



Version June 2016

Guideline for writing a bachelor or master thesis

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1 Introduction

Besides exams in various subjects, students need to write a thesis for the graduation of the bachelor and the master study. The expected requirements for the thesis is described in the APSO of TUM as follows:

"Die Abschlussarbeit soll zeigen, dass der Studierende in der Lage ist, eine Aufgabe selbstständig nach wissenschaftlichen Methoden zu bearbeiten." [APSO11 §18 Abs.2]

Translation: The thesis should show that the student is able to work on a task autonomously with scientific methods. The thesis needs to meet requirements both in form and content. The following guideline should help you by working on your bachelor or master thesis.

1.1 The student's role

The bachelor as well as the master degree is said to qualify you to take up professional work. You should proof this by writing your bachelor or master thesis. In § 18 par. 2 of the ASPO of TUM [ASPO07] the expected requirements for the thesis are explicitly stated:

„Die Abschlussarbeit soll zeigen, dass der Studierende in der Lage ist, eine Aufgabe selbstständig nach wissenschaftlichen Methoden zu bearbeiten.“ Meaning: The thesis should show that the student is able to work on a task autonomously with scientific methods.

The following demands result from this for you:

- **Self-responsibility:** The thesis ahead of you is your project, working on it as well as meeting deadlines, etc. and finally the success of your thesis is your responsibility.
- **Autonomy:** We expect you to work autonomously for the most part. That means for you to get access into topic by yourself, to acquire needed knowledge and to apply suitable methods.
- **Professionalism:** After graduation usually you will get employed and you will work there professionally. You should do this already in your thesis. That includes how to organize yourself, to make arrangements, to prepare appointments with your advisor and to document the progress of your project.

1.2 The advisor's role

The task of the advisor is to supervise the thesis and to be your primary contact especially for giving advice for technical questions. This includes:

- Support for developing the topic. Discussions about the task bring clarity about the goals of the thesis.
- Discussions about the approach,
- Support for choosing suitable methods,
- To coordinate working steps and the schedule,
- Discussions of intermediate results and the next steps,

- Discussions of the presentations and slides,
- To give feedback after your presentation,
- Discussions of the results and their interpretation,
- To give support for the structure of the thesis,
- To give feedback for the thesis's draft.

It is **not** the task of the supervisor to:

- Tell you what to do and when to do
- Proof-read the thesis before submission in detail
- Take care about deadlines, especially the deadline for submission.

2 Organization

2.1 Project description

The project description covers the title, the scope and details on conditions and tasks of the work. Before starting the thesis, the student and advisor agree on the project description and the supervising professor has to approve it. The evaluation of the thesis is based on the project description and the included tasks.

2.2 Admission, registration, duration

Below, the most important information regarding these topics are listed and explained. Details can be found in the examination and study regulations (FPSO) for the Bachelor's or Master's programm.

Admission, registration and deadlines

The requirements for the admission of the Bachelor's or Master's thesis are specified in the corresponding FPSO (see [FPSO-BA §50 Abs.2, FPSO-MA §13 Abs.3, FPSO-PE §46 Abs.2]). In order to register the thesis, the notice of acceptance must be submitted. An early acceptance has to be requested at the Studiendekanat (department office). Please discuss this with your advisor.

The thesis also includes a final presentation which is mandatory, but will not be graded. Please schedule your midterm and final presentation with your advisor at the beginning of your thesis.

Duration

Bachelor thesis

The 12 credits for the thesis correspond to 9 weeks full-time working. The duration must not exceed 20 weeks (see [FPSO-BA §50 Abs.2]).

Master thesis

The Master's thesis is awarded with 30 credits. This corresponds to 24 weeks full time working. In the MSEI, the duration must not exceed 52 weeks (see [FPSO-MA §13 Abs.7]). In the MSPE program the duration is limited to 6 months (see [FPSO-PE §46 Abs. 4]).

2.3 Grading criteria

The thesis is graded mainly based on its content. The following points are evaluated in particular:

- Goal achievement, thoroughness
- Thematic focussing
- Approach and methodology
- Design and construction (optional)
- Measurements: execution, evaluation, and documentation (optional)

- Creativity, self-reliance
- Literature references, quality of the sources
- Use of sources, citing technique

Beside the content, the form and layout are also considered in the final grade. The following aspects are particularly relevant:

- Structure, layout, systematics, clarity, logic
- Visualization, language, style, spelling, punctuation

2.4 Peculiarities for external theses

„Die Betreuung von wissenschaftlichen Arbeiten ist originäre Aufgabe der Hochschule und Dienstaufgabe der an die Hochschulen berufenen Professorinnen und Professoren.“ [TUM05]

Translation: The supervision of scientific theses is primarily the responsibility of the university and its professors.

Therefore, some things have to be considered if a thesis is not conducted at the institute itself, but mainly at an external organization (research institution or company):

- Only the issuing university professor is responsible for the task formulation. The **agreed task formulation is binding**. If it should be modified during the course of the thesis, eg because priorities should be set differently, the consent of the university professor is required.
- Taking part in the institute's seminar for the theses including an own presentation of the thesis' results in a final presentation is compulsory for all students, this is part of the scope of the curriculum. The involved company enables both the passive participation in the seminar by an exemption as well as the presentation of the thesis' results in a final presentation.
- The thesis is an examination. Thus just the **issuing university professor is responsible for the grading**. This one may consult the external advisor about this matter, but the professor is generally free in his evaluation.
- Originator and rights holder is the author of the thesis, thus the student. The compiled results and methods *„sind als solche grundsätzlich frei und unterliegen keinen Schutzrechten“ [TUM05]*. Translation: The compiled results and methods are in general free to use.
- Due to legal requirements, one original version of the thesis is kept at the institute. **This is generally accessible for third parties**. If provided information shall be kept confidential, they must be explicitly identified as confidential by the external organization. **The student is responsible for ensuring, that information, which shall be treated confidential, are declared that way**. Otherwise it can be assumed, that obtained information are not covered by a non-disclosure agreement.

- Generally **just the object can be evaluated, which is submitted for evaluation**. If output data or results aren't presented within the thesis because of confidentiality, this may have a negative impact on the grading of the thesis.

Therefore, the student is responsible for handing out a thesis, which will be graded as it is. The same applies to the content of the final presentation. It's in the student's interest to hand out a work, which is as complete as possible, in order to avoid that the scientific value of the work is reduced by abbreviated passages. For this reason, a normalization of confidential data is preferable compared to abbreviate affected passages.

- Insurance against accidents is only during carrying out work at TUM. If it is carried out externally, this issue has to be clarified with the external advisor.

2.5 Seminar

Every two weeks the Seminar for Bachelor and Master Thesis takes place on Mondays. There students present the current status and the results of their theses to their fellow students and the staff of the institute.

Participation in this event is compulsory for them after they applied their thesis until their own final presentation. If you cannot attend a seminar date, notify your advisor *in advance*! In the case of external theses, which aren't carried out in the region of Munich, this requirement can be dropped upon consultation.

You get the chance to present the current status of your thesis during a midterm presentation and your results in a final presentation.

3 General notes

3.1 First steps

During the first weeks, it is important to get an overview of the work that lies ahead of you in order to schedule the tasks accordingly.

Compile a time plan. It will simplify your work and will give you the possibility to evaluate your progress. Coordinate this time plan with your supervisor.

Compilation of a time plan

Since the processing time for a thesis is limited, it is very important to make the most of this time period. Therefore, compile a time plan, which includes all the tasks that are important to finish your work. Allow enough time for the preparation of the intermediate and final presentation as well as for the writing of your thesis. In this plan, also consider other activities that you have or want to fulfil (i.e. studying for exams, holidays etc.).

Table 3-1 contains a representative example of a rough time plan

Table 3-1: Representative time table

Work package	month 1	month 2	month 3	month 4	month 5	month 6
AP 1 Orientation						
AP 2 Model building						
AP 3 Data acquisition						
AP 4 Data analysis						
AP 5 Result interpretation						
AP 6 Prepare talks						
AP 7 Writing thesis						

Preparation of an outline

On the basis of the time plan and the information provided in chapter 4, it should be straightforward to prepare a preliminary outline, which represents the core of your thesis. Define milestones and set dates until which the appropriate data have to be available to accomplish them. During this process, the outline of your thesis will be refined with subitems of your chapters.

3.2 Working period

The working period represents the major part of the efforts for your thesis. You will work on tasks and generate results to achieve the milestones that have been set. Since this process varies strongly for each thesis, only general instructions will be given:

Document the progress of your work continuously. Be careful to make detailed records of the references you are relying on and referring to. This will ensure to include all of the sources that have been cited – a very important component of every scientific work.

For experimental work, be sure to conscientiously maintain your lab notebook. Note down all relevant information like date and name of the experiment, a short description, the set of

parameters that have been used, storage location of the results etc. Please proceed accordingly when running simulation models.

Evaluate your progress regularly on the basis of your time and work plan. If you should encounter major delays, it is very important to discuss them with your supervisor.

3.3 Previous work

Hardly any bachelor or master thesis is about completely unresearched topics. To the contrary, they are about building on *existing knowledge*. A literature research therefore is the basis for one's own work on the thesis topic.

By benefiting from the work from others you can benefit from their results and gain time for focusing only on specific aspects of your topic. However, you must always clarify, which contents are based on other's work by using references (explained later). Not every information is suitable for inclusion in a scientific thesis. You therefore should question legitimacy of sources and data, before using them for your own thesis. A good quality check is, whether or not the source explains, how the information in question was derived, gathered or acquired. Where do the authors derive their data and knowledge from? Do they reference properly themselves? It is your task to judge whether or not to trust a source.

If you use contents from sources that you did not reference, this can be seen as a case of plagiarism, which leads to the thesis graded with 5.0 (not passed).

This check can today be assisted by software that automatically checks the thesis against available online sources. You can assume, that any sources your search engine can find, will be found by these programs as well.

3.4 Finishing and handing in the thesis

You must hand in your thesis in **two different** versions: one **with** your immatriculation number, and one **without** it. For this purpose, you receive the page "topic of the thesis" in two versions from your advisor: one with and one without immatriculation number. With these, you create two different PDF versions.

Both PDF versions must be put on the storage medium (c.f. section 5.4). The version **with** immatriculation number must be used for the printout.

Generally, you need to hand in **two** printed copies of your thesis at the chair. One of them is used for grading, the second one is archived.

Printing and binding the thesis is offered by the student council EI (Fachschaft EI) or a copy shop, whereas the student council is the cheaper alternative. It is necessary to label the book spine with the following contents (right=top; indented on both sides by 2 cm, title centered):

Jane Doe	Title of thesis, shortened if required	2016
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Please check the prints: are they complete, are special characters and and hatchings printed correctly?

Given that the thesis is an exam performance, the copies need a permanent binding, e.g. with an adhesive binding. Spiral binding or folder/loose leaf binder are not accepted.

In the process of handing in the thesis at your supervisor you need to sign a form. Later on, with the mark filled in it will be forwarded to the Student Services Office of the department.

3.5 Possible publication through mediaTUM

The library offers the opportunity to publish the own thesis digitally (as PDF) on mediaTUM. In order to not commit copyright infringement the following mandatory conditions must be met:

All images in the thesis not self-created will be used only with written permission of the creator. Another possibility is that they are published under a suitable license (e.g. one of the Creative Commons¹ licenses) and their use keeps all the conditions of the license (with Creative Commons theses are mentioning the name and linking to the source).

If this is fulfilled in a successful work, to the proposal of Prof. Hamacher the advisor may approve an application for electronic publishing at the corresponding post of the university library.

¹ Google image search now have a filter for usage rights: "labeled for reuse" [without modification] or "labeled for reuse with modification" [for using in one's own image compositions].

4 Interim and final presentation

In the seminar for bachelor and master theses, you have the opportunity to present your work. The interim presentation should take place after about half of the planned timeframe, the final presentation at the end.

4.1 Content of the presentations

Interim presentation

In the interim presentation, explain the topic and the objectives and illustrate your approach. Moreover, present the first results and the further steps of processing.

Final presentation

In the final presentation, your work should be presented. Therefore, start with an introduction to your topic. Then explain your approach and methods, show and comment your results and finally give a summary as well as an outlook at the end. It is not necessary to present all the results, a suitable choice is often more advantageous. In the summary, you can evaluate your results again with regard to the topic.

4.2 Media and layout

For your presentations, a video projector and a laptop with Microsoft Office and a PDF viewer will be available. In addition, you also have the possibility to use blackboard and chalk.

4.3 How to participate in the seminar

If you give a presentation, please be there on time (at least 15 minutes before the start) in order to copy your presentation on the laptop and to test if everything works. This allows you to avoid unnecessary hectic rush and become familiar with the circumstances.

Please keep on the given timeframe of 10 minutes for the interim presentation and 20 minutes for the final presentation. You should rehearse that in preparation. After your presentation, there are a few minutes for questions.

5 The written thesis

The written thesis consists of a front matter, a main matter and a back matter. Figure 5-1 shows the general structure of those three parts. The thesis, the references, written software and used data have to be submitted additionally on a storage medium.

5.1 Front matter

Title page

The titlepage includes all important information of the thesis. This contains type and title of the thesis, the authors name and matriculations number, the institutes name and the name of the supervising professor and assistant. The thesis title has to be in English and German. Please do not mention the date of beginning or submission on the title page.

Abstract

The abstract should give on a half page a brief overview about the thesis. Recommended content of the abstract is a description of the thesis topic, of the approach and of the most important results.

Topic of the thesis

Student, supervisor and professor have to agree on the topic of the thesis before the thesis starts. The topic of the thesis should appear on the 3rd or 4th page of the thesis.

Legal declaration

Important part of the thesis is a declaration, in which it is stated, that only the mentioned references, sources and methods were used, the TUM Code of Conduct for Safeguarding Good Academic Practice was respected ([see here online](#)) and the thesis has not been submitted as an examination before. The author has to sign this declaration. The legal declaration should appear on 5th page of the thesis. Please find a template for the declaration in the appendix.

Declaration for the transfer of the thesis

In order to be able to continue using the thesis at the chair, you are asked to declare to whom the thesis may be passed on under which conditions. To make it possible to use and cite a successful thesis outside the chair, it has to be published (see chapter 3.5).

A sample of this agreement can also be found in the appendix, it should appear on the 6th page of the thesis.

Table of contents

The table of contents includes the numbered titles and headings of the chapters and subchapters. Table of contents can be generated automatically with most of common word processing programs, e.g. Microsoft Word, LaTeX.

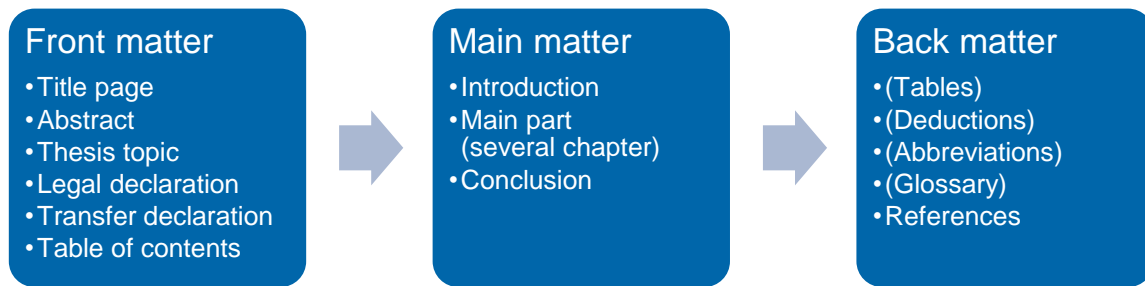


Figure 5-1: Structure of the written thesis

5.2 Main matter

Introduction

The thesis starts with an introduction where the reader should get familiar with the following aspects:

- The context of the topic and why the topic is worth being dealt with
- The major aspects that are of interest and have to be covered within the thesis
- The aims and goals of the thesis
- The steps that were conducted to solve the problems / deal with the topic
- A short literature review and contextualization of the thesis.

Main part

The major content of the thesis will be put in the main part which is the largest part and should be subdivided into chapters. The working plan can be used as a base for structuring the thesis. The chapters could be (exemplarily):

- Basics
- Method
- Experimental setup
- Database
- Measurements
- Modeling
- Description of work packages
- Results and evaluation

Defining the detailed structure of your thesis will be your task. It should consider the thesis description and be adopted to the specific problems solved.

Basics, Method, and Experimental Setup

Those chapters are the fundament of the thesis and the subsequent chapters will build on them. You should describe the initial situation, the work that has been done before and that

you will build on, the methods chosen and applied, as well as the the experimental setup if applicable.

Database, Measurements, Modeling

Based on the previous chapters, the input data or the measurements can be described. The modeling framework should be explained if applicable.

Results and Evaluation

The chapter with results is mostly put to the end of the main part. Results will be presented, commented, evaluated, and put into the overall context. In case you were calculating scenarios, they are compared here. The results should be presented in a clear way, preferably by putting them into illustrative diagrams and tables. If you found any anomalies, please discuss possible reasons (e.g. if several results of simulations are highly unexpected).

The interpretation and evaluation of the results is major feature of good scientific work.

The thesis description and your interpretation of the tasks to be fulfilled determine the extent, to which the described chapters will be part of your work. The guideline will only give you possible ideas but you do not have to stick to the thesis structure in all cases.

Summary and Outlook

The summary finishes off your work and provides the reader with the main aspects of the thesis. The reader should be reminded of the following contents:

- A short recapitulation of the initial thesis description
- A description of the method and the steps for getting to the results
- A very short summary of the major results and their contextualization
- Conclusions that were drawn based on the findings

The **outlook** should give ideas for practical implementation and point to future research that should be undertaken based on the achieved results.

5.3 Back matter

The back matter contains material, which serves as proof or illustration, but is not essential for the text comprehension, e.g. extensive tables, programming code, results of measurements, or created documents. If necessary, a table of abbreviations and indices as well as a glossary of important terms can be added.

List of literature and references

All sources used within the thesis have to be indicated in a bibliographically exhaustive way (cf. legal declaration).

- For sources from the internet, the complete URL and date of access have to be indicated.
- For personal information, the person's name, company/institution, as well as the date have to be indicated, e.g., „Phone call with Mr. Doe, X GmbH, 23.04.2010“.

- Additionally, data and models provided by the supervisor/chair have to be indicated as a reference in the thesis.

A reference includes the following information, if available:

- Name of author/authors
- Title of the publication
- Information on publication, e.g., conference, publishing company, editor
- ISBN, ISSN number, DOI (if available)
- Place of publication (for international sources also country)
- Year of publication
- Page number

The page number has to be indicated within the list of references if only part of the source is cited. In case different parts of the source are used within the thesis, it makes sense to add the page number to the cross reference.

5.4 Storage medium

A storage medium has to be attached to the thesis, which comprises at least the following files:

- The written report of the thesis (PDF)
- Data files relevant to the thesis (various file formats)
- Source code and executable code of created software
- Used sources, as far as available in digital form (PDF)
- Intermediate and final presentation (PDF/PPT[X])

6 Form and layout

6.1 General

Extent of the Thesis

It is not reasonable to define fixed extents (number of pages) for Bachelor or Master Theses. Depending on the focus of the Thesis (e.g., more practical or theoretical orientated), the ideal extent of the Thesis can vary significantly. Therefore, the following numbers should only serve as a rough reference. They refer to the main parts of the Thesis, without cover pages, tables of figures, content etc. and annexes.

- Bachelor Thesis: approx. 25 – 50 pages
- Master Thesis: approx. 60 – 90 pages

Page layout, numbering and font size

The paper size of the Thesis has to be DIN A4 in portrait format. The left, right and top margins of the pages should be at least 2.5 cm, the bottom margin at least 2 cm. Please consider an additional margin for the interior margins to compensate the binding of the Thesis. Use a test printout to determine the amount of this binding offset, as it depends both on page count and paper weight.

The pages have to be consecutively numbered, either at the header or the footer of the page. Page numbers must be either centered or aligned to the outer margin. One- or double-sided is allowed. For double-sided printing, use sufficiently opaque paper so that figures do not reduce legibility on the reverse side of the paper.

The font size has to be between 11pt and 12pt. The font should be chosen conservatively, for example Arial, Times New Roman, Century Schoolbook. Not suitable are on the contrary fonts like **Cooper Black**, *Bradley Hand*, *Script MT*.

The line spacing should be chosen between 1.0 and 1.5. Please try to utilise the space of the pages fully and to avoid empty spaces by shifting paragraphs around tables or figures or by varying the size of charts.

Typesetting systems like LaTeX carry out this task automatically.

Use of logos

The Thesis serves to achieve an academic record and is exclusive property of the author. Therefore, the Thesis should not contain any company logos. The TUM logo can be shown on the cover page of the Thesis. The logo of the chair may *not* be used.

6.2 Figure and table captions

Each figure and each table must be referenced somewhere in the text. This reference should relate to its surrounding text. It can be useful to highlight the first occurrence of a reference using **bold** or *italic* font. These points are exemplified by the references to **Figure 6-1** and

Table 6-1. Numbering of figures and tables is independent. They may either have running numbers (1, 2, 3...) or be numbered by chapter as in this document.

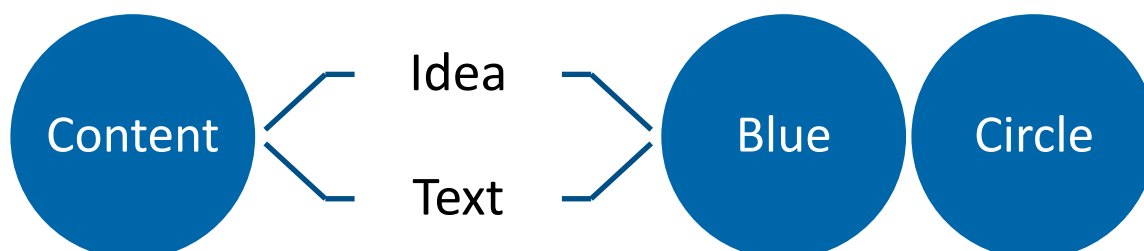


Figure 6-1: Sample figure caption

Omit that two captions follow directly one after another by placing them at least one paragraph apart. Font size for captions should be smaller than the main text.

Table 6-1: Sample table caption, crowning a table free of content, but with example for typesetting units. Data: [12]

Field 1	Field 2	Field 3 (kg)	Field 4
Blue	Idea	5.2	+++
Circle	Text	3.4	+/-
Content	None	3.1	---

Figures must have a caption, which must be located under the image. Figure 6-1 shows how this might look like. If you use graphics created by external software, preferably use vector formats (e.g. SVG, PDF, EPS, EMF), as they can be scaled without loss. For raster images the PNG format is a good choice; JPG is to be used only for photos, as they benefit most from the compression, while suffering least from its artifacts.

Tables must have a caption, which must be located above the table header. This is shown exemplarily in Table 6-1. It also shows that vertical lines are usually not necessary to create visual columns.

6.3 References and literature

Literature references

References in the text should be short and concise. They may use one of the following formats:

- Running numbers in brackets, e.g. [12]
- Abbreviation of author/institution and year, e.g. [WAGN09] or [DIN2067-08]; if multiple citations to the same author/year combination occur, append a running index, e.g. [TUM10a] and [TUM10b].
- Author name and year in parenthesis with or without comma, e.g. (Wagner 2009), (Wagner, Huber & Peters, 2001), (Wagner et al., 2001); if more than three or four authors would be listed, abbreviate them using “et al.”.
- If more than one source must be referenced at the same point, one can use the following formats: [10-12], [11, 13, 19], [TUM10a, TUM10b, WAGN09]

- If one source is referenced multiple times, but at different positions, one should append the page number in the reference, e.g. [5, p.12] or [TUM10a, pp.12–15].

Where to place references

References must be placed in a way that makes clear, which information has which source. That said, the following recommendations can be derived:

- The reference should be placed directly after any cited content.
- If a whole paragraph refers to a single source, the reference can be placed at the end of that paragraph.
- References for figures or tables with cited content must be either contained within (e.g. in a column header), or at the end of their captions. Table 6-1 shows this exemplarily.
- Citations, i.e. verbatim reproductions of text passages, must be signaled clearly by *“putting them into quotation marks and typesetting them in italic font”*. [12] The reference must be placed directly after, as shown in this paragraph.

6.4 Style

Writing style

“How to express oneself in a scientific document is no matter of taste. The scientific writing style focuses on objectivity and precision. Verboseness and wordiness are to be avoided. The method [of writing] is not about rhetorics, but about logical argumentation base on claim and proof, presentation and summary.” [translated from STAN73]

The style of a text on the one hand depends on the author, on the other should satisfy the text's purpose and readers. Please pay attention to the following recommendations:

- Write clearly and objectively. Use technical terms when appropriate. Avoid colloquial style and first-person narrative (“I did...”).
- Text length is no measure for quality. Write as precise and short as possible.
- Avoid constructing long, convoluted sentences, which the reader, if she can decipher them at all, often cannot comprehend and only serve to convey little content with much text.
- Think about the statements/assertions you want to convey in a given text passage. Which information do you have to give in order to make these statements comprehensible?
- Plan a logical sequence of arguments and background information. The reader should be able to follow, how results, deductions and claims were derived. Construct a line of argument and phrase the text accordingly.
- Differentiate between assumptions, opinions, judgements and facts. The results of a theses should – when possible – be mainly based on facts. Where reliable data is not available, assumptions have to be made and be presented as such. Avoid to base deductions only on opinion.
- Structure your text by using chapters, sections and paragraphs. More than three levels of headings (1.1.1) are rarely useful. Use lists when enumerating stuff (like here).

Abbreviations, technical terms and foreign words

Usual abbreviations like *e.g.* or *i.e.* can be used without explanation. Also the main SI units can be used in the abbreviated form (e.g. kg, MW, kJ). Abbreviations of institute names (like ENS), laws or technical terms may be used after having them introduced: upon first use, their full meaning is to be spelled out, followed by their abbreviation in parenthesis: German Renewables Act (EEG).

Each field has its own language or at least its own terminology. In order to be able to work with literature and use proper language, one must first get acquainted with these terms. However, excessive use of exotic neologisms unnecessarily undermines reader comprehension. Hence only use technical terms where they are necessary for clarity and correctness of presentation.

Tense

In which tense should the thesis be written?

- Past: completed or previous work, retrospection, summary or conclusion
- Present: current work, description of processes
- Future: prospective work, outlook

7 Conclusion and outlook

This guideline has presented the formal requirements of a Bachelor or Master thesis at the Institute for Renewable and Sustainable Energy Systems.

Thanks go to Peter Tzscheutschler and Marianne Winkelmayer from the Chair of Energy Economy and Application Technology, whose guidelines we could use as a basis for this document.

If you discover ambiguities, inconsistencies or even errors, please send a short and formless notice to jdorfner@tum.de. Future students will be thankful for your contribution!

At the end of this guideline we wish you all the best for your thesis!

A1 Abstract

Abstract

About half a page describing the thesis topic, the main thesis methods and findings.

A2 Legal declaration

Declaration

I,

Last name: **Mustermann**

First name: **Max**

ID No.: **123456**

hereby confirm that the attached thesis, submitted with the title

Beispielhafte Optimierung von Energiesystemen mit Hilfe von repräsentativen Auswahlaxiomen unter Berücksichtigung langer Überschriften ohne kohärenten Inhalt

was written independently by me without the use of any sources or aids beyond those cited, and all passages and ideas taken from other sources are indicated in the text and given the corresponding citation.

I confirm to respect the “Code of Conduct for Safeguarding Good Academic Practice and Procedures in Cases of Academic Misconduct at Technische Universität München, 2015”, as can be read on the website of the Equal Opportunity Office of TUM.

Tools provided by the chair and its staff, such as models or programs, are also listed. These tools are property of the institute or of the individual staff member. I will not use them for any work beyond the attached thesis or make them available to third parties.

I agree to the further use of my work and its results (including produced methods and models) for research and education.

This paper was not previously presented to another examination board and has not been published.

Munich, **01.01.2015**

.....
(Author: Last name, First Name)

A3 Declaration for the transfer of the thesis

I agree to the transfer of this thesis to:

- Students currently or in future writing their thesis at the chair:
 - ☐ Flat rate by employees
 - ☐ Only after particular prior consultation.
- Present or future employees at the chair
 - ☐ Flat rate by employees
 - ☐ Only after particular prior consultation.

My copyright and personal right of use remain unaffected.

Munich, 01.01.2015

.....
(Author: Last name, First Name)

A4 References

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