

Information regarding

BACHELOR THESIS SUPERVISION

at the Institute for Higher Education Management (IHM)

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Important information on this guide:

This supervision guide has been created in accordance with the supervision standards of the Department of Strategy and Innovation at WU Wien. Hence, duplications and similarities of rules, norms and useful tips within the department might occur.

This guide is based on the following department guides:

- Institute for Entrepreneurship and Innovation: SBWL E&I Bachelor Thesis Guide
- Institute for Organization Design: Information regarding Bachelor Thesis Supervision at the Institute for Organization Design (IOD)

Purpose of this guide

The aim of this guide is to provide all the necessary information collected for students who are interested in writing their bachelor thesis at the Institute for Higher Education Management.

Please read this document before contacting one of our team members regarding your bachelor thesis to get an overview of the important formalities.

1 Prerequisites: Who can write a bachelor thesis at the Institute?

In general, we offer all students the opportunity to write a bachelor thesis at our Institute. There are, however, some prerequisites that must be fulfilled:

(1) According to the curriculum of your program, the first prerequisite is a positive completion of the course "Academic Research Techniques" or similar (GWA). Anyone wishing to write a bachelor must know, understand and be able to apply the contents of the "Academic Research Techniques" course.

(2) The second prerequisite is that you convince us that the planned thesis will meet the standards of the Institute or Higher Education Management both thematically and qualitatively. The basis for a decision if these standards are met is a research proposal (see 4.1.) and a preliminary structure of the thesis. If this is the case, you will receive a confirmation for supervision.

2 What is a bachelor thesis?

You are required to identify a practically and theoretically interesting research gap, formulate a research question, and with the help of relevant literature – or, in some cases an empirical study, finally arrive at a solution. What does this mean exactly? What is an appropriate problem statement?

We want to clarify some potential misunderstandings:

- A bachelor thesis is not a project report. Statements in a project report are more or less exclusively related to a particular case, at a particular point in time, in a given situation. In the bachelor thesis you are required to be able to generalize your findings.
- A bachelor thesis is neither an individual experience, nor a personal opinion. The fundamental characteristic of a thesis is that it is unbiased in nature.
- A bachelor thesis is not a textbook. Textbooks are used to enable an interested reader to get started in a new subject, and aimed at transferring knowledge in an explanatory manner. A bachelor thesis should of course be comprehensible to read, but it offers not just an overview or summary of existing literature; it goes beyond that: it identifies and solves a specific and definite problem.
- A bachelor thesis is not a seminar paper. It is not enough to simply "polish up" a seminar paper. Problems identified and solved in a bachelor thesis are usually much more focused and the handling of the problem much more detailed.

So what is a bachelor thesis?

- A bachelor thesis identifies a general problem. A problem is "general" when it refers not only to an individual case. "How should company XY set the price for the innovation Z?" corresponds to a singular problem. "What are the determinants of price setting in product innovation?" is a general question.
- A bachelor thesis identifies a relevant problem. A research question is relevant if it (1) has not been sufficiently answered by existing research, and (2) the answer is important and interesting.
- A bachelor thesis contains the solution of the problem (at least to some extent). This is achieved, for example, through the use or the formation of theory or from empirical data.

From the above structure it should be clear that a thorough and **successful development of the research question is crucial** for the future quality of the thesis.

The way the problem statement is elaborated and how well the question is answered determines the quality of a bachelor thesis. This clear line is often referred to as the "common theme": a very good thesis is a compelling argument. It contains nothing superfluous and should be concise. The **normal range is 30 pages (for BaWiSo students) to 40 pages (for BBE students)** - excluding bibliography and appendix.

3 Supervisor/ Co-Supervisor

Your first points of contact are the research and teaching assistants of the Institute. They have the role of the so-called "co-supervisor", and they decide whether your topic ideas go in the right direction, whether the status of proposal and outline is sufficient for registering and then accompany you, after official registration throughout the process.

You should start searching for a potential supervisor early enough, since our capacities to supervise a bachelor thesis can be scarce on short notice. Just write a short email in which you explain your interest in writing your bachelor thesis and, if possible, shortly explain the topic of your interest. The topics are predetermined in some way and are based on the areas of focus of the Institute for Higher Education Management. The co-supervisors often have topic suggestions that you can adopt or that you can develop further. These are usually aspects in which the assistants have a high interest due to their own research.

Of course we are also open to your own topics. In this case you must find an assistant that is willing to co-supervise the subject. In all instances the topics are typically kept relatively narrow. "Explaining the world" usually does not work, especially not if it is to take place on 30-40 pages. Your co-supervisor will assist in narrowing your research question, and help you develop the proposed topic into a proposal. This phase may take some time, so start early enough.

Working on the problem statement with two or several students is possible, and is especially useful when there is a (large-scale) empirical study. However, the individual workloads must be clearly identifiable and separated from each other to be assessed.

4 The process: From the idea to the grade

4.1 Preparation phase: First contact with the supervisor and the creation of a proposal

If you meet the requirements (see chapter 1) and are interested in a bachelor thesis, please contact one or more assistants at the Institute. Ask yourself what topics you are interested in, get informed about topic suggestions by (co-)supervisors and listen to their suggestions.

In coordination with the co-supervisor you will narrow down your topic and develop a proposal. At this stage you should focus on the bachelor thesis, meaning you should not attend too many other courses, which is also why we have set the time frame for this phase at approximately 4 weeks. The proposal serves as a basis for the following process and thus already makes up a part of your bachelor thesis. A delay in this early phase usually leads to everything becoming more difficult and strenuous for you than necessary.

A proposal is a preliminary concept, which will serve as a guide for both the author and supervisor. It ensures that there are no (significant) misunderstandings between the (co-)supervisor and the student, that the research question is answerable and relevant, and that you are generally on the right track. The proposal consists of **five to seven pages** (excluding references) and includes:

- Cover page: Enter your name, matriculation number and the date of the present version of the research proposal. Name Univ.Prof. Dr. Barbara Sporn as the supervisor of the thesis, and the assistant as the co-supervisor. Add also the Institute's name and WU Vienna.
- Title: As part of the registration, the title of the thesis will be made formally binding.
- Background, problem definition, goal setting: The theoretical and/or practical background will be briefly presented. You also briefly summarize the current state of research and explain what you want to achieve with this thesis.
- Research gap and research question: What specific research question do you want to answer and why is it relevant from a practical and theoretical point of view?
- Approach and methodology: You describe how you will proceed to answer the research question and why this approach is suitable. You could also shortly mention any expected results.
- Structure of the thesis: Give an overview of what chapters the thesis is subdivided into. Here you should clearly characterize the "common theme".
- Table of contents (1-2 pages): All of your considerations should be summarized in an outline.

- **Time Plan:** In order to plan your bachelor thesis it is important to have a plan about when to do what. Therefore, we request to include a time plan into the proposal that outlines when the milestones of your bachelor thesis are planned to be achieved as well as the steps to be taken to achieve the milestones.
- **References:** State the table of references.

First milestone: Registration and acceptance of supervision

All bachelor theses are registered officially at Learn@WU. Registration serves as confirmation of supervision. The co-supervision assistant, in consultation with the supervisor, decides if the proposal has met the necessary criteria and coordinates the registration appointment date. After registration you will **typically have three months to complete your thesis**.

4.2 Second phase: The process of solving the problem statement

Once you have a definitive confirmation of supervision, we strongly recommend you to begin working on your topic immediately. During the working phase, you will stay in contact with the co-supervision assistant in order to keep him/her involved in any important decisions. Use his/her expertise when it comes to steps such as planning and conducting an empirical survey, analyzing interviews, etc.

Responsibility for completion lies with you. You decide when the work is finished or whether some things need to be amended or supplemented. The co-supervisor does not make a pre-correction for you. You decide alone and independently whether your work is ready to be submitted. We strongly suggest that you look for someone to proof read the work for you - especially in regard to spelling, grammar and formalities, as well as content. Get feedback from non-specialist people on whether the thesis is structured in a clear and understandable way.

Second milestone: Submission of the bachelor thesis

Submit the bachelor thesis electronically via Learn@WU and send the final version (as pdf) per mail to your supervisor. For the final version of the thesis, the cover sheet of the bachelor thesis needs to be completed, signed, and placed with the thesis. The cover sheet can be found online. Please be sure to observe the formatting guidelines for bachelor theses set by WU.

4.3 Third phase: Assessment of the bachelor thesis

By law, the assessment of the bachelor thesis will take place within four weeks of submission. The co-supervision assistant is responsible for the pre-grading, and Univ.Prof. Dr. Barbara Sporn for the final grading.

Third milestone: Feedback

After the thesis has been graded, you can make an appointment with the co-supervision assistant for a feedback session. We want to ensure that you understand the details of the assessment so that it may benefit you as much as possible in future, similar challenges.

5 Role of the supervisor

From the above explanations, the role of the co-supervision assistant should be clear. He/She has the function of an advisor that helps and provides support for your thesis. However, you should not forget that the accomplishment itself lies with you and you have full responsibility.

Understanding this is very important because it has a number of practical implications. For example, it means that the input of the co-supervision assistant is an opportunity, not an obligation. You have to critically verify any advice given. You should never follow a suggestion without understanding its importance. Misunderstandings are always possible, but keep in mind that you bear the responsibility when it comes to the final version of your paper.

Let us be perfectly clear though: you will not be left alone. We will help you get the most out of yourself and will be glad if you achieve a good or very good thesis. Usually, **2-4 personal meetings should be scheduled** with your supervisor to guide you along the way.

6 What comprises a good bachelor thesis?

6.1 Important components and core elements

6.1.1 A good title

The thesis's title should be descriptive and concise. Although it is not possible that it summarizes all aspects of the thesis, one should immediately know what it is going to be about. It should create a curiosity about its content. The final wording will be agreed upon as part of the registration.

6.1.2 The three vital parts: introduction, body and discussion

The **introduction** has a central function in the thesis. It serves three purposes:

- First, the objective of the thesis is stated. The underlying problem statement should be clear, and you develop a research question. The rest of the thesis will refer back to this part. A common beginner's mistake is that the actual thesis deviates from the research question, or in the worst case has nothing to do with it anymore. The "common theme" begins in the introduction.
- Secondly, the relevance of the research question is justified. This is obvious, but often forgotten. Sometimes, one reads of a "definition" of the topic. This is misleading, since definitions are statements of facts that do not require further justification.
- Third, the approach to problem solving is explained. The reader is offered a first overview of concepts, methods and results of the thesis. How does the author approach the topic? How do the individual chapters build on each other? What is the result of the thesis? The preview is thus a conceptual overview, a brief description of the methods used and a very brief summary of the key findings or conclusions.

The **body** contains the actual problem solving. It also introduces, analyzes and synthesizes the existing literature. Reviewed academic works are not always on the exact same topic, but can also be related in other ways, for example, originate from analogous fields or involve more general statements. This means the statement that one cannot find any literature on the topic only points to the fact that no thorough literature and database search was carried out. Based on discussion about the scientific work, you should show exactly why this is not sufficient to answer the problem statement contained in your thesis. It is therefore necessary to point out the limitations of previous research.

Based on these limitations, the contributions that your thesis makes can now be presented. What kind of support does your thesis offer to overcome these limitations? It may be useful to show on the one hand what your work accomplishes, and on the other hand what it does not address. Finally, it can be asked, what impact your own investigation results will have on the scientific theory. For whom is this result interesting? How will our point of view change because of the results of the thesis?

In the concluding **discussion** you should analyze to what extent the research question was answered, what alternative explanations there may be (especially in empirical studies), what additional questions emerged and what issues remain open and could be handled in future works. A self-critical analysis is important and there is no shame, if not all questions have been answered.

6.1.3 Figures, tables, and charts

Figures, tables, charts and key words greatly help readers to navigate through the document. Particularly complicated and detailed issues can briefly be summarized in this way. So do not be stingy - but do not overdo it.

6.2 Some key success factors

6.2.1 Text flow and structuring: the famous „common theme“

Do you understand the thesis immediately? Can you find your way around? The reader wants to be guided through the thesis and not have to put all the pieces together him/herself. A good thesis is characterized by a clear theme and a compelling argument. This is known as the "common theme". In a thesis that has a clear common theme, the results are answers to the research question, the analysis of the literature supports the argument and has no unessential parts - in short, the thesis is well-rounded, complete and contains nothing unnecessary.

It is a lot of work to get a thesis to this point. In no case one will succeed right away. A thesis must usually be revised several times. Here, critical feedback from someone who is not involved in the thesis is very important to get an external perspective.

6.2.2 A clear outline

For a bachelor thesis it should be sufficient to use a maximum of four numbered heading levels (e.g. chapter 4.1.2.3.). In general, you should be able to get along with three. If you have the feeling that you need more, you should critically question your fundamental structure. An outline is logical and self-explanatory.

6.2.3 Avoiding digressions

One should always focus on the fundamentals, namely the topic of the thesis. This means that for every chapter, every paragraph, every sentence and even every word, you ask yourself one critical question:

Does it contribute to problem identification and/or problem solution?

Things that deviate from the common theme, even if they are interesting and well written, will make the thesis worse. It will be necessary to revise the work several times and you will most likely have to remove some passages that you have put a lot of work into and that you may be proud of. While this is unfortunate, you will have to make the sacrifice or face the consequences, i.e. the risk of living with a worse grade.

6.2.4 A clear writing style

A good thesis is clear and precise. Obviously the writing style also contributes to this. The ability to express yourself can be learned – make yourself aware of which texts seem clear to you and which do not, and what distinguishes them. Practice it. There is good literature on this subject.

Sometimes a simple test helps: Give the thesis to your parents or a friend without business background and ask if they really understand the text or whether there are sentences that are not yet entirely clear.

6.2.5 Anticipated technical problems

It is recommended to define headings, figures, tables etc. as appropriate format templates and to insert cross-references to pages, figures, tables etc. using the functions provided for this purpose. This saves you a lot of time.

6.2.6 Some tips on time management

Writing a research paper is a complex and (for the author) new task. Particularly problematic is that the complexity is often drastically underestimated. What initially seems simple can become very difficult and time consuming when the time comes to write the thesis.

This is one more reason to plan the time required for the individual steps and chapters (use of milestones). This way it becomes evident whether your pace is sufficient to complete the work within the given time frame. When scheduling, please give yourself a buffer, as experience has shown that deadlines often cannot be met.

6.3 Empirical studies

In general, there are two different types of methods you can use in your bachelor thesis – either conceptual work (literature review and synthesis) or empirical work. Should you have interest in conducting an empirical study, you should seek the advice of your supervisor.

7 Formal guidelines

The following formal requirements are “suggested requirements”, so you have some margin of discretion. Please use these responsibly.

7.1 Structure and outline of thesis

A bachelor thesis can be written in either German or English and includes the following parts:

- Cover sheet (available for download on the WU website)
- Title page
- Table of Contents
- Figures and Tables
- Bibliography
- Appendix

7.2 Formatting the text

The thesis is one-sided, 1.5 line spacing. The font is Times New Roman, size 12, and the text alignment should be full justification. The top page margin is 2 cm and the bottom margin 3 cm. The left margin should be held at 3 cm, and the right at 2 cm. All pages of the text should be numbered with Arabic numerals. Paragraphs make the text much easier to read. It is important to make sure that paragraphs tie together coherent thoughts. Figures, graphs, tables etc. are to be numbered chronologically and given a description.

7.3 Citations in scientific work

7.3.1 Why cite and to what extent?

A scientific work builds on existing knowledge. Those who ignore the existing literature will not make a contribution to research. Therefore, the literature research and the reference to existing literature are of major importance. The WU library offers special courses in literature research on a regular basis. It is advisable to take advantage of this service.

The necessary number of references cited is a much-debated topic. It is not possible to specify a "minimum number". A relatively large literature base is not only advisable, but necessary for a good thesis. Of course it is important to note that it is not the quantity that is important, but rather the quality of the sources and how well they are applied. It can be said, although there are exceptions, that as a rule of thumb one can say that 20 scientific sources are certainly not enough, and that 50 sources tend to be the norm for a bachelor thesis.

For citing, the citation guideline listed below must be followed. Any use of someone else's intellectual material in a scientific work must be accurately cited, or otherwise be considered plagiarism. This rule will allow the reader of the thesis to determine whether the ideas presented by the author are his/her own, or if they originated elsewhere. It should be easy to locate and review the used citations.

Plagiarism is not a petty offense and is as easily found as it is created. At WU, as well as at the Institute, special software is used, which automatically compares the submitted work with all possible sources. For more information, see: <http://www.wu.ac.at/academicstaff/en/info/thesis/plag>. Also, you are supposed to upload your bachelor thesis to the Learn@WU platform, which will automatically run a plagiarism check over your final submission.

7.3.2 Verbatim quotations

Verbatim reproductions are to be put in double quotes. Quotations within a quotation are indicated by single quotes. Footnotes belonging to a quoted source are not incorporated. Long quotations (two or more lines) can also be shown by indentation and narrower font, but longer quotations are to be avoided if possible and replaced with brief summaries.

7.3.3 Paraphrasing

Paraphrasing someone else's thoughts or expressions also requires correct citation. In this case, "c.f." (compare) can be added to the citation.

7.3.4 Statistical tables, figures, diagrams, maps, etc.

Figures are only of scientific value if they are verifiable. All figures are therefore provided with the source data. Even well known figures must be cited. If your thesis combines a number of different figures, re-arranged to make them comparable so that citing every single number is no longer possible, the beginning of the section should list all the sources and the methods used for rearranging should be referenced in a footnote. As it is with verbatim quotations and paraphrasing of text, tables, figure etc. do not only need to be cited if the contents were reproduced 1:1, but also if they were simplified, supplemented, or modified in any other way.

7.4 Presentation of sources

7.4.1 Body of the thesis

References in the body of the thesis are to be done directly in the text (Harvard style).

Harvard style displays the source in brackets directly following the quoted or paraphrased text. If you cite more than one publication in brackets, they are to be listed in alphabetical order and separated by a semicolon. The author's name and the year are usually not separated by a comma, except in publications with three authors, where the names are each separated by a comma. When there are more than three authors, only the first is listed and then appended "et al."

All references in the body of the thesis include the author's name, year, and – if you use a direct quote – the exact page numbers.

Only the bibliography includes the detailed description of the title, publisher, location, etc.

Harvard-style:

The success of the lead-user method in generating innovative ideas for companies has already been empirically documented. (Lilien et al. 2002; Urban and von Hippel 1988; Olson and Bakke 2001).

References for tables, figures, diagrams, etc., are placed directly below the object, preceded by the word "source" (or "sources"). To avoid any misunderstandings, any special notes to the figures in tables, diagrams, etc. are to be labeled with small letters (a, b, c, etc.) directly in the table or figure and referenced in the footnote.

When you create a figure yourself, you need to identify the figure as such (source: own rendering). If you take the basic outlines of a figure, but to make changes or additions, you must also note this.

Source: Own rendering based on Homburg and Krohmer

Further information: <https://www.mendeley.com/guides/harvard-citation-guide>

7.5 Bibliography

Generally, citation is based on the APA (<https://apastyle.apa.org/>) guidelines.

Overview of how to cite different sources:

- Quoting books
 - Surname of the author (without any title)
 - First name(s) of the author (either written out or abbreviated)
 - Year (The year of the book is on the title page or on the back of the title page. If there is nothing to indicate the year of publication, this must be identified as "n.d." [= undated].)
 - Title of book (subtitles can be omitted)
 - Edition of the book (not required for the first edition)
 - Location of publication of the book. The location and the name of the publisher must be separated by a colon.
 - Publisher

Gillis, Tom S. (1997). Guts & Borrowed Money, Austin: Bard Press

- Quoting book chapters

Edited books are collations of chapters written by different authors. To reference a single chapter, a different format is needed.

- Surname of the author (without any title)
- First name(s) of the author (either written out or abbreviated)
- Year (see above)
- Chapter title
- Name of the editors with the suffix "(ed.)"
- Title with the suffix (ed., page range)
- Location of publication (see above)
- Name of the publisher (see above)

Troy, B.N. (2015). APA citation rules. In S.T., Williams (Ed.). A guide to citation rules (2nd ed., pp. 50-95). New York, NY: Publishers.

- Quoting essays from journals, periodicals, etc.

- Surname of the author (without any title)
- First name(s) of author (either written out or abbreviated)
- Year
- Title of the article
- Name of the publisher (see above)
- Edition of the journal, if more than one edition has been published
- Page number (see above)

Mitchell, J.A. (2017). Citation: Why is it so important. Mendeley Journal 67(2), 81-95.

If you use numerous works of an author with the same publication year, distinguish the citations by adding a small letter at the end of the year. (e.g. 1981a, 1981b).

WTO (1981a)
WTO (1981b)

- Quoting from URL (Publications on the World Wide Web)

References to publications on the World Wide Web are cited separately in the bibliography. The year corresponds to the last review by the author.

- Surname of the author (without any title)
- First name(s) of author (either written out or abbreviated)
- Year
- Title
- Retrieved from URL on (Date)

Mitchell, J.A. (2017, May 21). How and when to reference. Retrieved from <https://www.howandwhentoreference.com> on August, 10th 2020.

For other types of sources (film, song) and more information on how to cite in your bachelor thesis please refer to the official APA citation guide <https://www.mendeley.com/guides/apa-citation-guide>.

7.5.1 Literature Management Software

We recommend using a literature management software to handle citations while writing your thesis. Such a software not only increases efficiency but also ensures correct referencing in your thesis. Common literature management softwares are:

- Mendeley
- Zotero
- EndNote
- Citavi

For more information about how to use a literature management software you can refer to Fit4Research (<https://learn.wu.ac.at/open/fit4research/index>).

7.6 Gender-fair language

Helpful tips for using gender-neutral language can be found at:

https://www.wu.ac.at/fileadmin/wu/h/structure/about/publications/aktuelle_Brosch%C3%BCren/fair_und_inklusiv.pdf

7.7. The Use of Artificial Intelligence (AI) Tools for Your Thesis

Your bachelor's thesis should be your original work. Misusing text generated by AI tools, such as ChatGPT, Grammarly, Bard, or others, is not considered original work. It is considered academic misconduct under our policy, leading to serious disciplinary actions. The automated plagiarism check of your thesis will return a probability score for AI generated text. In cases where there is a lack of documentation and transparency, we will conduct an additional interview. While the core content of your thesis should be your own creation, you are allowed to use AI-based tools for grammar/spelling checks. However, you are not allowed to use AI-based software to generate new text for your thesis, for example, by using prompts like "write a paragraph about my topic" or "make this chapter longer." If you choose to use AI-based tools, please ensure that you provide a detailed overview in the appendix, including your prompts and the responses from the text generation software that you used to generate your thesis. To assist you with this, we provided a reporting text template below.

Text Template for Reporting the Use of AI Tools:

Acknowledgment of Artificial Intelligence Tools Used:

For purposes of grammar/spelling checks, I used the following tools:

- Grammarly (<https://www.grammarly.com>)
- Chat-GPT v.3.5 (<https://chat.openai.com/>)
- Bing (<https://www.bing.com>)

I used the following prompts:

- "Check for errors in my writing"
- "Correct for grammar, spelling and comma mistakes."

I used the output to help revise my writing in the following segments of my thesis:

1.1. Introduction

2.3. Sampling

3.4.2. Results Study 1

4. Discussion