Master Thesis Manual
Table of Contents

1 General Aspects of Writing a Master Thesis ........................................................ 3
  1.1 Characteristics of Academic Papers .............................................................. 3
  1.2 Requirements for Academic Papers .............................................................. 3
  1.3 Academic Misconduct ................................................................................ 4
  1.4 Linguistic Style ......................................................................................... 4

2 Formal Guidelines ........................................................................................... 6
  2.1 Title Page ................................................................................................ 6
  2.2 Confidentiality Clause ................................................................................ 7
  2.3 Executive Summary .................................................................................. 7
  2.4 Table of Contents ....................................................................................... 7
  2.5 List of Figures ............................................................................................ 9
  2.6 List of Tables ............................................................................................ 10
  2.7 List of Abbreviations ............................................................................... 10
  2.8 Preface ................................................................................................. 10
  2.9 Text ...................................................................................................... 11
    2.9.1 Contents & Structure .................................................................. 11
    2.9.2 Layout ...................................................................................... 11
    2.9.3 Structure / Logical Sequence ....................................................... 12
    2.9.4 Visual Information ....................................................................... 12
    2.9.5 Quotation & Citation ................................................................... 13
      2.9.5.1 Direct Quotation ......................................................................... 13
      2.9.5.2 Indirect Quotation / Paraphrases ............................................. 14
      2.9.5.3 Footnotes .................................................................................. 14
      2.9.5.4 Additional Citation Guidelines ....................................................... 15
      2.9.5.5 Consequences of missing/wrong Citation ................................... 16
  2.10 Bibliography ............................................................................................. 16
  2.11 Appendix .................................................................................................. 17
  2.12 Declaration of Authenticity .......................................................................... 18
  2.13 Additional literature ................................................................................... 18

3 Submitting the Master Thesis .......................................................................... 19
1 General Aspects of Writing a Master Thesis

1.1 Characteristics of Academic Papers

The aim of the master thesis is to review topic-relevant aspects in an objective manner, unbiased by personal opinion or preferences. Therefore, conclusions should be based on scientific literature which is reviewed critically. A non-problem-oriented compilation of literature is to be avoided. In a master thesis there is no room for non-reflective judgment and personal opinion. Personal statements are only permitted if they are highlighted as such and commented upon.

Readers of the master thesis need to be able to easily comprehend the structure of the paper. Therefore all presented findings need to be verifiable and relevant. Moreover, the master thesis should always follow a systematic approach and be based on scientific methods. In this respect, the general objective of the master thesis and its structure need to be determined in advance.

A master thesis intends to explain real phenomena and has a written argumentation process at its core. The key focus of this process is on answering the overall research question and suggesting relevant management implications.

1.2 Requirements for Academic Papers

As the final academic assignment, the master thesis needs to conform to a set of requirements.

(1) Particularly moral requirements play a vital role in regards to accurate academic writing. Hence plagiarism, i.e. the wrongful adoption other authors’ thoughts and their representation as one’s original work, is to be avoided by all means.

(2) Regarding the structure and the argumentative process of the thesis certain technical requirements need to be fulfilled. The author needs to maintain objectivity throughout the master thesis and thus ensure that the presented statements are verifiable by anyone. This is achieved by basing one’s findings on renowned scientific literature. Conducted experiments or surveys furthermore need to be reliable or valid, which refers to the fact that they should always yield the same results if repeated. This serves as the key prerequisite for robust conclusions. To ensure reliability and validity of the findings, the discussed aspects need to be relevant for answering the respective problem.
Stylistic requirements of a master thesis involve a sophisticated linguistic style, as well as a proper and logical written composition of the relevant arguments.

1.3 Academic Misconduct

A master thesis needs to fulfill high academic standards in many respects. Since the failure to comply with these requirements may result in a lower grade or even failing the thesis, it is important to be wary of potential forms of academic misconduct.

As part of a student’s “intellectual integrity” plagiarism is to be avoided by all means. This term refers to the utilization of words and ideas of others without indicating their proper source, i.e. claiming them as one’s own. In academic work, plagiarism is considered a severe violation of private property and is strictly forbidden. Hence, all submitted master theses are electronically screened for unquoted source material. If the computer program detects plagiarism, this invariably leads to the student failing the master thesis.

Particularly if experiments or surveys form part of the master thesis, students need to refrain from making false statements. Contents, data or sources may not be invented or distorted in any way to further the desired outcome.

If there is additional scientifically relevant media, such as books, surveys or documents they need to be integrated into the argumentation. Deliberately rendering something useless to one’s thesis in order to arrive at an originally desired conclusion for instance is not permitted.

1.4 Linguistic Style

The writing style of a master thesis should be professional and formal. Therefore no personal style may be used. The grammatical persons “I” and “We” need to be avoided throughout the thesis, with the preface being the only exception. In order to express personal opinion expressions like “according to the author’s opinion ...” or “it can be summarized that...” may be used instead.

The author should make sure to apply scientific language. The chosen language should be as clear and factual as possible and characterized by short and concise sentences.
There may be no colloquial expressions and the use of subjunctive words such as “could”, “would” or “might” needs to be limited.

In a master thesis certain terms are to be avoided. Exaggerating parlance marked by words like “enormous”, “incredible” etc. is unscientific and inappropriate. In order to maintain conciseness, filler words such as “well”, “like” etc. need to be avoided. A convincing master thesis moreover should limit the use of words of reassurance like “somehow”, “virtually”, “probably” etc. since they give the impression of a lack of confidence by the author. Words like “certainly”, “naturally” etc. should be left out since they subliminally portray personal opinion and substitute for an argumentative process.

The author needs to maintain linguistic clarity. The more difficult the contents, the clearer the chosen writing style should be. Therefore sentences should not be lengthy and preferably contain only one statement each.

A thesis should be of solid substance throughout. Hence filler sentences, as well as unnecessary repetitions of previously stated aspects need to be avoided.

All arguments or aspects need to follow a logical sequence and support each other. In order to maintain consistency, contradictions need to be avoided by all means. There needs to be a factual relation between arguments; pseudo-causality is out of place. To enhance readability, the table of contents should follow a clear and consistent structure. The structure criteria should not be changed within the thesis.
2 Formal Guidelines

Please note:
Italicized terms are to be replaced with the respective information in the master thesis.

Contents of a Master Thesis
A master thesis includes:

(1) Title Page  
- Blank page -
(2) Confidentiality Clause
(3) Executive Summary
(4) Table of Contents (incl. page numbers)
(5) [List of Figures]
(6) [List of Tables]
(7) [List of Abbreviations]
(8) [Preface]
(9) Text (introduction, main body, conclusion)
(10) Bibliography
(11) [Appendix (questionnaires, interview transcripts etc.)]
(12) Declaration of Authenticity

2.1 Title Page

The title page needs to include (please also see appendix):

- title
- [subtitle]
- "Master Thesis"
- "at Hof University"
- submitted to Title Family Name and Address
- submitted by Given Name Family Name and Address  
- Hof, Month, Day, Year

Concerning the margins:

- upper margin: ca. 10 cm
- lower margin: ca. 5.5 cm
- left and right margin: each at least 3 cm
Format/Font size:
- All parts of the front page need to be centered
- Title 16 pt, subtitle 14 pt, all bold
- "Master Thesis" 14 pt, bold
- "at Hof University ... " up to the date 12 pt, bold

2.2 Confidentiality Clause

If the master thesis contains confidential data and has not officially been declassified by the company, it is required to add a confidentiality clause. This clause is part of the paper and it also needs to be attached to the front cover of the master thesis:

This bachelor thesis contains confidential data of Company name. This work may only be made available to the first and second reviewers and authorized members of the board of examiners. Any publication and duplication of this master thesis - even in part - is prohibited. An inspection of this work by third parties requires the expressed permission of the author and the company Company name.

2.3 Executive Summary

The executive summary provides a short and concise overview of the master thesis. After reading the executive summary, the core substance and results should become evident. It normally is about 1 page in length and contains three main parts:
- Short problem statement
- Brief description of the overall structure and procedure
- Condensed summary of the findings of the study

2.4 Table of Contents

This section provides an overview of the different parts of the master thesis, such as the preliminaries, the chapters with their subsections and the reference material. It is the purpose of the table of contents to provide an analytical overview of the material included in the study together with its sequence of presentation. Moreover it illustrates the importance of chapters and their subsections by grouping them into different structure levels. The final table of contents can only be prepared as soon as the final draft of the thesis is completed. A preliminary table of contents however should be
drafted before starting with the text of the master thesis in order to establish a clear guideline.

The preliminary pages are numbered using roman numerals (I, II, III, etc.). Neither the title page, nor the table of contents appear within the table of contents; nevertheless page numbers are assigned to them. The main body of the thesis and the reference material are numbered using Arabic numerals (1, 2, 3, etc.).

The table of contents needs to include all headings exactly as they appear in the text without exception. Each heading has to show a page number in the table of contents. The empty space after each heading is to be filled by inserting a series of full stops.

Table of Contents

- Confidentiality Clause ................................................................. II
- Executive Summary ....................................................................... III
- List of Figures ............................................................................... VI
- List of Tables.................................................................................. VIII
- List of Abbreviations ..................................................................... IX
- Preface ......................................................................................... X
- 1 Introduction ............................................................................... 1
- 2 Rehau AG & Co. ......................................................................... 2

For the structure it is suggested to use the following classification system:

1 ...
  1.1 ...
  1.2 ...
    1.2.1 ...
    1.2.2 ...
    1.2.3 ...
      1.2.3.1 ...
      1.2.3.2 ...
  2 ...
    2.1 ...
    2.2 ...
    2.3 ...
    ...

© Prof. Dr. Wengler 8 April 2013
Please note that if there is a section 1.1 in chapter 1, there at least needs to be a section 1.2. A master thesis should generally contain a maximum of four different structure levels (1.x.x.x). The hierarchical level of a section should correspond with its importance for the thesis. Each section needs to contain a minimum text of ½ a page.

| 1 Introduction ................................................................. | 1 |
| 2 Rehau AG & Co. ..................................................................... | 2 |
| 2.1 Company Overview .......................................................... | 2 |
| 2.1.1 Company History .......................................................... | 2 |
| 2.1.2 Turnover/ Employees/ Headquarters .................................. | 3 |
| 2.1.3 Mission & Vision ........................................................... | 4 |
| 2.1.4 Competencies ............................................................... | 5 |
| 2.2 Business Units ................................................................... | 5 |
| 2.2.1 Construction ................................................................... | 5 |
| 2.2.2 Automotive ...................................................................... | 6 |

2.5 List of Figures

This section lists all illustrations, maps, charts and graphs that are part of the paper in a chronological manner. All visual material except tables is to be considered a figure. All figures are consecutively numbered with Arabic numerals throughout the thesis and provided with a concise. Similar to the table of contents, the list of figures indicates the respective page numbers for each figure for better accessibility.

- List of Figures

  - Figure 1: REHAU in Germany .................................................. 3
  - Figure 2: REHAU's locations worldwide ................................. 4
  - Figure 3: Range of services offered by Rehau's construction division .............................................. 5
  - Figure 4: REHAU’s products in an automobile ......................... 7
2.6 List of Tables

The list of tables lists all information that is provided in a tubular form. It follows the list of figures and appears in the same format.

<table>
<thead>
<tr>
<th>List of Tables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1: Contribution of PP, ABS, PVC – in Germany and Worldwide ........................................... 9</td>
</tr>
<tr>
<td>Table 2: Average time to clear exports through customs (selected countries)................................... 17</td>
</tr>
<tr>
<td>Table 3: Market size of various industries in India ........................................................................... 28</td>
</tr>
<tr>
<td>Table 4: Real Estate Contribution to the GDP in India ....................................................................... 46</td>
</tr>
</tbody>
</table>

2.7 List of Abbreviations

This list aims to provide a collective overview of uncommon abbreviations used in the master thesis. Established abbreviations, such as “i.e.”, “e.g.” or “cf.” do not need to appear in the list of abbreviations.

<table>
<thead>
<tr>
<th>List of Abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
</tr>
<tr>
<td>BRIC</td>
</tr>
<tr>
<td>CAGR</td>
</tr>
<tr>
<td>IT-BPO</td>
</tr>
</tbody>
</table>

2.8 Preface

The preface is optional and may contain personal remarks, such as the explanation of personal interest regarding the topic. It is also possible to acknowledge and give thanks to contributors, supporting institutions or interview partners. In Germany it is not recommendable to specifically thank the supervising professor, since this could be considered as an attempt to bias the professor’s judgement. The preface ends with location and date, as well as the first and last name of the author.
2.9 Text

2.9.1 Contents & Structure

In a convincing master thesis, each section or subdivision of the text needs to represent an important logical division of the topic being investigated and reported.

The text consists of three main parts:

- Introduction (1 chapter): Introduces the topic and arouses the reader’s interest
  - Problem statement & context (relevance of the topic)
  - [Overview of the history and present status of the problem (other studies)]
  - Purpose of the master thesis
  - Preview of the overall structure
  - [Brief statement regarding data sources, methods of analysis and the proposed treatment of the findings]

- Main body (3-5 chs.): Highlights all relevant aspects in a logical sequence
  - Organization of the presentation in a logical and orderly way
  - Substantiation of arguments or findings
  - Accuracy in documentation

- Conclusion (1 ch.): Ties together the master thesis
  - Succinctly restatement the developments of the previous chapters
  - Discussion of important findings
  - Derivation of conclusions / future outlook
  - [Statement of questions that require further research]

2.9.2 Layout

- Fonts: Times New Roman / Arial (consistent throughout)
- Font size: 12 pt
- Font style: Regular (Italics or Bold to emphasize special terms)
- Line spacing: 1 ½-spaced
- Numeration:
  - Text: Arabic numerals
  - Pages before: Roman numerals
    → title page serves as page „I“, but does not include the page number
  - Position: right upper corner
- Margins:
  - left margin: 3.0 cm
  - right margin: 2.0 cm
  - upper margin: 3.0 cm
  - lower margin: 3.0 cm
• Arrange ment: Full justification (block)
• Paragraphs: Single blank line afterwards
• Headings:
  - Blank lines before and after
  - Not as last line on the page
  - Start a new page for level-1 headlines
  - Single line; second line needs to be indented
  - No footnotes or conclusive punctuation marks (.,:, etc.)
• Alignment: left
• Spacing: 1 1/2 –spaced
• Font style: bold
• Font size:
  - Level-1 headings: 16pt
  - Level-2 headings: 14pt
  - Level-3 & Level-4 headings: 12pt

2.9.3 Structure / Logical Sequence

In the text it is important to assure a logical sequence within each main chapter:

2 | level-1 heading
   ...
   ... All level-1 headings need to be followed by at least 3-5 sentences of text:
   ... → Provide a basic framework/introduction to the contents of the chapter
2.1 | level-2 heading
   ...
   ... Active transition of chapters/subchapters:
   ... → Logical sequence!
2.x | level-2 heading
   ...
   ... The last paragraph of the last subchapter:
   ... → Transition to the next chapter
3 | level-1 heading

2.9.4 Visual Information

The use of graphs, tables and other figures is welcomed and recommended. Each graph, table or figure has to be labeled. The term “figure” is commonly used for pictures, maps, charts and graphs, while “table” is used for tables. Both figures and tables need to be numbered and labeled with a title. Tables have their number and title above, whereas figures have them underneath. Moreover they need to be listed at the beginning of the master thesis in their respective sections. Their sources are indicated by inserting
footnotes after their labels. Custom (self-made) figures are labeled “Own illustration based on ...” and need to use the same font as the main text.

- Font: Times New Roman / Arial
  (→ Needs to be consistent with the main text)
- Font size: 10pt
- Font style: bold
- No continuous text next to the illustration

Important: It is not sufficient to include only a figure or table; it is also required to describe it – including the main message that is derived from it.

2.9.5 Quotation & Citation

An essential part of academic writing is the correct use and implementation of sources. Sources that were publicized within the last five years are preferable and non-quotable sources, such as cheap literature, lecture notes, project papers or encyclopedias should be left out. All information which is taken from other publications needs to be accounted for twice: within the text and in the bibliography at the end of the master thesis. Within the text it is sufficient to use short references which provide the minimum amount of information that is necessary to identify the source. On the basis of these short references, more detailed references are to be compiled in the bibliography.

There are two basic options for citing sources: Direct quotation or paraphrasing the source’s information by using one’s own words.

2.9.5.1 Direct Quotation [“...”¹]

Direct quotations adopt the exact wording used by the original author and are placed between quotation marks. The quotations may be adjusted for better contextual integration. Any additions or alterations, such as the capitalization of lowercase letters, need to be indicated by placing them in square brackets [].

If a company engages in a joint venture agreement it normally “agrees to share equity and other resources with other [local] partners to establish a new entity in the foreign company.”¹¹¹

Omissions of words or letters are to be indicated by adding [...] for single words or […] for longer parts at the relevant section. In any case, the original meaning of the quote may not be distorted in any way.

This type of joint venture refers to the underlying principle that “[... partners in the value chain divide the value chain activities between them”¹¹¹, meaning that the companies provide complementary competencies at each end of the value chain.
Direct quotes should not be longer than five lines. Longer quotes should only be added if they are essential for the topic. Then they are indented by 1cm from the left margin, while omitting the usual quotation marks.

Probable spelling mistakes in the original source need to be quoted as they are. In order to indicate that the author of the thesis was aware of this mistake, [sic] may be added afterwards.

“We have found that maybe we need to do things differently in India. Maybe, we need to have different product function and quality [sic] in India that we don't have globally.”¹³⁹

Source material which is exclusively available in other languages than the master thesis may be translated by the author. The original version needs to be placed in a footnote followed by the remark “- translation by author”.

2.9.5.2 Indirect Quotation / Paraphrases [...¹]

Paraphrasing is the more frequent and preferred form of citation in academic papers, since it renders it possible for the author to add his/her personal touch. In order to outline a previous idea with one’s own words or in order to avoid excessively long quotes, it is advisable to paraphrase the original author’s words. Paraphrasing involves re-writing a text so that the wording is substantially different from the original source without altering the content. Merely changing one or two words of the original sentence does not suffice and is considered plagiarism. The author of the master thesis needs to be vigilant about this requirement, since most cases of plagiarism originate from insufficiently paraphrased passages. Hence, extensive paraphrasing does not diminish the master thesis’ quality, but rather add to it. A practical guideline would be to adopt a maximum of three consecutive words from the original source.

Downstream activities, such as marketing and sales & services could have been covered by the Indian joint venture partner.¹¹⁹

2.9.5.3 Footnotes

Regardless if contents by other authors are quoted or paraphrased, it is always mandatory to indicate their proper source. Therefore, short references are placed in footnotes and the corresponding number is indicated after the cited text passage by adding superscript numbers (¹, ², etc). Short references follow the structureFootnote Author’s last name (Year of publication), p. XX.
While reducing risk compared to setting up its own subsidiary, REHAU would have been able to “access the marketing knowledge of the partner directly rather than waiting for the internal development of such skills.”\textsuperscript{120}

\textsuperscript{120} Bradley (2004), p. 249.

In the master thesis footnotes are primarily used for referencing. Moreover they may include auxiliary content that does not necessarily belong into the main part of the text, such as bibliographic indications or disambiguation.

It should be avoided that the text in the footnote is longer than the ordinary text on the same page. The footnote always follows the punctuation like “,” “.” or “;” or quotation marks if it refers to the complete text; otherwise it follows directly after a specific statement/word. Footnotes always end with a full stop.

Formal guidelines for footnotes:

- Fonts: Times New Roman / Arial
- Font size: 10pt
- Font style: Regular
- Numbering: Continuously throughout; bottom of the page
- Separated from the text via a thin, left-aligned 5cm line

by both a so-called CVD\textsuperscript{14} of twelve and a S-CVD of an additional four percent.

\textsuperscript{14} CVD = Countervailing Duty

2.9.5.4 Additional Citation Guidelines

If there are less than four authors all last names are stated (Author’s last name / Author’s last name / Author’s last name (Year of publication), p. XX); with more than three authors, the Latin expression for “and others” substitutes for their names (Author’s last name et al. (Year of publication), p. XX)

\textsuperscript{108} Trembley et al. (2010), p.108.
If there is more than one entry for the same author in any one year, a lower case letter (a, b, c) is placed right after the date. The respective letter also needs to appear within the bibliography. The order is given by the sequence in which the works are first referred to in the text.

With two successive quotes from the same source, the second quotation can be marked (ibid.) as short reference, indicating the same source as before.

All cited internet sources, as well as company internal information, need to be archived as PDF files and submitted on CD together with the master thesis. Since internet pages may be changed or deleted during the preparation of the thesis, it is advisable to save the referenced websites as PDF-files immediately. These files should be collected in the folder “internet sources” and correspond with their references in the bibliography.

2.9.5.5 Consequences of missing/wrong Citation

Using the thoughts and findings of others without indicating their proper source is considered plagiarism. In academic work, plagiarism is a severe violation of private property. Submitted master theses are electronically screened for unquoted source material. If discovered, plagiarism invariably leads to failing the master thesis.

2.10 Bibliography

The bibliography or list of references is an integral part of the master thesis. It lists the detailed references for all sources used in the master thesis. Only sources that are actually cited in the master thesis should be listed. Other supporting literature that is not included in the final text does not appear in this section. The sources are listed in an ascending alphabetical order, starting from “A” respectively “0”.

In terms of the layout, the bibliography uses the same font and spacing as the main text. A blank line should be added in between references. The first line for each source is left-aligned and the following lines are all indented by 1cm. Automatic, blue hyperlinks should be avoided and changed to a black font color.
The bibliography has to include all the sources used for the master thesis. Each source has to be presented by indicating at least the author, the year of publication, the title, the location of publication as well as the date of publication. Where an institution is author, it appears in the author’s position instead. If there is no author, the title is placed in the author position.

- **Monograph (individual books)**

- **Journal**

- **Compendium, collected editions etc.**

- **Internet**

### 2.11 Appendix

The appendix usually contains data which is referred to in the text, but cannot be placed there since it would render the body of the text unduly large and poorly structured. Particularly autonomously compiled data such as results from questionnaires or transcripts of expert interviews need to be placed in the appendix. Each appendix is to be clearly separated from the next by assigning distinct capital letters (A, B, C, etc.) and listed in the table of contents.

- Appendix A: Comprehensive Product Portfolio of REHAU AG .................................................. 122
- Appendix B: Overview of IKEA Stores Worldwide ........................................................................ 125
- Appendix C: Questionnaire about Customer Preferences regarding furniture in India .......... 126
If interviews form an integral part of the master thesis, transcripts of the relevant interview sessions need to be included in the appendix. During the interview students are required to take notes of vital points. It is also helpful to record the interview in order to review certain passages again afterwards. In the student needs to write a transcript of the interview. The transcript does not have to include the interview word-for-word, but rather summarize the main points / results. Besides the summary minutes, this transcript should at least state the place and date, duration, general purpose, as well as the participants of the interview with their respective occupations.

2.12 Declaration of Authenticity

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person where due reference is not made in the text.

Hof, Date                      Signature
                                      First name Last name

2.13 Additional literature

  [Hof University library shelf number: 100/AL 43550 A545(4)]

  [Hof University library shelf number: 100/AK 39580 B156(3)]

  [Hof University library shelf number: 100/VB 4400 E15(2)]
3 Submitting the Master Thesis

The master thesis needs to be submitted to the examination/student office within the respective deadline.

- 2 tightly-bound copies of the master thesis (No spiral binding - no specifications regarding color or lettering on the spine and front cover)

- 1 CD
  (Master thesis PDF-file, 1-page thesis summary, archived sources as PDF-files)