
  - 5.2. Examination of the review and preparation of answers to the reviewer's questions.
  - 5.3. Defence of the master's thesis in terms of answering questions about the sector and area of the research, also presenting and justifying proposals to deal with the research issue, thus making an investment in the creation of new knowledge and the development of research and professional methods.

\*If the student has ignored the consultation schedule and requirements for drafts, the supervisor can reduce the final grade of the work, refuse to continue the role of the supervisor, and recommend that the examination commission ban the student from preliminary defence or final defence.

## **BACHELOR'S THESES**

1. Students write their bachelor's thesis during the pre-last and last semester of the study programme.
2. There are several theses development phases, that provisions completion of specific tasks in cooperation with the academic supervisor;
  - 2.1. Selection of the topic, writing of the introduction, the theoretical part, the research part (the analytical part and the empirical research), and a draft version of the thesis for preliminary defence during the next-to-last study semester;
  - 2.2. Submission of the final version to the academic supervisor;
  - 2.3. Submission of the thesis for defence, taking into account recommendations from the preliminary defence commission and the academic supervisor;
  - 2.4. Defence of the thesis during the last study semester.
3. The phases related to preliminary defence:
  - 3.1. The student examines the requirements for the thesis and chooses a topic on the basis of his or her interests and knowledge in the area of economics and entrepreneurship, then formulating the topic and getting confirmation of the academic supervisor. Students can choose topics from a list that has been prepared by faculty members at the Faculty of Business, Management and Economics.
  - 3.2. Presentation of the topic must include a brief (no more than 600 characters) description about the planned research issues and the anticipated results. The study programme director reviews and confirms the application and topic and also approves the academic supervisor.

\* If a student has not submitted the topic by the deadline and has no reason for having failed to do so, or if the student has not started to write the thesis in partnership with the academic advisor, then the examination commission has the right to reduce the final evaluation of the thesis.

  - 3.3. Definition of the research goal and tasks, planning of the research and content of the thesis.
  - 3.4. Examination, selection and analysis of scientific literature, argumentation, preparation of a list of sources that are to be used in the thesis.
  - 3.5. Formulation of the research problem and hypothesis, as well as selection of appropriate research methods after analysing the literature. This information is corresponding with the analysis of scientific literature in the draft research part of the thesis.
  - 3.6. Preparation of the theoretical part of the thesis.

3.7. Writing and formatting the draft introduction and theoretical part.

3.8. Writing the draft research part of the research, including data extraction, respondent numbers, data processing and analysis, preparing the information for the empirical research, and writing up the research results. Processing of sources of information and illustrative materials (statistical tables, figures, methods) in line with the goal and tasks of the thesis.

3.9. Defence of the theoretical part and the research part.

3.10. **3.10.** The student incorporates the supervisor's recommendations into the prepared version of the Bachelor's thesis for the pre-defense and submits it at least **three working days** before the pre-defense.3.11.the preliminary defence commission evaluates the draft thesis and approves or does not approve further work on the final version.

\*The introduction, theoretical part and draft research are prepared and submitted together in a single document for preliminary defence.

The entire thesis is in a single document, with supplementations in each sequential version, as recommended by the preliminary defence commission. The thesis is then supplemented with a summary, conclusion and other missing parts and changes recommended by the commission.

Because the same commission handles preliminary and final defence, the preparation of a single document allows commission members to track the progress of the student and make sure that their recommendations have been taken account.

\*During all of this process, the student must regularly consult with his or her academic supervisor.

The student and supervisor agree on the schedule and form of consultations, but despite set schedule, the student must submit the draft thesis to the supervisor at least once per month.

If the student has not done this, the supervisor must inform the examination commission, which then decides on whether or not the student should be admitted to preliminary defence and final defence.

4. Preparation of the final version of the thesis and submission of same to the academic supervisor:

4.1. Writing and formatting the introduction and theoretical part in line with recommendations from the preliminary defence commission;

4.2. Describing used research methods and evaluating their practical opportunities in terms of achieving the research goal, as well as writing the methodological part of the thesis in line with recommendations from the preliminary defence commission;

4.3. Preparation of the research part and analytical part of the thesis;

4.4. Analysis and interpretation of results;

4.5. Preparation of conclusions and proposals.

\*Submission of a final version of thesis to the academic supervisor that is developed in appropriate scientific and linguistic terms. The supervisor can ask a student to edit a text that has too many grammatical,

orthographic or stylistic errors.

5. Submission of the bachelor's thesis for defence and then defence of the thesis.

- 5.1. Formatting of the theses and preparation of presentation materials;
- 5.2. An examination of reviews and preparation of responses to questions from the reviewer/
- 5.3. Defence of the bachelor's thesis.

If the student has ignored the consultation schedule and requirements for drafts, the supervisor can reduce the final grade of the thesis, refuse to continue the role of the supervisor, and recommend that the examination commission ban the student from preliminary defence or final defence.

Reference of the Student's Application (in a separate document)

## **STAGES OF MASTER'S THESIS DEVELOPMENT IN THE MASTER'S STUDY PROGRAM FINANCIAL ECONOMICS**

1. Students develop *master's theses in master's study programs with a one-year study plan* - in the 1st and 2nd semester, in *master's study programs with a two-year study plan* - in the 3rd and 4th semesters.

2. The master's thesis has several stages of development, which envisage the performance of certain tasks and cooperation with the supervisor:

2.1. selection of the master's thesis topic, development of the research project and pre-defense of the master's thesis in the 1<sup>st</sup> or 3<sup>rd</sup> semester;

2.2. development of the final version of the master's thesis and submission to the supervisor for evaluation;

2.3. submission of the master's thesis for defense, taking into account the recommendations of the pre-defense commission and the supervisor;

2.4 defense of master's thesis in the 2<sup>nd</sup> or 4<sup>th</sup> semester.

3. Operational stages for pre-defense

3.1. The student gets acquainted with the requirements of the master's thesis; based on his / her interests and acquired knowledge in the field of economics and business, chooses the topic of the master's thesis, formulates it, co-ordinates with his / her scientific supervisor of the master's thesis.

3.2. The student must include in the application together with the topic of the master's thesis a short description (not more than 1000 characters) about the idea of the planned project and its topicality. The submitted application, the topics of the master's thesis and the approval of the scientific supervisor are reviewed and approved by the director of the study program.

\* If a student without a justifiable reason has not submitted an application for the topic of the master's thesis within the term specified by FESS and has not started the development of the master's thesis in cooperation with the supervisor,

3.3. Defining and formulating the aim of the research, planning the course of the research and the content of the master's thesis.

3.4. Getting acquainted with the content of scientific literature and previous research, selection and analysis of scientific literature, argumentation, creation of a list of literature to be used in the master's thesis.

Formulation of research problems and research question, preparation of information for the

purpose of empirical research, in accordance with the planned research framework, selecting appropriate research methods, based on the results of analysis of scientific literature and previous research. According to the topic of the master's thesis, in consultation with the supervisor of the master's thesis, the research object, research methods are selected and current problems are analyzed.

This information, together with the analysis of the scientific literature, is compiled by the student in the draft master's thesis application.

3.5. Writing and designing a master's thesis idea and a draft part of a project.

3.6. Preparation of the research project development, which includes the *substantiation of the project idea and topicality, the research of the most important sales markets of the company's products (services), the analysis of the company's customers and the most important competitors.*

3.7. The student incorporates the supervisor's recommendations into the master's thesis version prepared for the pre-defense and submits it at least one week before the pre-defense.

3.8. The pre-defense commission of the master's thesis evaluates the submitted master's thesis, in accordance with the procedure and evaluation criteria set by FESS, recommends possible directions for improvement of the master's thesis, approving / not approving the final development of the final master's thesis.

\* Master's thesis project preparation is prepared and submitted for pre-defense *together, in one document.*

Throughout the process of writing a master's thesis, the thesis is performed in one document, supplementing it in each subsequent stage with corrections recommended by the commission in the pre-defense.

The master's thesis is supplemented with other missing sections and corrections recommended by the commission in the pre-defense.

As the pre-defense and the defense of the master's thesis take place at the same commission, the creation of such a single document for the development of the master's thesis allows the commission members to follow the progress of the dissertation and assess whether the commission's recommendations have been taken into account.

\* At all stages of master's thesis development, the student must regularly consult with the supervisor of the master's thesis.

The student and the supervisor individually agree on the schedule and form of consultations, but regardless of the schedule of consultations, *the student must submit a draft of the master's thesis to the supervisor for review at least once a month.*

If the student has not followed the above procedure, *the supervisor is obliged to inform the final examination commission, which decides on the admission or non-admission of the student for pre-defense and final defense.*

4. Development and submission of the final version of the master's thesis to the supervisor for evaluation.

4.1. Writing and designing the project part, according to the recommendations of the pre-defense commission.

4.2. Based on the research of scientific literature, the student processes, analyzes and interprets the obtained data, describing it in the master's thesis. The research is developed according to the content of the thesis:

**Annotation:** a short summary of the project, which gives an idea of the developed project (on pages 5-6 in Latvian and English).

**Project idea, topicality:** it is necessary to justify why it is necessary to create / improve / modernize the company, what it is related to, what problems the project will solve, what is the expected effect.

**Company:** it is necessary to justify the choice of legal form, determine the size of the company's share capital, describe the company's fixed assets, create the company's organizational structure, show the relationship between departments, determine staff remuneration and responsibilities, analyze the company's need for external financing.

**Industry research:** it is necessary to research whether the external environment is favorable for the implementation of the project. Based on the analysis of statistical data, to analyze the industries (to which the company belongs according to the NACE classification), to study the development trends in the last 3-5 years; based on the opinions of industry experts, to determine the development perspectives of the industry in the next 3-5 years.

**Description of the company's activities, products, services:** it is necessary to describe in detail the project idea, based on the company's products or services, as well as the study of potential partners.

**Marketing:** it is necessary to analyze the most important sales market of the company's products or services, to study potential customers, competitors, as well as to create the company's marketing strategy. An important part of the chapter is the competitiveness analysis based on the SWOT matrix.

**Project financial plan:** it is necessary to formulate the assumptions on which the financial forecast is based, create a financial forecast for at least 3 years, as well as perform project

evaluation (project payback time, project NPV, IRR, EBITDA, ROE, ROIC).

**Risks and mitigation measures:** it is necessary to create and analyze the company's risk profile.

5. Submission of the master's thesis for defense and its defense.

5.1. Design of the master's thesis and preparation of presentation material for defense.

*The defense speech includes:*

- *Project idea and topicality (emphasizing topicality);*
- *Information about the company (legal form, name, share capital, external financing);*
- *SWOT analysis results (insert matrix, emphasizing project benefits);*
- *Financial results of the project (main assumptions, balance sheets, PZA, basic cash flow items, project evaluation indicators);*
- *Project risks (risk map).*

5.2. Getting acquainted with the received review and preparing answers to the reviewer's questions.

5.3. Master's thesis defense.

The student defends the master's thesis, presents and substantiates the developed project idea, as well as answers the questions to the final examination commission, thus contributing to the creation of new knowledge / research / professional methods.

\* The supervisor has the right *to reduce his / her assessment of the master's thesis or to refuse to supervise the thesis*, as well as to recommend *to the final examination commission not to admit the student to the master's thesis pre-defense and / or final defense*.

**Master thesis review form**  
**(Master's study program "Financial Economics") Name of the Study Program Professional Master**  
**Study program "Financial**  
**Economics"**

**Student** (student card No.): \_\_\_\_\_

**Title:** \_\_\_\_\_

Evaluation criteria	Evaluation*	Comments
<b>1. Project description</b>		
1. Justification of topicality	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2. The reality of project implementation	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3. Complete project development	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
4. Relevance of the project content to the purpose	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
5. The use of the latest special literature	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>2. Evaluation of the thesis</b>		
1. Positive aspects (emphasizing the author's creative idea)		
2. Errors and shortcomings identified in the thesis		
3. Qualitative evaluation of the used literature (academic quality, topicality, international recognition)	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	

4.	Use of current information, qualitative evaluation of analytical and statistical data processing	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>3. Technical performance and scope of the thesis</b>			
1.	Use and design of references according to the methodological instructions	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2.	The technical execution and design of the thesis (including pictures, tables) complies with the methodological instructions	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3.	The amount of thesis is appropriate	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
	<b>Complies with the set requirements and is recommended for further development of the final version of the thesis</b>	<input type="checkbox"/> comply	<input type="checkbox"/> does not comply

\* The criteria for the evaluation: Unsatisfactory (0-39); satisfactory (40-59); good (60-79), outstanding (80-100)

Reviewer's questions:

**Reviewer** \_\_\_\_\_  
*(nem, surname, academic degree, position)*

Date:

Reviewer's signature:

**STAGES OF MASTER’S THESIS DEVELOPMENT**  
*Professional Master’s Study Programme “Project Management”*

**1. Students develop their Master’s thesis during the 2nd, 3rd, and 4th semesters.**

**2. The Master’s thesis consists of several stages that involve performing specific tasks and cooperating with the thesis supervisor:**

**2.1.** Selection of the Master’s thesis topic, preparation of the plan, and its approval with the supervisor during the 2nd semester;

**2.2.** Preparation of the introduction and research part, and participation in the pre-defense during the 3rd semester;

**2.3.** Development and submission of the final version of the Master’s thesis to the supervisor for evaluation;

**2.4.** Submission of the Master’s thesis for defense, taking into account the recommendations of the pre-defense committee and the supervisor;

**2.5.** Defense of the Master’s thesis during the 4<sup>th</sup> semester.

**3. Activities prior to the pre-defense:**

**3.1.** The student familiarizes themselves with the Master’s thesis requirements and, based on their interests and acquired knowledge in project management and related fields, selects and formulates the thesis topic, submitting it in the form of a Master’s thesis application approved by the Director of the Study Programme. After the supervisor has been assigned, the student coordinates the topic with their scientific supervisor.

*If a student, without a justified reason, fails to submit the Master’s thesis topic proposal within the deadline set by the Faculty of Business, Management and Economics (FBME) and does not begin work on the thesis in collaboration with the supervisor, the Final Examination Committee has the right to reduce the final grade of the Master’s thesis.*

**3.2.** Definition of the research aim and formulation of research tasks, planning of the research process and the development of the Master’s thesis project.

**3.3.** Formulation of the research object and subject, situation analysis within the research object, and identification of problems. Formulation of the research problem and research question; preparation of information for the empirical study according to the planned research framework; selection of appropriate research methods based on the analysis of scientific literature and previous studies. In consultation with

the supervisor, the student defines the research object, selects research methods, and analyses relevant issues. The student also conducts independent research, choosing suitable research methods (e.g., expert interviews and/or respondent surveys), determining the purpose of the study, preparing and carrying out the research, summarizing and interpreting the results, and supplementing them with illustrative materials (tables, figures, etc.). The research part concludes with the identification of the main problem, analysis of its causes, and justification for the selected problem to be addressed.

**3.4.** Drafting and formatting the introduction and research part of the Master's thesis.

**3.5.** The student incorporates the supervisor's recommendations into the prepared version of the Master's thesis for the pre-defense and submits it **at least one week before the pre-defense.**

**3.6.** The Master's thesis pre-defense committee evaluates the submitted draft of the thesis according to the procedures and evaluation criteria set by FESS and provides recommendations for improvement, approving or not approving the thesis for further development into the final version.

*The introduction and research part of the Master's thesis are prepared and submitted for pre-defense as a single document.*

Throughout the thesis writing process, the thesis must be developed as a single document, supplemented at each stage with revisions recommended by the pre-defense committee.

The Master's thesis must be further expanded with discussion, conclusions, and any missing sections or corrections suggested during the pre-defense.

*At all stages of thesis development, the student must regularly consult the supervisor.* The student and the supervisor agree individually on the schedule and form of consultations; however, regardless of this schedule, the student must submit the draft of the Master's thesis to the supervisor **at least once a month.**

If the student fails to follow this procedure, the supervisor must inform the Final Examination Committee, which decides whether the student will be allowed to participate in the pre-defense and/or final defense.

**4.** Preparation and submission of the final version of the Master's thesis to the supervisor for evaluation.

The Master's thesis must include the following sections:

**4.1.** Writing and formatting of the introduction and research part according to the recommendations of the pre-defense committee.

**4.2.** Development and analysis of the project proposal, including:

**4.2.1.** Preparation and analysis of the project objectives plan;

- 4.2.2. Formulation and analysis of project alternatives and selection of the two best alternatives;
- 4.2.3. Development and analysis of conceptual designs for the two selected project alternatives;
- 4.2.4. Evaluation and comparison of the two project alternatives based on monetary and non-monetary criteria;
- 4.2.5. Preparation of the final project proposal for the selected alternative.

4.3. Development and analysis of the project implementation manual, including:

- 4.3.1. Analysis of the project initiation process;
- 4.3.2. Development and analysis of the project plan, including structure plan, progress, timeline, resources and costs, financial plan, and milestone plan;
- 4.3.3. Analysis of the project controlling process;
- 4.3.4. Analysis of the project closing process.

4.4. Preparation of conclusions and recommendations.

The final version of the Master's thesis must be submitted to the supervisor in scientifically sound and linguistically correct Latvian, complying with the norms of the Latvian literary language. The supervisor has the right to require the student to correct the text if it contains numerous grammatical, orthographic, or stylistic errors.

5. Submission and defense of the Master's thesis.

- 5.1. Formatting of the Master's thesis and preparation of presentation materials for the defense.
- 5.2. Review of the received evaluation and preparation of responses to the reviewer's questions.
- 5.3. Defense of the Master's thesis.

The student presents their Master's thesis for up to **15 minutes**, followed by answers to the questions of the Final Examination Committee, thus demonstrating their knowledge, skills, and competence in project management within the chosen field of the national economy.

*The supervisor has the right to lower their evaluation of the Master's thesis, to withdraw from supervision, or to recommend to the Final Examination Committee that the student not be admitted to the pre-defense and/or final defense if the student has not followed the consultation schedule or the requirements for submitting the draft version.*

During the development and defense of the Master's thesis, the requirements established under agreements concluded with partner universities of the respective study programme may also be applied.



## DEPARTMENT OF MANAGEMENT SCIENCES

### MASTER'S THESIS REVIEW

*Professional Master's Study Programme "Project Management"*

**Student:** \_\_\_\_\_

**Title of the Thesis:** \_\_\_\_\_

Evaluation criteria		Evaluation*	Comments
<b>1. Project description</b>			
1.	Justification of topicality	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2.	The reality of project implementation	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3.	Complete project development	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
4.	Relevance of the project content to the purpose	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
5.	The use of the latest special literature	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>2. Evaluation of the thesis</b>			
1.	Positive aspects (emphasizing the author's creative idea)		
2.	Errors and shortcomings identified in the thesis		

3.	Qualitative evaluation of the used literature (academic quality, topicality, international recognition)	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
4.	Use of current information, qualitative evaluation of analytical and statistical data processing	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>3. Technical performance and scope of the thesis</b>			
1.	Use and design of references according to the methodological instructions	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2.	The technical execution and design of the thesis (including pictures, tables) complies with the methodological instructions	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3.	The amount of thesis is appropriate	<input type="checkbox"/> outstanding <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
	<b>Complies with the set requirements and is recommended for further development of the final version of the thesis</b>	<input type="checkbox"/> comply	<input type="checkbox"/> does not comply

Reviewer's questions:

**Reviewer**

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*(nem, surname, academic degree, position)*

Date:

Reviewer's signature:

**University of Latvia**  
**Faculty of Economics and Social Science**

**GUIDELINES**

for the development of the Bachelor's Thesis with a Project Component  
(Engineering Project)  
in the Professional Bachelor's Study Programme  
"Industrial Engineering and Management"

Riga  
Year

## **1. GENERAL GUIDELINES**

These methodological guidelines are intended for the preparation and defence of the Bachelor's Thesis with a project component (Engineering Project) by students, supervisors, consultants, and members of the state examination committee of the professional Bachelor's study programme "Industrial Engineering and Management" at the University of Latvia. The University of Latvia establishes uniform requirements for the content, formatting, and defence of final theses in accordance with the "Regulations on Final Examinations at the University of Latvia" (approved by the UL Senate Decision No. 183 of 27.12.2011, amendments: UL Senate Decision No. 231 of 02.07.2012 and UL Senate Decision No. 45 of 28.12.2013). These guidelines contain specific requirements that supplement the regulations as mentioned above.

The Bachelor's Thesis with Engineering Project is the final research work of students in the professional Bachelor's study programme, in which the student independently solves a particular problem related to the analysis and engineering solutions within an industrial business environment and in the context of a national economic sector. The objective of the thesis with engineering project is to solve a specific practical problem in line with the requirements of the study programme and the professional qualification to be obtained. The thesis is developed according to the student's field of specialization, interests, professional competence, scientific foundation, and experience. The selected topic must correspond to the content and direction of the professional Bachelor's study programme.

If a student has successfully passed all examinations and assessments required in the study programme "Industrial Engineering and Management", upon the successful development and defence of the Bachelor's Thesis with Engineering Project, the State Examination Committee awards the student the professional Bachelor's degree in Industrial Engineering and Management and the 5th-level professional qualification "Industrial Management Engineer".

The Bachelor's Thesis must be developed in accordance with the generally accepted standards of academic research and must include the following components:

1. Theoretical analysis of the research problem and empirical research;
2. An engineering project component that addresses a specific, practically relevant technical issue. It must be based on experimental studies,

engineering analysis, engineering calculations, mathematical modelling, optimization, etc. The engineering solution developed in the thesis must include an economic justification and an assessment of compliance with general environmental and occupational safety requirements.

It is recommended that students begin preparing the thesis with engineering project during their final scheduled internship. The student is responsible for the content, data used, and overall quality of the developed thesis.

## **2. SELECTION OF THE BACHELOR'S THESIS WITH ENGINEERING PROJECT TOPIC**

The suitability of the thesis topic is evaluated and approved by the study programme director and the thesis supervisor. The topic must be related to production (industrial business environment) processes and engineering solutions, the design, implementation, or improvement of new systems, development or enhancement of new technology or technological processes, creation, maintenance, and improvement of knowledge-intensive products, or the design and optimization of production equipment or components.

The thesis topic must comply with the following criteria:

- Correspondence to the study programme and qualification requirements;
- Relevance to a specific national economic sector and real industry needs;
- Inclusion of the opportunity to solve complex industrial engineering problems;
- Reflection of the competencies, skills, and knowledge of an Industrial Management Engineer.

During the preparation of the final thesis, the topic formulation may be refined based on the conducted analysis and obtained data. At the start of the research, the student must agree with the supervisor on the thesis development plan, content, objective, and specific tasks.

Before drafting the plan, the student must familiarize themselves with relevant scientific literature on the selected topic. The presentation of the studied problem must be linked to the thesis objective, and separate issues must be logically connected. Data collection is an important part of the development process, along with preliminary processing and verification of information sufficiency.

The student must thoroughly study theoretical approaches, evaluate existing

literature and practical materials, compare different viewpoints, discuss scientific findings, and provide their own judgment. The supervisor may require a detailed schedule, including deadlines for submission of drafts. The student has the right to consult other instructors. The supervisor monitors the progress of the thesis.

The supervisor may be a faculty member or an industry professional with a Master's or Doctoral degree and relevant professional qualifications. A consultant may be chosen for a specific engineering topic and may be indicated on the title page. A technological consultant may also be appointed, who signs the graphical and descriptive parts of the engineering project. Supervisor and consultant appointments are approved by the study programme director.

### **3. VOLUME AND STRUCTURE OF THE BACHELOR'S THESIS WITH ENGINEERING PROJECT**

The recommended length of the thesis is at least 70 pages (excluding appendices), preferably not exceeding 80 pages. The structure must follow this order:

1. Title page;
2. Abstract and keywords (in three languages: Latvian and two foreign languages, one of which must be English);
3. Table of contents;
4. List of abbreviations and acronyms;
5. Introduction (2–3 pages);
6. Theoretical section (20–25% of the total volume);
7. Research section including analysis of an industrial company and its processes (20–30%);
8. Engineering project section: task definition, development of engineering solutions, experiments, calculations, drawings, modelling, etc. (20–30%);
9. Conclusions;
10. Recommendations;
11. Acknowledgments (optional);
12. References;
13. Appendices;
14. Documentary sheet.

### **4. CONTENT REQUIREMENTS**

#### **4.1 Title Page**

Prepared according to the template (Appendix 1). It includes the University, faculty, programme, title of the topic in Latvian and English, thesis type, student information (name, student ID), supervisor (name, academic degree, title), location and year of preparation, and consultant details if applicable. The title page is page 1 but has no page number printed on it.

## **4.2 Abstracts**

Prepared in Latvian and two foreign languages certified in the EU, including English; the third language is selected in agreement with the programme director. The abstract must describe the problem, aim, tasks, results, their practical application, and novelty. Maximum length: 850 characters including spaces. Keywords (4–8) must follow the abstract.

## **4.3 Table of Contents**

Includes abbreviations first (if used), then the introduction, numbered chapters and subchapters with page numbers. Pages are numbered with Arabic numerals. Chapter and subchapter numbering rules must be followed.

## **4.4 List of Abbreviations and Acronyms**

Placed on a separate page if several abbreviations are used in the thesis.

## **4.5 Introduction**

Must include:

1. Justification and relevance of the topic;
2. Problem description;
3. Thesis objective and tasks;
4. Research hypothesis or question;
5. Brief description of research methods;
6. Research period;
7. Limitations (if any);
8. Short structural overview of the thesis;
9. Brief description of the literature sources.

The objective must be precise, reflect the entire thesis scope, and must not be phrased descriptively; one single objective must be defined. Tasks must clearly reflect the steps taken to achieve the objective and include the engineering project development.

Methods may include: quantitative (measurements, modelling, simulation, statistical analysis), qualitative (interviews, expert evaluations), and other methods approved by the supervisor.

Each chapter should ideally end with a short summary and logical transition.

## **4.6 Theoretical Section**

20–25% of total volume. Must include analysis, comparison, evaluation of scientific literature internationally and in Latvia.

#### **4.7 Research Section**

20–30% of total volume. Includes characterization of the selected industrial company and its processes, identification of problems, justification of selected empirical research methods, and analysis of survey/interview results. Questionnaires and full interview transcripts must be included in appendices. It is recommended to conduct at least five expert interviews.

#### **4.8 Engineering Project Section**

Practical engineering solutions must be developed and justified using quantitative analysis, modelling, calculations, diagrams, drawings, etc. Must include:

- Description and justification of methods, equipment, and software used;
- Technical solution analysis, optimization, parameter calculations, simulations;
- Economic justification and financial calculations;
- Environmental impact, occupational safety, ergonomics, civil protection considerations where applicable.

Calculation volume: approximately 20–30% of the section. Cost analysis may include prototype manufacturing, operating costs, and implementation costs.

#### **4.9 Conclusions**

Must be concise, structured, numbered, and strictly derived from solutions, results, objective, and tasks. Should not include citations, only the author's insights.

#### **4.10 Recommendations**

Must be practical, justified, linked to conclusions, and directed to specific stakeholders (e.g., company management, production director, industry associations). Numbered separately.

#### **4.11 Acknowledgments**

Optional. For individuals who supported or contributed to the thesis work.

#### **4.12 References**

All cited works must be included in the list, formatted according to faculty requirements; APA style is recommended. Foreign literature should be included. Sources without citations must not appear in the list.

Direct copying must be marked as quotations; paraphrasing still requires citation.

#### **4.13 Appendices**

Include supplementary materials such as intermediate calculations, illustrations, questionnaires, technical descriptions. Appendices are numbered with Arabic numerals and not page-numbered within the main pagination.

#### **4.14 Documentary Sheet**

(See Appendix 2.) Includes:

1. Thesis title and faculty;
2. Author's declaration of independent work;
3. Supervisor's statement regarding eligibility for defence;
4. Receipt confirmation by responsible person;
5. Reviewer's details;
6. Date and protocol number of the defence meeting.

### **5. FORMATTING REQUIREMENTS FOR THE DESCRIPTIVE PART**

Formatting must comply with the guidelines for final theses issued by the Faculty of Business, Management and Economics (approved by faculty decision No. 22-3/103 of 10.09.2019), which are based on UL Senate regulations.

### **6. FORMATTING REQUIREMENTS FOR THE GRAPHICAL PART OF THE ENGINEERING PROJECT (IF APPLICABLE)**

Graphical materials (drawings, diagrams, schemes, graphs) must be prepared on A1 or another required format. Requirements for layout, scales, symbols, etc. must follow Latvian national standards (LVS).

### **7. RESEARCH ETHICS AND PLAGIARISM**

If human participants are involved, informed consent, data confidentiality, and compliance with GDPR must be ensured. Ethical standards must follow international and national regulations and codes.

All external information must be properly cited, including data, images, and tables. Use of a student's own previous work must also be cited to avoid self-plagiarism. Falsification of data is strictly prohibited.

All theses are checked using the Unified Plagiarism Detection System in accordance with UL regulations (UL Rector's Order No. 1-4/12 of 09.01.2024 and UL Senate Academic Integrity Rules, 26.04.2021).

## Bachelor's Thesis with the Engineering project review

### Study programme: Professional Bachelor Study Programme "Industrial Engineering and Management"

Student: \_\_\_\_\_  
(name, surname)

Title of the thesis: \_\_\_\_\_

Evaluation criteria	Evaluation*	Comments
<b>1. Topicality of the topic, aim, tasks and structure of thesis</b>		
1. Topicality and selection of the topic	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2. Formulation of the research problem, research question and /hypothesis formulation (clarity, possibility to examine / prove)	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3. The extent to which the goal and tasks of the thesis conform to the research question or hypothesis	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
4. Structure of thesis, it's correspondence with topic, methodology	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>2. The theoretical part of the thesis</b>		
1, The extent to which the theoretical part is in line with the topic of the thesis	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2. The clarity and logic of the theoretical part and appropriate selection of the methodology	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3. The quality of literature that has been accessed (academic quality, topicality, international recognisability)	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	

<b>3. The methodology and results of the research</b>		
1.	Appropriateness of methods in terms of the research problematics and/hypothesis	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory
2.	Description of the research process	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory
3.	Evaluation of scope and quality of practical (empirical research)	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory
4.	Correspondence of practical (empirical) research to the theoretical explanation	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory
5.	Evaluation of summary and interpretation of research results	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory
<b>3. Evaluation of the Engineering Project Part</b>		
1.	Specific and practical engineering solutions	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory
	Data acquisition – measurements, analysis of technical parameters, processes and systems, statistical processing of data	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory
	Clearly justified author's opinion regarding the performed data analysis	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory
<b>5. Conclusions and proposals</b>		
1.	Correspondence of conclusions to the goal and tasks	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory
2.	Correspondence of proposals to the results of the research	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory

3.	Structure of proposals (indicated addressee, indicated implementation methods)	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
<b>6. Technical aspects and scope of the thesis</b>			
1.	Preparation and placement of references in accordance with methodological guidelines	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
2.	Technical design of the thesis, including figures and tables, in accordance with methodological guidelines	<input type="checkbox"/> excellent <input type="checkbox"/> good <input type="checkbox"/> satisfactory <input type="checkbox"/> unsatisfactory	
3.	<b>Corresponds with requirements for thesis are met and recommended for defence</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	

\* The criteria for the evaluation: Unsatisfactory (0-39); satisfactory (40-59); good (60-79), outstanding (80-100)

**Reviewer's questions:**

Reviewer

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*(name, surname, academic title, position)*

Date:

Reviewer's signature: