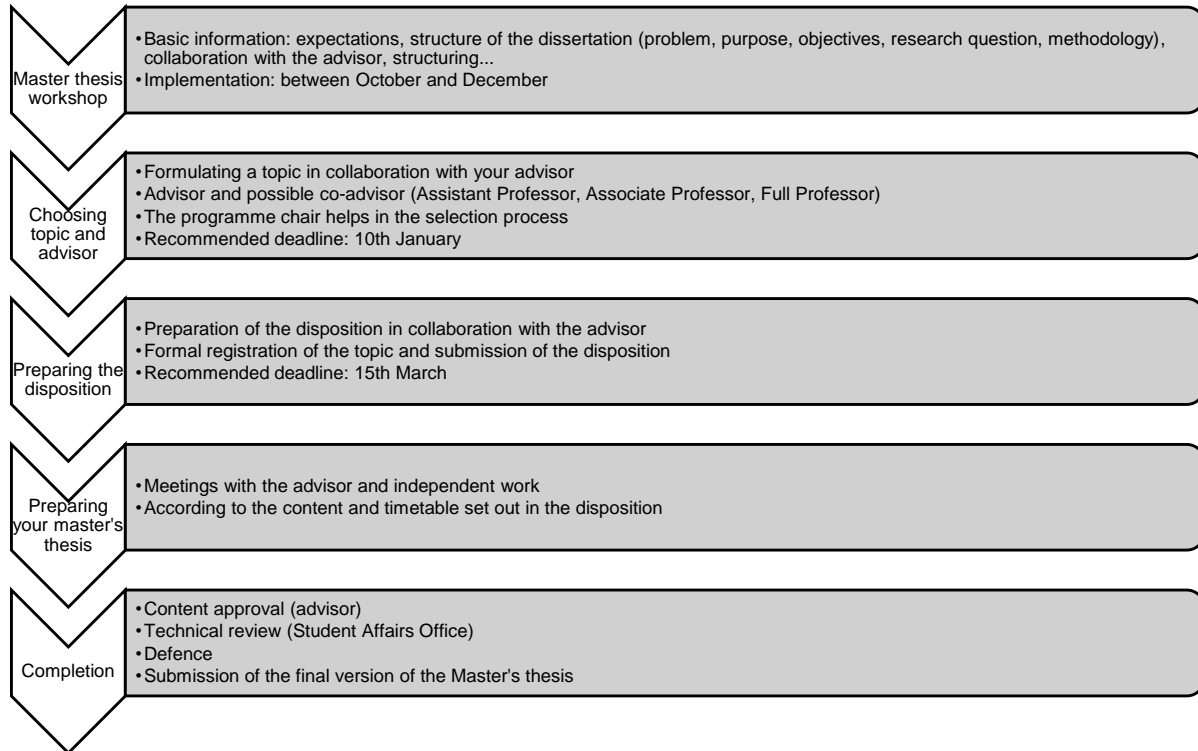


Preparing your master's thesis – guidelines for students of Business informatics

Thesis development stages and timeline



Basic principles

When preparing your written work follow the formal instructions for thesis requirements as well as the suggestions of your advisor. Before your first advisor meeting or email conversation read the instructions and requirements and think in advance about the content – be prepared.

Recommendations for master's thesis:

- Try to form your research question – draw from your existing knowledge, experience and available research, and discuss it with your advisor. The research question needs to be clear and unambiguous.
- Discuss with your advisor whether your proposed research question is feasible: check whether you can get access to the necessary data, whether it is realistic time-wise, check if you need approval from the company in question to publish sensitive information regarding the company.
- Examples of unsuitable research questions:
 - “Can the company business processes be modelled?” (answer is YES)
 - “Does modeling business processes always bring business improvement?” (answer is NO)Examples of suitable research questions:
 - “What are the key success factors of implementing a Business Intelligence system in selected company?”
 - “What are the effects of a process redesign project on a selected company?”
 - “How can the selected company improve its purchasing process?”

“Which core factors affect employee engagement during digital transformation at large manufacturing companies?”

- A clearly defined thesis purpose will clarify, why you are writing your thesis. Your purpose can be for example to contribute to understanding business intelligence system implementation in small enterprises or to contribute to the improvement of efficiency of processes in selected company.
- State your goals to explain exactly what you will do in your thesis and what are the expected results. A goal can be for example to prepare a literature review on the advantages of process modeling or to analyze user resistance towards process modeling or prepare a model of existing processes in an organization, analyze them and present improvement possibilities.¹
- **A master's thesis requires proven individual contribution – what did you discover during your literature review and case/example analysis². Write in first person singular. Clearly state your individual contribution in the text.**
- First part of master thesis (theoretical background) helps you answer your research question. Write from general to specific – if, for example, your chosen topic is “Self-evaluation of digital transformation maturity on the case of insurance company”, begin this part with a general introduction and definition of digital transformation, possible approaches, opportunities and challenges. Continue with a definition of maturity and ways of measurement. Then introduce the specific characteristics of the insurance industry in general. Begin practical part with presenting your chosen company in particular. **Present your methodology** in detail (in this example a questionnaire and/or interviews). Next present your results. Finally, discuss your thesis` contribution and what others can take away from your work.
- The master’s thesis should include a subchapter entitled **methodology** (usually at the beginning of the empirical/practical part), where you clarify what your personal contribution was in the master’s thesis³.
- The master’s thesis should ideally be based on primary data (e.g. case studies, questionnaires, interviews and/or experiments). You can however (although with greater difficulty) develop your individual contribution based on secondary sources⁴.

¹ When defining goals, a good strategy is to follow the main thesis structure – the chapter titles can be understood as highly abbreviated goals.

² Your contribution cannot be “successfully implemented BI solution in an organization”. It can be “analysis of factors influencing the success of BI implementation” or “analysis of factors influencing acceptance of BI system solution by end-users”.

³ Good example: “In my master’s thesis I analyze the implementation of a CRM concept in the company MojaFirma. I worked on the project as a marketing employee, mainly preparing customer purchase data and collecting user requests, where I did this and that... For my master’s thesis I also conducted a survey on 20 employees, using previously validated questionnaires, and interviewed 5 key system users with the intent to identify the user satisfaction levels with the newly implemented system and suggestions for improvements.

Bad example: “My thesis paper describes the CRM implementation in a chosen company. By using a descriptive method, I summarized existing literature. I used empirical-analytical methods to explore the main factors affecting the implementation success. With a comparison method we compare the results.”

⁴ See for example “Lessons learnt” in article DaSilva, C. M., Trkman, P., Desouza, K., & Lindič, J. (2013). Disruptive technologies: a business model perspective on cloud computing. *Technology Analysis & Strategic Management*, 25(10), 1161-1173. The article uses secondary sources for the Salesforce and Amazon study, yet draws from them completely new conclusions, applicable to wider literature (note: the conclusions presented

- **Make sure your literature review not is based only on secondary sources (e.g. previous theses), but on relevant** (current, as far as viable) **literature** that can help you prepare your empirical/practical part. Combine different sources, but predominantly rely on scientific literature (articles, monographies), taking into consideration your research hypotheses. For example, when defining what a “business process” is, use appropriate monographies, textbooks and scientific articles. For current trends or perhaps market shares of CRM solution providers use also web sources/consultant reports or blogs.
- Include the literature that you will actually use. Search through various literature and resources to identify the conclusions and contributions of other authors, researching the same or similar research question – use available books (e.g. in CEK library), scientific research (e.g. articles on ScienceDirect or Google Scholar), documented case studies, and newspapers.
- Take careful notes of any useful references, since you will need to list them in the thesis.
- Adhere to the rules of academic honesty – any used sources must be correctly referenced, whereby the content used should be summarized in your own words. **The percentage match in the Plagiarism Detection Program Turnitin is not the main criteria for plagiarism**; even a thesis with a low percentage of identified matches can be rejected for plagiarism⁵.
- Keep in mind that your master's thesis will be made public. It is possible that the thesis is unavailable for one year, for which you must apply when submitting the disposition.
- A description of the project you conducted at work⁶ cannot be considered the main contribution of your master's thesis.⁷ The project can, however, be used as the starting point for your thesis (most commonly the “easiest” path to thesis completion), which will produce your research question. Think along the lines of “what can be learned from this case?”, “what new insights can someone from this field learn?”. You can also look for a narrower topic hidden in the project (e.g. what affected end-user adoption?).
- When writing a thesis based on “your project”, take on the perspective of an objective researcher and not an employee from your organization – try to analyze the content as objectively and accurately as possible. Even a failed work project can produce a high-quality master's thesis⁸.
- You cannot hand in the same/similar term paper in multiple courses of your postgraduate studies. You can however build upon it or upgrade it into a master's thesis (if appropriate). In that case you would ideally take on as advisor the professor who had already commented/graded your paper.
- Decide on the details of your thesis development together with your advisor, as each professor can have a slightly different approach.

an important contribution when the paper was published in 2012 - today these notions are considered well-known).

⁵ See e.g. <https://edubirdie.com/blog/how-to-cheat-turnitin>

⁶ Especially, if you were one of many working together on the same project.

⁷ Example of inappropriate methodology description: “my master's thesis describes the CRM implementation taking place in our chosen company between January and December 2017. We assess the project success based on the project successfulness report from 2018.” It is not clear, what the contribution was, based on unnecessary use of plurality and just summarizing a success report).

⁸ Analyze for example the reasons why the project failed.

- Adhere to set deadlines. Do not procrastinate, rather spend at least 2 hours each day on your final thesis. Every single day. If you do not follow the set deadlines or agreements your advisor can refuse/discontinue cooperation.