



## Guideline for the Preparation of Scientific Theses

*(Last update: April 2023)*

This document contains instructions concerning the organizational process and the preparation of scientific theses at the department of Business Administration and Controlling. It does not replace the mandatory instructions of the respective examination regulations and students still have to comply with those. Therefore, it is highly recommended to become familiar with the relevant information of the examination regulations.

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# 1 Process

## 1.1 Application

### 1.1.1 Bachelor thesis

You need to apply via KLIPS. There are two application rounds per year – October and April. Details are provided in KLIPS.

Example for the October round 2018: The application deadline is September 28<sup>th</sup>. KLIPS publishes the candidate's allocation on October 15<sup>th</sup>. Remaining slots are allocated subsequently. The final list of bachelor theses candidates is published in KLIPS on October 21<sup>st</sup>.

If you are among the candidates allocated to our department, please send your application as a PDF file via email by 1:00 pm of the next day (in the example above October 22<sup>nd</sup>) to Mr. Timo Pauen ([timo.pauen@wiso.uni-koeln.de](mailto:timo.pauen@wiso.uni-koeln.de)). Your application should include (1) a motivation letter explaining why you want to write your thesis at our department and what you plan to do after the thesis, (2) a CV, (3) a list with exam grades (“transcript of records”).

In the week of October 22<sup>nd</sup> (April 15<sup>th</sup>) you will be contacted by your thesis supervisor. Bachelor theses must be registered with the examination office immediately after receiving the thesis topic.

### 1.1.2 Master thesis

There are two application deadlines per year: September 15<sup>th</sup> and March 15<sup>th</sup>. In the week of October 15<sup>th</sup> (April 15<sup>th</sup>) you will be contacted by your thesis supervisor at the latest. Please send your application (see Master Thesis Application Form provided at the department's homepage) to Mr. Timo Pauen ([timo.pauen@wiso.uni-koeln.de](mailto:timo.pauen@wiso.uni-koeln.de)).

### 1.1.3 Procedure subsequent to the allocation

After the allocation to the department of Business Administration and Controlling, one of the assistants will be appointed as your advisor. Along with Prof. Dr. Homburg, your advisor will develop the thematic focus of your Bachelor- or Master thesis.

## 1.2 Rough structure and Exposé (for Master theses)

Following the topics agreement with the department, you will have an orientation phase of approximately three to four weeks. In this phase, you will prepare an Exposé, which informs about the problem, the theoretical approach to the topic and the course of argumentation. This Exposé will contain a rough (preliminary) structure (table of contents), approximately three to four pages of written text and a list of key literature references. After Prof. Dr. Homburg and your advisor have assessed your Exposé positively – and if necessary enhanced it –

you will receive the acceptance for your Master thesis from the department. Immediately after the approval, the thesis must be registered in the examination office.

There is no Exposé phase for **Bachelor theses**, nevertheless, a consultation about the rough structure (table of contents) with your advisor is highly recommended.

### **1.3 Registration at the Examination Office**

Your scientific thesis has to be registered at the examination office. **Master theses** should also be registered at the examination office within two weeks after the acceptance of the department. The official processing time is six months. Please pay attention to the application and hand-in deadlines of the examination office for **Bachelor theses**.

### **1.4 Preparation of the thesis**

Contact your advisor for any questions regarding your thesis during your processing phase.

### **1.5 Hand-in of the thesis**

One copy of the printed (single-sided) and hardback (hardcover) thesis has to be handed in. In addition, a CD containing the entire thesis in Microsoft Word format and in pdf-format has to be tacked on the last page of the copy. Moreover, a folder, which contains all used literature that is digital available, as well as the used data and codes shall be part of the CD. The submission takes place at the examination office.

In case the examination office provides you with the opportunity to hand-in the thesis digitally, we accept this procedure as well. Please make sure that you provide your supervisor with the relevant documents, which might not be part of the digital hand-in (e.g., STATA-files).

According to the specification of the examination office, a “sworn declaration” has to be handed in / uploaded separately (i.e. not within the thesis). We ask you to download the declaration currently provided by the examination office using their online file.

## 2 Components of the thesis

The Bachelor- or Master thesis contains:

- Cover page (Components: topic of your thesis, subject, professor in charge, course of study, faculty, place and year, name, address and matriculation number of the candidate).
- Table of contents (Please note that the table of contents needs to be appropriate in comparison to the main text. The headlines of the main text must be equal to those of the table of contents).
- List of abbreviations, if necessary
- List of symbols, if necessary (Take care of integrity, consistency and uniqueness of the definitions).
- List of figures, if necessary
- List of tables, if necessary
- Main text
- Appendix, if necessary (e.g.: mathematical derivations, amendments, illustrations and examples, which exceed the focus of the main text. Please make references to the appendix within the main text).
- List of laws, regulations and administrative directives, if necessary (Make sure to use the latest status).
- List of court decisions, if necessary
- List of references

### **3 Content development of the thesis**

The scientific paper is an important part of the university education. Compliance with the rules of this guideline is expected.

#### **3.1 Development of a research question**

The central question (research question) should be clearly formulated and delineated. To justify the work, the relevance of the central question needs to be clarified. The research question should be neither too comprehensive nor too restrictive. It helps to ask yourself the following questions: What do I want to examine? Why is this important? Is there anything new that I can contribute to the topic? Which approach should I use in order to answer the central question?

#### **3.2 Creation of a structure (Table of contents)**

The table of contents should reflect the structure of the paper and it should be proportionate to the text. It consists of the chapter headings with appropriate page references. A good table of contents is constructed logically and clearly, which allows the reader to easily get an overview of your paper.

The structure itself should be decadal:

1 ...

1.1 ...

1.2 ...

1.2.1 ...

1.2.2 ...

2 ...

If positions are on the same level, they have the same “content rank”, and refer to the same main topic. The outline logic requires that each hierarchical level needs to be broken down into at least two parts (Example: If a subchapter 1.1 exists, a subchapter 1.2 must follow).

For all indices, a continuous Roman numbering is recommended. For the main text, the appendix and the bibliography, a continuous Arabic numbering is required. The cover page does not contain a page number. The table of contents starts with (Roman numeral) I, all directly following indices (list of abbreviations, etc.) are continued with Roman numerals. With the beginning of the first text page (page 1), all pages will have to be numbered in Arabic numerals (incl. references etc.). The page numbers have to be added (in the same font) to the bottom right corner.

Chapters (e.g. chapter 2) have to be named “chapter”; for subchapter (e.g. 2.2) use the term “section”.

### **3.3 Line of argumentation**

Your own opinion is of great importance and has to include more than the mere expression of the opinion of an author. It must be based on a scrupulous examination of previous literature on the subject. Moreover, this examination should be formed without prejudice, which does not imply, that own arguments as well as arguments stated in the literature cannot be used. Nevertheless, thoughts of other authors need to be cited. If an author's opinion is quoted, the most recent edition of the relevant work must be used.

Own claims and arguments always have to be proved. One's own opinion is particularly effective if it represents an unavoidable logical consequence of the premise and arguments used.

### **3.4 Autonomy**

The student should be able to handle a topic in a scientific and independent way. To achieve this, an extensive analysis of the relevant literature is required. The logical structure and the substantive focus need to be highlighted as well as substantiated in the thesis, so that the train of thought is transferable and understandable to the reader.

By examining your thesis, you demonstrate your ability to deal independently and seriously with a scientific question as well as with the literature and arguments of others. This includes the neutral, but critical presentation of previous findings and theses, and – as far as possible and enriching – the addition of own contributions based on facts.

## 4 Formal design of the thesis

In addition to the content requirements, there are some formal prerequisites for a successful thesis.

### 4.1 Scope of the thesis

Master theses should include a maximum of 60 DIN A4-pages; bachelor theses range between 25 and 27 pages. A precisely worded presentation is preferable to a broad version with redundancy!

### 4.2 Style

By examining the thesis, you have to pay attention for correct orthography, punctuation and a distinct way of expression. In addition to proper spelling and grammar, an adequate style of writing is required. The “scientific style” is characterized by impersonal form, consistent tense as well as clear and precise language. Please ensure that the difference between one’s own thoughts and another’s thoughts is always apparent.

### 4.3 Formatting

As the font, you have to choose Times New Roman consistently (i.e. on the cover page, in the table of contents, in the references, in the curriculum vitae, etc.). A 4 cm margin has to be met on the left side and a 2 cm margin has to be met on the right side, the upper and the lower end of the DIN A4 page. Use 1.5 for the line distance and choose 12 for the font size. Headlines of the first level should have a font size of 14 and headlines of the following levels should have a font size of 12. All headlines need to be formatted in bold. For the whole document (also in the references) use justified text alignment.

Quotes are used only in literal (direct) citations. Accentuation has to be cursive or bold. SMALL CAPS, CAPITALS, underlines, b l o c k e d and all ~~extravagant~~ as well as multiple formatting have to be avoided. Less is more!

There shouldn’t be added extra space behind single paragraphs. Before the beginning of a new chapter or paragraph, there has to be at least one (maximum of two) lines left open.

Formulas have to be centered and numbered in the text. If a sentence ends after a formula, the formula ends with a dot. In case the sentence continues, you might add a comma.

### 4.4 Citation of foreign sources

In scientific papers, opinions, foreign thoughts or other explanations relevant to the topic must be substantiated by quotations. All sources used in the thesis need to be cited. Those sources include unpublished works, books (which are not yet published) and transcriptions. Furthermore, sources of origin (primary sources) should preferably be cited. They are characterized by the fact that they contain the opinion of the author who represented this opinion for the very first time. Secondary sources are characterized by dealing with the primary source or with basic information of the source of origin. If secondary sources are used in the text, it needs to be made clear in the footnote.



In the scientific work it is possible to quote literally or analogously. Literal quotes should be kept to a minimum and should only be used if they are necessary. It is important to note, that in addition to the short notes in footnotes, all cited sources have to be included in the bibliography.

#### 4.4.1 Citation in footnotes

The style of citation shall satisfy the requirements of logic, completeness, clarity, and consistency. Thus, it is recommended to use scientific methods like short-form citations.

Short-form citation uses the following style (the complete information about the respective source is only made in the references):

No. of footnote name (year), specification of page, column, or marginal number.

Example: <sup>1</sup> See Theisen (2008), p. 151.

In case of up to three authors, separate the names via slash (in case of more than three authors, only name the first author following the notation „et al.“ (et alii)):

Name/Name (year), specification of page, column, or marginal number.

Example: <sup>2</sup> See Homburg/Eichin (1998), p. 635.

The prename is not mentioned in the footnote. Do not use a keyword or a short title. The year of publication has to be put in brackets. Differentiate multiple titles of the same author and the same year with small letters after the year (e.g. (2000a), (2000b) etc.). Do not use shortened references like “ibidem, p. 30“ in the footnote. The footnotes are to be consecutively numbered. For footnotes a line distance of 1.0 and a font size of 10 have to be used. Footnotes are always positioned at the end of a sentence, directly following the punctuation mark. There shall be no footmark behind a heading. You can put a footnote behind colons. Different sources have to be combined in one footnote, i.e. multiple footnote-references behind each other are not permissible. A footnote is always terminated by a dot. All footnotes have to be situated on the same page as the referring references and have to be separated from the main text with a horizontal line.

#### 4.4.2 Literal and analogous citations

For each literal or analogous citation, you have to state the respective reference in the footnote. Literal (direct) citations should be an absolute exception and they have to be put in quotation marks within the text; the relating footnote starts directly with the surname of the cited author.

Example for a literal (direct) citation:

Text: “A direct quote is characterized through the report of the exact words of the original author“<sup>3</sup>

Footnote: <sup>3</sup> Theisen (2008), p. 147.

Analogous (indirect) citations are not put into quotation marks. The referring footnote starts with "Cf." (if you point to a source that can be used for comparison) or "See" (if you point to a source that gives more information of the same kind).

Example for an analogous (indirect) citation:

Text: Analogous citations use indirect foreign thoughts by lyrically or argumentative following a reference.<sup>4</sup>

Footnote: <sup>4</sup> See Theisen (2008), p. 151.

Often, it is useful to include detailed (short) explanations referring to a cited reference within the footnote.

Examples:

<sup>5</sup> See Miles/Ezzell (1980). However, Miles/Ezzell do not discuss the impacts of insolvency risk.

<sup>6</sup> But see e.g. Horváth (1996), p. 141.

<sup>7</sup> This fact is considered in several interactive multiple target algorithms; e.g. Zelny (1982).

#### **4.5 Abbreviations**

The use of abbreviations is limited to common usage. Relevant, but generally unknown abbreviations must be listed alphabetically in the list of abbreviations. A short explanation needs to be included. In addition, abbreviations used in the text section need to be introduced once. Abbreviations such as "etc.", "etc.", "cf." or "e.g." are generally accepted and do not need to be included in the list of abbreviations.

## 4.6 Figures and tables

Figures and tables are used in the text for the graphic explanation of treated thoughts or the empirical support of an argumentation. Figures and tables need to contain a headline as well as a serial numbering. In addition, references need to be allocated to figures and tables. Those can either be placed directly under the graph or table, or as a footnote on the corresponding page. It is important to note that the word "source" must be prefixed here.

Example:

Table 1: Determination of shareholder value under dirty surplus accounting

...	...	...
...	...	...
...	...	...

Source: Own illustration.

Source: Pfaff (1993), p. 112.

Source: Referring to Pfaff (1993), p. 112.

Large groups of graphics or tables should be included in the appendix. Attention must be paid to the appropriateness of the illustrations and tables! The number of illustrations and tables also depends on the central question of the thesis paper.

Each work, if it contains figures or tables, has to have a figure index or table index with numbers and headings.

## 4.7 References

In the references, the complete bibliographic data of all cited references (and only these) should be listed in alphabetical order of the authors. Only the names of the authors and the year of publication should be in bold type. The bibliography must be arranged alphabetically by the name of the first author. For several works by the same author, the chronological order applies according to the year of publication (starting with the earliest title). A complete source statement is composed as follows (depending on the category listed).

### 4.7.1 Monographs (Books)

Generally, the following information should be provided:

**Surname, Purname(s) (year):** Title, edition, place(s) of publication: Publisher(s), year of publication.

Example:

**Theisen, Manuel R. (2008):** Wissenschaftliches Arbeiten: Technik – Methodik – Form, 14th edition, Munich: Vahlen, 2008.

The first prename of the authors should be fully written out. If information about author, place or year are not available then the following annotation should be used: „*n.u.*“ (*name unknown*), „*n.p.*“ (*no place given*) respectively „*n.d.*“ (*no date*). The edition has to be mentioned only if more than one edition exists. Dissertations need to be marked by indicating the university and the year it is published in.

### 4.7.2 Articles in journals

Generally, the following information should be provided:

**Surname, Purname(s) (year):** Title of the article, in: name of the journal, volume, year, first to the last page (column, margin number) of the article.

Example:

**Miles, James A. / Ezzell, John R. (1980):** The Weighted Average Cost of Capital, Perfect Capital Markets, and Project Life: A Clarification, in: Journal of Financial and Quantitative Analysis, Vol. 15, 1980, pp. 719-730.

The explanatory notes apply analogue to the ones made for “books”. If there are several publishers, the separation of the names has to be made with a forward-slash.

### 4.7.3 Compilations

Generally, the following information should be provided:

**Surname, Purname(s) (year):** Title of the article, in: Surname, Purname(s) of the editor (ed.): Title, edition, place(s) of publication: publisher, year of publication, first to the last page (column, margin number) of the article.

Example:

**Homburg, Carsten (2002):** Kostenbegriffe, in: Küpper, Hans-Ulrich / Wagenhofer, Alfred (ed.): Handwörterbuch Unternehmensrechnung und Controlling, 4. Edition, Stuttgart: Schäffer-Poeschel, 2002, pp. 1051-1060.

The explanatory notes apply analogously to those made for "books". If there are several publishers the separation of the names has to be made with a forward-slash.

#### 4.7.4 Online-Sources

Generally, the following information should be provided:

**Surname, Pname(s) (year):** Title of the source, year, (complete!) URL, "Access on" or "Last visit on" date of access/visit, (if possible) page.

Example:

**Moody's (ed.) (2011):** Data Collection & Analysis Tools, 2011, [http://www.moodyskmv.com/products/dataCollection\\_analysisTools.html](http://www.moodyskmv.com/products/dataCollection_analysisTools.html) , Access on 11.02.2011.

#### 4.8 Further requirements

Seminar papers need to be handed in at the secretary of the chair by the deadline for submission. Diploma, Master and Bachelor theses have to be submitted in duplicate to the examination office.

Additional information can be found on the homepage of the examination office.

### 5 Plagiarism

Plagiarism is the theft of foreign intellectual property. This may refer to the adoption of foreign thoughts, texts or other representations, as well as foreign ideas. Copying parts of the scientific work from sources, which are not quoted in the thesis, is considered as plagiarism. Make sure that all sources used have been indicated as such. Plagiarism attempts are penalized for the protection of all students by failed!