Tips and tricks for writing a bachelor or master thesis at the Institute for Markets and Strategy

These following chapters are intended to work as guidelines with regard to formal and content criteria for those students, who are writing their bachelor or master thesis at our Institute. If you have any questions please do not hesitate to contact us at <u>ims@wu.ac.at</u>

1. How can I find the right supervisor and what is his/her role?

All academic WU staff members with completed doctorate/PhD studies are eligible to supervise. Since every scientific staff member has certain aspects within their research and these are listed on our website, we kindly ask you to contact each person directly.

If your topic is not easily identifiable, please contact the institute. We will find out together which supervisor fits best.

How can your supervisor help you:

- Professional review of the work status
- Agreement on the next steps
- Support for the timing of the structure
- Regular meetings (WU guideline is about 4 meetings for the bachelor thesis); for the master thesis the number of meetings will be agreed upon individually with the supervisor.
- Note deficiencies, ramblings, etc.

The following tasks are **not** part of the support package:

- Help with the literature research
- Correction of spelling and/or writing style
- Check up on the current status and correct it
- Keep active contact
- Give intermediary assessments (only completed theses can be graded)

2. How can I find a topic?

There are two possibilities: On our homepage you can find specific topics as well as special research areas of our scientific staff. A good starting point are the (recent) research publications of our employees.

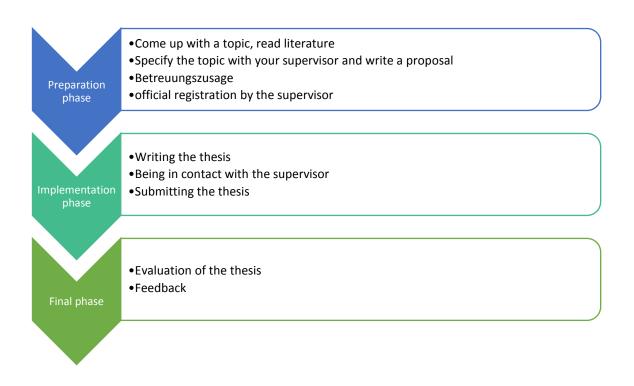
Another possibility is to find suggestions for the selection of a topic by reading specialist literature or by visiting lectures and then propose a topic in the field of Markets and Strategy.

If you are interested in a specific topic, start doing research and think about a concrete question. Create a rough concept and then contact the institute or a possible supervisor directly and come up with an interesting question together.

Please note that the question requires an analytical approach as well and not purely a descriptive one. Questions, which merely lead to a description are therefore unsuitable. The question has to generate new knowledge.

3. The Bachelor/Masterthesis

The Outline of the Schedule



3.1 Phase 1 – The Preparation phase: Choosing a topic, reading literature, establishing contact with the supervisor and writing a proposal

Once you have chosen a topic from the research questions from our website or from the subject areas of the individual supervisors, you should write a short,1 to 2 page summary and then bring it with you to your meeting with the desired supervisor.

After the first meeting, you should read a few articles on the discussed topic and write a proposal. This includes a cover sheet, a concept, a preliminary outline, a bibliography and a schedule. This proposal serves as a guideline for the bachelor thesis for the student and as well as the supervisor.

The proposal has approximately 5 to 7 pages (without cover sheet and bibliography) and includes the following aspects:

 Cover sheet. Please provide your name, your student ID number and the date of the present version of the research proposal. As supervisor of your thesis you have to write down Univ. Prof. Ben Greiner and the co-supervisor is whichever member of the scientific staff you chose. The cover sheet bachelor is downloadable in English or German and you can fill it out electronically.

- The title of the document is Bachelor Thesis Research Proposal with the corresponding title of your thesis. In the course of the application, the title of the thesis will be fixed. It should be short and concise.
- Concept: The concept is a roughly 2 to 3 page long text, in which you explain, what the thesis will be about, what the current state of research is, what goals you are pursuing with your work, how you are planning to approach the topic and which method(s) you want to apply. If you have your own hypotheses, briefly describe them.
- Structure. The structure is a first draft of the table of contents. The structure should be about 1 or 2 pages, from which the priorisation of the individual chapters of the thesis can be read. Similar levels mean similar relevance. More than two sub-levels are not necessary. If you need help, contact your supervisor. The common theme of the thesis should be recognizable in the outline.
- Bibliography. This includes all relevant sources that you have found during your literature and database research and which are relevant for your thesis. <u>Link to</u> <u>citation rules PDF</u>
- Schedule: The schedule sets time limits and deadlines to complete individual steps. In principle it is useful to write and submit the bachelor thesis during the semester, as the submission and grading during the holidays is made considerably more difficult by the frequent absence of the supervisors.
- Contact the supervisor during the preparation of the proposal. It is recommended to agree upon a potential research question with the supervisor and to discuss a rough outline before writing the proposal. Before the first meeting with the supervisor it is useful to write down your own thoughts and outline ideas. A basic idea should already exist.

3.2 Phase 2 – The Implementation phase

3.2.1 Structure of the thesis:

3.2.1.1. Cover Sheet: The cover sheet for the bachelor thesis has to be filled out electronically and thoroughly. The link for the German and English cover sheet can be found here:

Cover Sheet Bachelor Thesis German PDF Cover Sheet Bachelor Thesis English PDF

- 3.2.1.1 Table of contents: It is important that the pattern of the table of contents is transferred to the entire thesis and that no other headers or bullet points are used in the main chapters.
- 3.2.1.2 List of illustrations, tables and abbreviations: Please ensure the completeness of your directories and align them with the information given in the thesis. Do the page numbers and titles match (Use the help of your writing program)? Have all abbreviations been introduced into the text and are listed in the directory? Use abbreviations only if they are a relief for the author and reader.
- 3.2.1.3 Introduction: The introduction introduces the topic and presents it and, together with the conclusion, forms the framework for the bachelor thesis. The focus is on the topic of the thesis and the exact question. Explain in the introduction what you want to find, present or discuss in your thesis. Write down why this question is of interest and why you feel it is relevant. Explain briefly the progress of your thesis / how you will be able to answer the research question. Whether the problem is explained in the introduction or as the first point of the main part is up to you.
- 3.2.1.4 Main part: in the main part the actual examination of the question is taking place. The statements should be supported and verified by the literature used. The overview of the literature summarizes the findings of the current research status and reflects on them critically in relation to the research topic. Try to cover the topic objectively and neutrally. At this point, your own opinion should be less reflected, but it is appropriate tot o draw conclusions and incorporate critical discussions based on the literature you have chosen.

The method describes the approach, whether it be a purely theoretical research question or an empirical investigation; the

main part describes the path to the research results in a comprehensible way. It is important that you proceed in a logical and coherent way. The approach to the solution contains the new ideas, methods, concepts and procedures that led to the solution. Help the reader understand the structure of your thesis. Write short transitions between topic changes / chapters and remember to justify your decisions (e.g. focus on a specific characteristics)

- 3.2.1.5 Conclusion: In the conclusion the results of the main part are summarized and critically assessed and presented with regard to the research question. These must also be assessed with regard to the assignment. Possible improvements can also be mentioned here, as well further papers. The question formulated in the introduction must be answered explicitly here and must be supported by the literature or your research results.
- 3.2.1.6 Bibliography: All literature that has been used must be listed here. The bibliography should be sorted alphabetically as well as by type of text. It is important in this context that the citation rules are complied with and if one has decided on a system, to retain it.
- 3.2.1.7 Annex: This includes the material which is referenced in the line of argument (e.g. additional statistical evaluations, leaflet material, advertising models) as well as the material which must be provided to the reader for reasons of readability (e.g. accompanying letter, question sheet, transcripts).
- 3.2.1.8 Declaration of Independence: At the end of your thesis an affidavit has to be attached. Please mention at this point that you agree to a plagiarism examination by a software of the university. (Please sign in the printed version)

3.2.2 Formal Structuring of the bachelor thesis/master thesis

- Scope: the approximate guideline is <u>30 to 40 pages for bachelor theses</u> and <u>40</u> <u>to 60 pages for master theses</u>, bibliography or annex not included.
- The time period for writing a bachelor thesis
- In English
- Page numbers: state the page numbers. Preceding directories are numbered with Roman numerals, from the introduction on Arabic numbers are used.
- The page format is DIN A4, with the following margins: left side: left: 2 cm, right: 3 cm; right side: left: 3 cm, right: 2 cm. (Tip: facilitates the binding of the theses)
- Recommended font Arial in the font size 11pt. or Times New Roman in the font size 12pt.
- The flow text must be aligned as a block text with syllable separation, the line spacing is 1,5 lines.
- Please note that the formal design of the bachelor theses is uniform and the same font and size (12pt and 11pt respectively) is also used for illustrations, tables, headings, sources and so on.
- Orthography, grammar: The linguistic quality of the thesis is part of the grade and it is the students responsibility to ensure it. Before submission the thesis has to be proofread. It should be pointed out that it is not the supervisor's task to correct linguistic or formal errors.
- Gender-neutral wording: The following link gives you recommendations of the WU Vienna: <u>fair and inclusive PDF</u>
- Citation: Depending on the supervisor there are different preferences for the favored citation style. Irrespective of this, it is important that you cite the quotes uniformly and completely – even in the case of indirect quotes – indicate the page number in order to ensure the traceability. For the correct citation style please read the literature, which you has been given to you in the course "Fundamentals of scientific writing".
- The citation in the Harvard-Style is recommended. <u>Link to citation rules</u>

3.3 Phase 3 – The Final phase

You can submit your thesis on learn@wu: https://learn.wu.ac.at/guide/Abschlussarbeiten Stud

The grading is carried out according to law up to 4 weeks after submission of the bachelor / master thesis. The co-supervisor is in charge of the pre-correction and Univ. Prof. Greiner is in charge of the final assessment. Once your thesis has been

graded, we are sending the assessment report to the examination division. The cosupervisor will notify you by email of the grade. We also offer the students a feedback meeting.

What distinguishes a good bachelor thesis/master thesis? What cardinal errors should be avoided?

- Has the research questions been answered what are the results?
- Clear separation of opinion and facts, no personal opinion
- Clear Argumentation
- Avoiding excesses
- The thesis must be objective, which means it should be written objectively, neutrally and without prejudice.
- Comprehensibility of the presentation of the reasoning for the reader of the thesis
- Gaining knowledge a new scientific finding has to be included.
- Independent thesis due to the literature research and/or empirical work own ideas are formed
- Clear structure
- The thesis should be written intelligibly; an immense number of non-relevant technical terms do not contribute to the comprehensibility of the text. When using a technical term, make sure to use it correctly. Long sentences should be avoided.
- Avoid spelling errors, sloppiness errors and grammar errors. Therefore, please be sure to let your friends proofread before submission. The supervisor is not available for proofreading.
- Arbitrary omission or addition of data, to display the result in a specific way is not allowed.
- No distorted reproduction of texts and erroneous documenting of sources all sources must be specified. The rules of plagiarism are very strict: all theses you write during your studies (bachelor and master thesis and dissertation) are subject to a mandatory plagiarism test by means of a plagiarizing agent software. See also: https://www.wu.ac.at/mitarbeitende/infos-fuer-lehrende/lehrveranstaltungen-pruefungen-abschlussarbeiten/plagiate/

Design of tables and images

The following points must be taken into account in the design of a bachelor thesis:

- Images are representations, which contain image information (e.g. diagrams) and tables are representations, which contain only text and/or numbers. All images and tables must be consecutively numbered (fig. 1 to fig n. and tab. 1 to tab. N.) Less important or extensive images and tables, which aren't directly required for the understanding of statements in the text, should be added in the image- or table appendix.
- Images and tables must be presented in a clear manner: clear headline, information about the used units, if applicable a legend (please put all abbreviations in the abbreviations list). Sometimes less is more. Consider whether the form of presentation conveys the relevant information (e.g. color use: it can be useful in many cases to help convey information. But to make a graphic colorful to make it look 'more beautiful' can lead to confusion.)
- For images and tables on the results of your own surveys or tests, the sample size (e.g. base: 260 respondents), location and period of study (e.g. written survey in Vienna, July 2016) is necessary.
- For results on rating scales, it is imperative to specify a reading aid for scale (e.g. 1 = does not apply at all until 6 = applies completely). If the space permits use the questionnaire in the image/table.

Time management

 The advantage of writing the bachelor thesis ist he open time table and the high degree of self-determination, but in order to control the time factor, it is essentail to plan the thesis by formulating realistic goals and milestones. You should create a concrete plan, which has to be discussed with the supervisor as well. It certainly is helpful to schedule certain time buffers and check from time to time, if the schedule is adhered to. Disturbances and distractions should be avoided as well as an ambiguous goal, missing milestones or a generally bad day to day schedule.

Empirical work

An empirical thesis is a good possibility to make the bachelor/master thesis more interesting. When collecting data independently and not just drawing on other scientists' work, it is called an empirical work. These data can be collected by the means of a survey, by observation or by means of an experiment. If you opt for a lab experiment, funding can be applied for and the experiment can be carried out at the WU (discuss this with your supervisor). Please note autonomously that you do not commit copyright infringement (e.g. for images or surveying instruments) within the framework of your study.

Consider requirements, test set-ups, data collection and data evaluation beforehand, and consider which competences you are bringing to the table and what your willingness (/time) is, to get involved. Missing competences can be acquired through various classes. In an empirical investigation, an increased time expenditure is usually to be expected. In addition to literature research, preparation and formulation of a question, data collection has to be planned and carried out. Results must be determined and presented. The schedule is therefore particularly important.

The thesis differs from usual non empirical papers mostly in the main chapters. As a rule this includes the following areas: (consider this structure as an aid and not as an obligation)

- 1. Literature overview (see general guidelines)
- **2.** Questions and hypotheses:

Before an empirical investigation is carried out, specific questions and hypotheses should be formulated in this section. These derive logically stringent from the literature analyses and their discussion in the introduction and refer to e.g. research gaps, limitations of previous results or necessary replications of findings.

- Description of the experiment conditions and the investigated groups (e.g. experimental group and control group) as well as the method for allocation of these groups.
- 4. Information on the demographic characteristics of the participating persons (e.g. number, age, sex, level of education, occupation, origin, language) and the selection of these persons (e.g. type of sampling, voluntary participation), number and (possible) reasons for failures.
- 5. Detailed description of how the independent and the dependent variables as well as the control variables have been collected. When using tests or published scales, sample items should be reported. A brief explanation of why these methods were chosen is mandatory.

- 6. Description of how the data was collected and/or the course of the investigation (location, time and concrete instructions/manipulations). The study is to be described in a comprehensible and replicable manner.
- 7. Results

In this section, the results are presented precisely, which are necessary to answer the question(s) or to examine the hypothesis(es). Typical content is descriptive statistics (e.g. average, standard deviation). In the representation of results from inferential statistical analyzes (including regression, correlation,...) the specification of relevant statistical parameters (e.g. sample size, average, test statistics, degree of freedom, exact p-value, effect variables) is necessary. Look for consistent, correct abbreviations and representations. For most characteristic values, rounding to two comma points is useful, p- values should always be given exactly (please discuss this with your supervisor in advance). It is often useful to display the results in tables or graphs. It is less useful to display each information twice (e.g. table and text). Please refer to relevant tables and graphs in the flow text (reference functions in the usual word processing programs can be helpful).

Tips for data surveys and data collection:

- 1. Find out how authors have recorded the same or similar constructs before you.
- 2. Consider in advance the advantages and disadvantages of different survey methods and how many people you can examine with your resources.
- 3. Consider how you want to evaluate your results before data collection. This makes it easier for you to work later and avoids annoyances about missing information.
- 4. Before starting your survey, go through it with a few test subjects (six eyes see more than two ;) It is particularly useful to ask these test subjects to think aloud or give detailed comments, while they are answering your questions.

Phase 3.4 – After the grading

Selected (excellent) theses can be published on our homepage with name, title and possibly a link. This is, of course, agreed upon between the supervising professor and the student.

Every year it is possible to propose an exceptional bachelor thesis for the TALENTA award. The WU awards – with subsidies form the City of Vienna - the most outstanding three bachelor theses as well as the most outstanding three master theses of the past calendar year on basis of the criteria excellence, social relevance, accessibility and diversity. <u>https://bach.wu.ac.at/d/grants/255/</u>

Additional tips:

- Keep your goal in mind: When do you want to submit? What do you want to answer?
 Is what you are doing expedient?
- Don't postpone the difficult points. The further along you are with your project, the harder it becomes to find alternative solutions or seek help.
- Contact your supervisor in a timely fashion about issues that may arise. Keep in mind that it may take a few days to get a meeting. Small questions could be collected.
- Many problems you face have already been faced by other students; maybe you can find some solutions in a forum here: learn@wu.ac.at.