

A WORD OF WARNING:

I am totally opposed to the development and use of any form of artificial intelligence and will not support any initiatives in this direction! The use of artificial intelligence in any form is prohibited when writing the final thesis.

1 BPO and MPO

Please ensure you read the relevant sections of the Examination Regulations Parts A and B concerning the Bachelor's and Master's examinations ('BPO' and 'MPO'). Part A states, amongst other things:

BPO §21 (1) and MPO §24 (1): The thesis "shall demonstrate that the student is capable of independently addressing a problem from the subject area of the respective degree programme within a specified timeframe on an academic basis."

2 "... on a scientific basis"

What does 'working scientifically' mean for me?

1	... having an overview of a subject area and identifying a previously unsolved problem within it
2	... having a perfect command of the specialist terminology
3	... research and evaluate existing approaches to the problem ('state of the art')
4	... identifying and evaluating solution methods and justifying the choice of the selected method(s)
5	... developing a solution to the problem
6	... presenting the solution in writing and orally in a linguistically flawless and logically coherent manner
7	... critical evaluation of one's own solution and outlook on future work

3 Communication

If I am to supervise your thesis – whether as first or second examiner – I would first like to meet with you in person to discuss the concept and title of the thesis. Please email me the material we wish to discuss at these meetings a few days in advance.

Afterwards, we can also speak on the phone (04402 / 98 27 67 or 0151 / 11 22 24 14), email (stern@jade-hs.de) or Skype ('astern55').

If you are carrying out the work within a company (which will likely be the case in the vast majority of instances), I would also welcome telephone or email contact with a contact person within the company.

4 Second examiner from the company

The role of second examiner can also be taken on by someone from the company where you are carrying out the thesis. Please note, however, that this person must already hold the academic degree you are aiming for (i.e. Bachelor's or Master's – or Diplom)! This must be proven by a copy of the relevant certificate.

If you wish, I can send that person a short document containing the most important information on the duties of a second examiner, as well as a sample report.

5 A* as a second examiner

Even though I am 'only' your second examiner, I would strongly recommend that you get in touch with me – ideally as early as the planning stage of your thesis; but at the very latest once you have finalised the outline and are ready to start writing.

From my experience so far, I know that a few tips from me would usually have led to a better thesis and thus also to a better mark.

However, an unwritten rule (at least in my case ;-)) is that the first examiner invests more time in supervising the student. Therefore, they also have the final say when it comes to decisions regarding the content and form of the thesis.

6 Supervision form

To keep track of who has done or is due to do what and when, I have devised a supervision form. Please download the form from my website, follow the instructions provided and email it back to me once completed. I would like to receive this form as early as possible – even if you do not yet have all the information requested. You can then send me updates later.

7 Change of topic

Make sure, at the very earliest opportunity, that you obtain all the company information required for your thesis – in other words, that there is a contact person who is willing to answer your questions. If necessary, you will have to change your topic, as towards the end of the semester the excuse "I couldn't write this up because nobody told me" will not be accepted! (Please note: According to the Examination Regulations, Part A, §21 (4), the topic may only be changed once within the first 3 weeks of the writing period!)

8 Drafts

I do not look at drafts of the thesis, because if you incorporate my comments into your text, it is no longer your work and I would effectively be censoring myself! (... and could I possibly give myself anything other than a '1'!?)

However, you are welcome to ask me for my opinion on specific details (text passages, diagrams, quotations, references, etc.) at any time.

9 Files

If you send me files, their titles must include your name and the version date (in reverse order: year – month – day!!). A Word file containing an outline should therefore be named neither

“Outline.docx” nor “Outline-Star.docx” (I know my own name), but “Outline_Smith_2020_09_13.docx”!

10 Title

The title of the thesis should be short and concise and must not contain any company names. So NOT “Presentation of the current analysis and optimisation of material flow in the production of car spare parts at Otto Meier GmbH & Co. KG, with particular consideration of conditions at the Nieder-Oberursel site” – BUT “Optimisation of material flow in the production of car spare parts”! Full stop!

The thesis must then deliver on what the title promises. If, for example, the title contains the word “optimisation”, you must have actually optimised something!

On my website www.andreasstern.de, you will find a list of the titles of the theses I have supervised to date. You can use these titles as a model. The most important thing here is the first word: ‘Analysis ...’, ‘Concept ...’, ‘Optimisation ...’, ‘Development ...’, ... etc. It determines what you are aiming for as the result of your work.

11 Outline

Draw up an outline early on – even if you end up revising it countless times later. You’ll then always have a guide for how to proceed!

Make a note of a few key points regarding the planned content for each sub-point straight away in the draft outline. A heading is quickly jotted down, and afterwards you’ll find yourself wondering what to write about it!

It’s best to also note in the draft outline how many pages you intend to write for each section. That way, you won’t face any nasty surprises when putting it all together.

When you send me the outline, I expect it to meet the minimum requirements for proper document formatting (key points: name – date – page number on EVERY page!).

A section 2.1 only makes sense if there is also at least a section 2.2 – a truism, but one that unfortunately hasn’t got round to everyone yet ;-)

The text under headings at the same level (e.g. 2.1 and 2.2) should be roughly the same length – so not 2 pages for 2.1 and 15 pages for 2.2! Otherwise, you’ll need to consider whether you can split or merge headings.

Only in very exceptional cases should the sub-structure go beyond the third level (i.e. a maximum of “1.1.1.”).

12 Length

As a rough guide, you can assume that your bachelor’s thesis should be around 50–60 pages long. A master’s thesis should – although, of course, length isn’t everything – be slightly longer, i.e. around 80 ± 10 pages.

It is best to note down in your draft outline how many pages you intend to write for each section. That way, you won’t face any nasty surprises when you come to write it all up.

13 Text structure

In my view, structured working is very important, i.e. a logical line of argument that the reader can follow and a clear presentation of facts (tables, graphs, diagrams).

I am not a fan of endless texts with equally endless run-on sentences – but I am a great advocate of graphical representations and tables. There is hardly a topic where it is not worth taking a look at the methods of systems analysis. The method of 'structured analysis' can always be applied wherever information flows are involved. Flowcharts depict business processes a thousand times more clearly and concisely than text.

You should definitely use tables for lists and comparisons.

I have seen papers where there were whole A4 pages of continuous text without a single paragraph. That is completely unreadable! It will definitely lead to a lower mark!

The line spacing should NOT be 'single'. That is extremely tiring to read! Here in this text, 'Line spacing: Single' and 'Font size: 15 pt' have been selected. The spacing can easily be even greater – the text will read all the better (and the less you'll need to write ;-)

Points such as page formatting with headers and footers, a cover page, a table of contents, precise citation, etc. should go without saying. Please be sure to consult the "Guidelines for Writing Bachelor's Theses" by Holoher/Volk/Wengelowski!

As for the purely technical side (using MS Word), there is a script and a series of videos I have created (in the university's Moodle system under 'University / Office Tutorial Videos (Star)').

14 Spelling

"German is a difficult language!"

Simple spelling mistakes are not allowed! Firstly, there is the spell-checker in Word. Secondly, you must read through your thesis very carefully once more at the end to find anything that Word has missed.

Commas, commas, commas!!! A paper in which most commas are missing is, as you can easily imagine and as I demonstrate in this sentence, unreadable because the reader has to keep going back in the text to work out which parts of the sentence belong together! This is unreadable and will definitely lead to a lower mark!

15 Illustrations

There's a reason why they say 'A picture is worth a thousand words'! So, wherever possible and appropriate, illustrate your text with figures. However, the text must remain easy to read. If a large number of figures are necessary, you should include one or two as examples in the main text and place the others in the appendix.

For figures you have created yourself, you do not need to write 'Source: Own illustration'. If no source is given for a figure, I automatically assume that there is none – that you have created the figure yourself.

If you use illustrations from other sources, you should pay attention to the graphic quality. The illustration should not look grey and blurred in your work. If necessary, you must recreate the illustration yourself and cite the source as "Own illustration based on ...".

If you have large figures that span several pages of text, it is a good idea to staple the figure to the back of the corresponding text on an A3 sheet so that it folds out. This allows the reader to keep the figure in view whilst reading and avoids the need to flip back and forth.

16 References

I have no specific requirements regarding the format of source references. Simply follow a recognised standard.

If you are quoting from websites, please cite the source precisely. This means, firstly, that if the site uses frames, you must specify which clicks from the home page lead to the page where you found the information. Secondly, it means that you must also state when you found the information on a website – because six months later, it may no longer be there!

In a Master's thesis, higher standards are applied to sources. For example, if you cite a book on logistics as the source for the results of a survey of employers, this is insufficient. You must make an effort to find the original source!

Of course, you may deliberately refer to historical sources – but otherwise, sources should be as up-to-date as possible. So, in a thesis written in 2020, referring to a textbook from 1995 is simply not acceptable!

17 Structure

A dissertation should generally be structured as follows:

Introduction	Here, you should explicitly state, amongst other things, what your aim is with this thesis.
Main body 1	This is the 'theoretical section'. It is essential, as this is an academic thesis (see examination regulations). This section should include, for example, a literature review on the topic, a description of the methods and procedures to be used, and, where applicable, an explanation of existing approaches by other authors (-> correct citations!).
Main section 2	Here you present your solution to the problem. This includes, for example <ul style="list-style-type: none">• An introduction to the company• Explanation of the problem• Presentation of the approach and the solution• A <u>self-critical</u> assessment of the solution The main body 2 should comprise at least 40% of the total pages.

Summary and Outlook	<p>Here you summarise the results of the work; in other words, <u>no new findings</u> are presented here. The reader should be able to see that you have thereby achieved the objective set out at the beginning.</p> <p>You should also provide an outlook on a possible continuation of the work (“What remains to be done?”).</p>
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Please refrain from writing at the beginning of each chapter what is contained in the following chapter. This should be self-explanatory from the sub-chapter headings!

18 “Creative contribution”

Your solution to the problem must, in some form, contain your own creative contribution or intellectual achievement. This does not necessarily have to be a Nobel Prize-worthy new idea – but it should be YOUR idea.

It must be very clearly recognisable which parts of the work are your own intellectual contribution and which originate from external sources. You are welcome to state this explicitly (e.g. in the summary): “With this work, I have achieved the following ...”.

19 Programming

If you wish to develop an Excel or Access application in your work, it may be necessary to write VBA code. You can do this yourself – but we can also do it this way: you tell me what you would like to have programmed and I will do it for you. This will not result in a lower mark!

Your contribution will then consist of

- consulting users about their requirements,
- creating the application concept (e.g. form layout),
- obtaining the necessary input data and providing it in a suitable format,
- Generate test cases (“What output must the application produce for a specific input?”),
- to test the application with users within the company and
- assessing its usefulness and, where necessary, its potential for improvement.

That’s plenty to keep you busy!

20 Work in English

Your thesis should be written in German. A thesis in English is an **ABSOLUTE** exception; there would have to be very serious reasons for this, none of which I can think of off the top of my head. The argument “The company wants it that way” doesn’t hold water, because this is a thesis you are writing at university to obtain an academic degree. It is not an internal company project report. If the company wants your thesis in English, then either you or the company must translate it!

Why not English? In my many years of supervising theses, I have found that writing in a foreign language tends to encourage the use of empty phrases. A sentence in English may sound wonderfully academic and complex – but when translated into German, it often contains nothing but platitudes or even meaningless verbiage.

The reason for this is quite clear: for many German words, there are 10 ... 15 or more translations in English. A non-native speaker cannot recognise the subtle differences in meaning between all these synonyms and simply chooses one at random. The result is ... see above ...

That's why: **your work is written in German!**

Let's take the German word 'Bedeutung' as an example. If I say "Digitalisation is of great significance in logistics", I mean that digitalisation is important in that field. But if I say "The significance of digitalisation in logistics is not yet entirely clear", I mean that it is not yet clear what specific content or measures are meant by "digitalisation" – in other words, "What does 'digitalisation' mean in logistics?".

21 Copies of the thesis

The BPO Part B states in §9 (4): "The Bachelor's thesis must be submitted in two hard copies and as an electronic file. Furthermore, a summary of one A4 page in length must be submitted, setting out the topic, the scientific method used and the results of the Bachelor's thesis."

The MPO Part B states in §6 (2): "Two copies of the Master's thesis and a digital version of the thesis must be submitted. Furthermore, a one-page summary must be submitted, setting out the topic, the scientific method and the results of the Master's thesis."

PLEASE NOTE: In addition to the mandatory copies to be submitted, I would like to have my own copy of your thesis. It does not need to be bound or in colour – a black-and-white copy with spiral binding will suffice (this is also much easier to read than a hardback copy). I have a habit of making notes in the thesis whilst reading it, and of course that is not possible in the copies to be submitted.

If you overlook this point, it will lead to a delay in your graduation, as you will first have to produce a new copy of your thesis.

22 Extension

BPO Part B §9 (3) states: "The time allowed for the Bachelor's thesis is 10 weeks. It may be extended by a maximum of two weeks."

The MPO Part B §6 (1) states: "The period from the allocation of the topic to the submission of the Master's thesis is 5 months. Upon a justified request, the Examination Board may, in individual cases, extend the completion period in accordance with § 24 (4) Part A to a maximum of 6 months."

An extension of the completion period is only granted in truly justified cases; generally due to external causes beyond your control (e.g. "I received the necessary data from the company too late because ..." and not "I misjudged the time required").

23 Colloquium

BPO Part A §22 (1) and MPO §25 (2) state: "In the colloquium, the student must demonstrate, on the basis of a discussion of the Bachelor's (or Master's) thesis, and explain in a specialist discussion that they are capable of independently addressing interdisciplinary and problem-oriented questions from the field of study on a scientific basis."

During the colloquium, you will present the results of your thesis in a short presentation (approx. 10 mins) using slides. In your presentation, discuss the research question, your methodology and, in particular, the results achieved. The two examiners will then ask questions about your thesis.

Please ensure that the technical equipment required for your presentation is ready in good time!

24 Master's thesis

A Master's thesis is not a second Bachelor's thesis! So what is it? I have a separate document on this!

25 The psychological side ...

For your final thesis, you will need to collaborate with staff at the company where you are writing the thesis. Your task will generally be to examine existing processes within the company and, where necessary, to optimise them. So what does this look like for the staff? "Here comes some young whippersnapper from uni who hasn't got a clue about anything and wants to tell us how to do our jobs. He might even figure something out!"

So you must avoid

- a) being dismissed as a 'know-it-all' and/or
- b) being feared as a "fault-finder" and "job-killer".

The boss and you must therefore convince the staff that you

- a) are there to learn and
- b) want to support them.

Unfortunately, I'm no psychological expert myself, but rather the bull in a china shop ("I'm just telling it like it is!"). So I can't give you any specific advice on this. I just want to draw your attention to the problem. Make the most of it!

BEST OF LUCK

wishes

A*!