

Bachelor of Economics (central allocation) - a guide

University of Cologne
Department of Economics

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Basic information

Basic informationen Bachelor Economics

- The Bachelor's thesis is an examination achievement in the form of an independently written piece of work which is intended to show that the examination candidate is capable of scientifically processing and reflecting on a thematically limited problem from the subject area of the degree programme using the required methods within a specified period of time.
- 12 credit points are awarded for the bachelor thesis. Students who have earned at least 100 credit points may register for the bachelor's thesis.
- The maximum time allowed for the bachelor thesis is 12 weeks.
- In general, the bachelor's thesis must be written in German (or in English if the examiners agree).

Basic informationen Bachelor Management, Economics and Social Sciences

- A bachelor's thesis is an examination achievement in the form of an independently written piece of work which is intended to demonstrate that the examination candidate is capable of scientifically processing and reflecting on a thematically limited problem from the subject area of the degree programme using the required methods within a specified period of time.
- 12 credit points are awarded for the bachelor's thesis. Students who have earned at least 108 CP may register for the bachelor's thesis.
- The time allowed to complete the bachelor's thesis is a maximum of twelve weeks.
- Please register via Klips 2.0.
- The bachelor thesis must be written in English.

Bachelor thesis in Economics: supervision

- At the Department of Economics bachelor theses are organised differently depending on the supervisor.
- There is both a centralised assignment for bachelor theses with the supervisors Barbie, Bierbrauer, Funk, Hornung, Krause, Pinger, Schabert and Siegloch as well as an individual allocation for other supervisors.
- These slides inform on bachelor theses that are allocated centrally.
- For information on bachelor theses at Institute for Econometrics and Statistics please go to <https://wisostat.uni-koeln.de/en/courses/thesis>

Time period

- There are two periods each semester in which a bachelor's thesis can be written. The first period starts at the beginning of the lecture period, the second approximately in the middle of the lecture period. You can find the exact dates each semester on the website.
- It is not possible to write a bachelor thesis outside these periods with the examiners who are part of the centralised allocation.

Topics

- The supervisors whose bachelor's theses are organised via the central allocation process provide a list of topics each semester (more information can be found on the following slides).
- If you are particularly interested in a specific topic, you can send a topic proposal to office-cmr@wiso.uni-koeln.de. The deadline for an individual topic proposal is announced each semester on the website. A topic proposal should describe the research question in 5-10 sentences and include at least two scientific sources. Once the topic proposal has been received, it will be discussed internally whether a candidate would like to supervise a bachelor's thesis on the proposed topic. We will be back to you in due time.

Scientific misconduct (excerpts from the Examination Regulations)

- The provisions of good scientific practice apply to the preparation of the bachelor's thesis. The bachelor's thesis must not have been submitted in the same or a similar form as part of another examination.
 - If an examination candidate attempts to influence the assessment of an examination performance by cheating for their own or another's benefit, if they use unauthorised aids in the examination or if they commit academic misconduct in the performance of the examination, they are committing an act of cheating.
 - A serious offence may be considered in particular in cases of the use of unauthorised aids, the (attempted) exertion of influence on the author or, in cases of plagiarism, in which sources are deliberately disguised by rewording the original texts, rearranging the syntax or using synonyms.
- The use of text-generating AI tools such as ChatGPT is not permitted (see above, 'unauthorised aids').
- Any misconduct will be sanctioned!

Critical thinking

- Scientific work means thinking critically!
- Scrutinise the literature you refer to and its assumptions!
- Also scrutinise your own argumentation and identify the assumptions on which it is based and why these assumptions are acceptable.

Organisation

Schedule

This slide only lists the most important dates. You can always find the exact dates on the website of the Department of Economics.

- During the first enrolment phase of the semester: application via Email to office-cmr@wiso.uni-koeln.de with the application form (published on the website of the central allocation at the start of the application phase) and the latest Transcript of Records.
- At the start of the term we offer a consultation hour via Zoom on the topics where we also answer possible questions.
- At the start of the term the topics are allocated by the Department of Economics (Email by Fabian Knapp) for Working Period I. The topicallocation marks the start of Working Period I, submission: 12 weeks after allocation of the topics.
- At the middle of the term the topics are allocated by the Department of Economics (Email by Fabian Knapp) for Working Period II. The topic allocation marks the start of Working Period II, submission: 12 weeks after allocation of the topics.

Organisation: Supervision

- An introductory meeting with the supervisor takes place shortly after receiving the topic.
 - Objectives: Clarification of initial content-related questions, agreement on the individual design of the topic, registration of the Bachelor's thesis by the supervisor.
 - Recommendation: At the time of the meeting, the basic literature should already have been read.
- As a rule, after the introductory meeting, there is only one further meeting with the supervisor during the working period.
 - Content-related questions can always be sent to the supervisor by email. Recommendation: The second meeting is therefore recommended after
 - completion of the literature research (approx. 1/3 of the working period) to discuss the structuring of the thesis.

Organisation: submission of your thesis

- Your bachelor thesis has to be submitted to the Examination Office at the end of the working period. There are two ways to submit your bachelor thesis:
 - Submission as a PDF file via the [Wiso-Inbox](#) (recommended).
 - Submission in a single hardbound copy and electronically on CD or DVD. See the website of the Examination Office for further information.
- The file may only contain the cover sheet, the text of the thesis and an overview of the resources used, in particular the literature sources used. If the applicant requires further information on the thesis, this must be sent directly to the examiner in consultation with the examiner.
- Please refrain from submitting the thesis more than once. Only the version submitted first will be considered.
- Each thesis must be accompanied by an affidavit. See the website of the Examination Office for further information.

Work planning

Work planning: Overview

Before the start of the working period (WP)

Max. 1/3 of the WP

Ca. 1/3 of the WP

Min. 1/3 of the WP

Choice of software.

Literature research.

Calculations, data analysis, argumentation

Drafting your thesis.

▶ Details

▶ Details

▶ Details

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Software I

- You find templates for MS Word or L^AT_EX on this webpage.

- MS Word

- L^AT_EX

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- (+).

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- (+).

- (-).

- (-).

- (+).

- Chargeable (-).

- (+).

L^AT_EX is best used with [overleaf](#). As an alternative L^AT_EX can be installed via a T_EX-Distribution, e.g. [MikT_EX](#). In this case, a L^AT_EX-editor is recommended such as, e. g., [TeXstudio](#) or [LyX](#). LyX is easy to use but less flexible.

Work planning: Software II

It is advisable to use a reference management programme for citation. This

- ensures that references and bibliographies are created correctly and consistently.
- Personal recommendation: [Zotero](#) can be used both with L^AT_EX and MS Word. There are also the following alternatives: MS Word has a simple integrated reference management system. Alternatively, Endnote (licence via RRZK) or Citavi (licence via RRZK) can be used with MS
- Word.
- Jabref (free of charge) can be recommended to be used with L^AT_EX.

The following programmes are recommended for quantitative analyses:

- [STATA](#): strengths with panels, relatively easy to use, chargeable but available in the WiSo PC pools.
- [R](#): more sophisticated operation, free of charge
- [Matlab](#): more demanding operation, free of charge for students
- [Python](#): more sophisticated operation, free of charge.
- [Julia](#): more sophisticated operation, free of charge

Work planning: Literature research

- The literature research should begin with a thorough study of the basic literature on the topic. Texts cited therein can be used for in-depth study.

The second step should be a search using relevant search engines (Google Scholar, Web of Science, USB catalogues). Details can be found in the research course.

- Literature research from home via VPN access

- Notes on evaluating the search results:

- The majority of the literature used should consist of articles in peer-reviewed scientific journals.
- Please only cite working paper versions if the cited content differs from the published version

Journal rankings can be used to estimate the importance of a journal:

[Scimago](#), [IDEAS/ RePEc](#)

Work planning: Calculations etc, writing the paper

Calculations, data analyses or verbal technical argumentation form the core of your bachelor thesis. Your previous degree programme should have prepared you for this.

1/3 of the working period

At the 1st meeting with the supervisor, it should be discussed where your individual strengths/preferences lie.

The final formulation of the bachelor thesis takes place at the end of the processing time. Support is provided by the Bachelor's Seminar III unit.

Min. 1/3 of the working period.

It is strongly recommended that you proofread the thesis at least twice yourself and have it proofread by at least one other person.

Structure of the bachelor thesis



Struktur der Bachelorarbeit: Übersicht

■	Guideline	Objective	
■	Structure	Preliminaries	
■		Introduction	
■		Main part	Length:
		Conclusion	25-40 pages
■		Bibliography & Appendix	

Deviating length must be agreed with the supervisor.

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Structure of the bachelor thesis: Objective

- The bachelor thesis must have a clearly formulated objective or research question.
The objective/research question should be formulated as early as possible in the working period. It can be adapted in the course of the work, but must be finalised at the latest at the beginning of the third phase (writing the thesis).
- Each section of the bachelor thesis should contribute one step towards achieving the goal, otherwise it is redundant.

Structure of the bachelor thesis: Opening

All elements of the work before the beginning of the introduction are referred to here as opening.

- The opening must consist of the following parts:
 - Title page
 - Table of contents
 - List of figures, if applicable.
 - List of tables, if applicable.
 - List of symbols, if applicable.
 - List of abbreviations, if applicable.
- The table of contents must contain page numbers and the headings of the bullet points must correspond exactly to the headings in the text.
 - in the text.
- When using the $\text{L}^{\text{A}}\text{T}^{\text{E}}\text{X}$ -template, many of these requirements are met automatically.

Structure of the bachelor thesis: Introduction

The introduction should

- formulate the objective/research question and motivate its relevance,
 - describe the path chosen to achieve the goal, i.e. give an overview of the
 - central theme of the work,
- summarise the results,
 - structure the work.

Optionally, the introduction can also provide a brief overview of the most important related literature (only if there is no separate chapter or the main section does not contain a bibliography).

Structure of the bachelor thesis: Main part

- Typically, the introduction is followed by a literature review and then the core content of the bachelor thesis: arguments, calculations, data analyses.
- The content of the main section should fulfil the objective of the thesis. All results of the bachelor thesis must be elaborated in the main part.
- The subdivision of the main section should help the reader to structure the content mentally and to place it in the overall context.
- The subdivision of the main section should help the reader to structure the content mentally and to place it in the overall context.
- The main part should be independently readable, i.e. the core of the work must be understandable without consulting the appendix.
- If this is not the case, the parts of the appendix belong in the main body.

Structure of the bachelor thesis: Conclusion

- The conclusion
 - reiterates the objective of the work,
 - summarises the results.
- Optionally, the end section can also
 - outline the significance of the results for further questions,
 - outline further questions arising from the results,
 - point out weaknesses of the results and limitations of their validity.
 -
-

Structure of the bachelor thesis: Bibliography and Appendix

All elements of the work after the end of the final section are referred to here as bibliography and appendix

The credits must consist of the following elements (see also templates):

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- bibliography.
- possibly appendix.

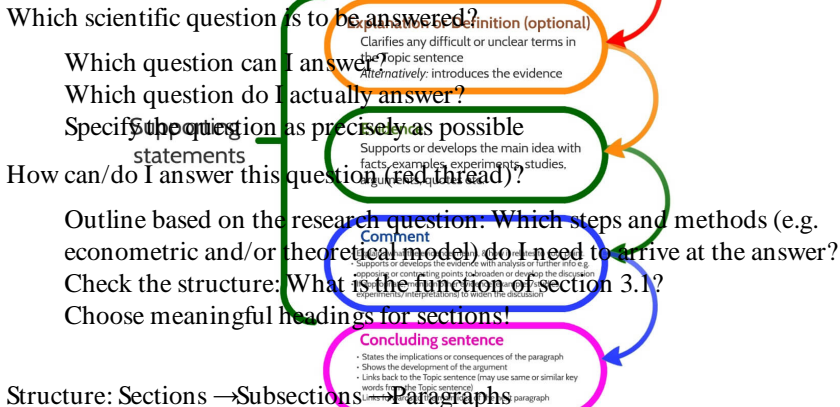
The bibliography contains all cited literature.

The appendix can be used to separate additional tables, figures and mathematical paragraphs (derivations, calculations, proofs) that are not essential for understanding the text.

For submission the bachelor thesis must be accompanied by a separate form with a signed affidavit on the originality of the work (available on the website of the Examination Office).

Writing process - content & structure

Starting point is the question



Writing process - How to structure a paragraph?

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- The introductory sentence should outline the basic idea of the paragraph.
- Each additional sentence should explain, build on or refer to the main idea.
- In the last sentence, you should then refer to the introductory sentence or create a transition to the next paragraph.
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Writing process - How to structure a paragraph?

Writing process - a good language style

Prerequisites for a good structure

- Meaningful structure
- Sufficient well-founded sources to support own argumentation
- Appropriate visual presentation
- Consistently clear linguistic style

Stylistic analysis

- Correct use of terminology
- Use catchy language, do not use filler words
 - No endless sentences, avoid unnecessary repetitions
- Maintain scientific distance, no colloquial language
- Correct spelling and punctuation

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Citation



Citation - Meaning

A scientific approach also implies correct citation of the literature.

- **Attention:** Missing or incorrect citations will be negatively evaluated and will be assessed as plagiarism (currently: Graichen).

- The citation must contain the necessary information and be consistent..

- Avoid secondary citations and refer to the original source instead.

Attention: Original texts that you have translated yourself or with the help of programs such as DeepL, Google Translate,... are direct quotations.

- **Attention:** Citing a primary source on the basis of secondary literature without having consulted the original constitutes scientific misconduct (“blind citation”)

Citation - General Informations



■ Quote

Direct (literal) quotations

Indirect (analogous) quotations

■ **Uniqueness**

Completeness, but not redundancy



Consistency

Bibliography: Contains the bibliographic information of all titles referenced in the paper and no other title!



Citation - Short reference method

- Each (direct or indirect) quotation must be supported by a reference to the source and the place where it was taken.
 - Please use the short reference method!
- The short reference method identifies a quotation in the text by naming the author, the year and, if applicable, the specific page number in round brackets:
 - Example 1: Funk (2008) states. . .
 - Example 2: Bierbrauer (2014, S. 120) shows . . .
- This marking enables a clear assignment to the complete bibliographic reference in the bibliography at the end of the work.

Citation - Short reference method (ctd.)

In the case of two authors, both are named.

Example: Bierbrauer and Sahn (2010).

Works by more than two authors are abbreviated to “et al.” from the second mention onwards.

Example: Fernández-Villaverde u. a. (2015).

For seven or more authors: use “et al.” citation from the first reference onwards.

If there are several sources by the same author with the same year of publication: differentiate in the citation and bibliography with lower case letters after the year.

Example: Schmitt-Grohé and Uribe (2004a,b).

The page number of the citation is appended to the author-year expression after the comma

Example: (Barbie and Hillebrand, 2017, p. 628).

Citation – Direct vs. indirect citation

- If you reproduce other people's ideas and arguments in an entire paragraph, you can integrate the reference into the text or place it at the end:

Prantl (2010) points out the influence of market entry regulation (...) (...) long-lived market participants are also influenced by market entry regulation(Prantl, 2010).

- In any case, it must be clearly recognisable whether the ideas are the author's own or someone else's.

In the case of extremely close reference to an entire section to a source, better:

- 'The following chapter is mainly based on Prantl (2010), unless otherwise stated. . . '

- For direct quotations, the page number is obligatory; for indirect quotations, it is only obligatory for book references or references to specific passages.

Citation – Verbatim Quotation

- - Verbatim quotations
 - must correspond exactly to the template (including punctuation).
 - are set in quotation marks.
 - should remain an exception.
 - You can shorten verbatim quotations if this does not change the meaning.
- Omissions are marked by three dots:
 - **Example:** “Such a system uses various characteristics, such as age, (...), to identify (...) groups of persons who are on the average needy.”(Akerlof, 1978, p. 8).

Citation – Verbatim Quotation(ctd.)

Additions or grammatical adaptations must be indicated in the quotation by square brackets and a note that the annotation was made by the author::

- **Example:** “What is the aspect of the data that makes these [lumpy investment, Anmerkung F.K.] models better than linear ones at explaining aggregate investment dynamics?”(Caballero, 1999, p. 841).
- English quotations can be used in their original wording. A translation is not necessary.
- Other foreign-language texts are translated into German (or English).

The original text is then added as a footnote or, in the case of longer quotations, moved to the appendix.

Citation – Indirect citation

Indirect quotation can be understood as citing in a reasonable way → description of an author's statements and results in their own words

- As with direct quotations, this must be indicated in your bachelor thesis.
- In contrast to a direct quotation, no wording is taken over and no quotation marks are used.

Attention: Verbatim citation and presentation as indirect quotation is scientific misconduct!

However, introductory sentence elements are often helpful.

- **Example:** Schabert (2015) analyses ...

If different essays are compared with each other, you can put both works in brackets.

Example: (see Krause and Lubik, 2007, p. 706; Pavoni et al., 2018, p. 133)

Citation – Categorisation formula

The categorisation formula specifies where in the bibliography the source reference is to be placed.

It is made up of the authors' surnames and the year of publication, e.g. Funk (2008).

The order is based first on the authors' surnames. If there are several works by identical authors, the year is decisive for the sorting.

If there are several works by the same author in one year, they are labelled with lower case letters (which usually corresponds to the alphabetical order of the title).

Citation – General Information

Only cite working paper versions of published articles if they contain information that is not included in the published version.

For internet sources, always try to identify the author and state the date of retrieval! A hyperlink on its own is not considered a sufficient reference!

Example: Paul Krugman (2012). Bleeding the patient: a drama. The New York Times. url : <http://krugman.blogs.nytimes.com/2012/12/14/bleeding-the-patient-a-drama/> (visited on 16. 12. 2012)

If no author can be identified, enter the author as without author

Citation - Bibliography

The following pages (References I to III) illustrate the different citation methods described before.

References I

- Akerlof, George A. (1978). The economics of “Tagging” as applied to the optimal income tax, welfare programs, and manpower planning. *The American Economic Review* 68(1), pp. 8–19.
- Barbie, Martin und Marten Hillebrand (2017). Bubbly Markov equilibria. *Economic Theory* 66(3), pp. 627–679.
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- Bierbrauer, Felix und Marco Sahm (2010). Optimal democratic mechanisms for taxation and public good provision. *Journal of Public Economics* 94(7-8), pp. 453–466.
- Caballero, Ricardo J. (1999). Aggregate investment. *Handbook of Macroeconomics* 1, pp. 813–862.
- Fernández-Villaverde, Jesús, Pablo A. Guerrón-Quintana, Keith Kuester und Juan F. Rubio-Ramírez (2015). Fiscal volatility shocks and economic activity. *American Economic Review* 105(11), pp. 3352–3384.

References II

- Funk, Peter (2008). Entry and growth in a perfectly competitive vintage model. *Journal of Economic Theory* 138(1), pp. 211–236.
- Krause, Michael U. und Thomas A. Lubik (2007). The (ir)relevance of real wage rigidity in the New Keynesian model with search frictions. *Journal of Monetary Economics* 54(3), pp. 706–727.
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- Pavoni, Nicola, Christopher Sleet und Matthias Messner (2018). The dual approach to recursive optimization: theory and examples. *Econometrica* 86(1), pp. 133–172.
- Prantl, Susanne (2010). The impact of firm entry regulation on long-living entrants. *Small Business Economics* 39(1), pp. 61–76.
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References III

- Schmitt-Grohé, Stephanie und Martín Uribe (2004a). Optimal fiscal and monetary policy under sticky prices. *Journal of Economic Theory* 114(2), pp. 198–230.
- (2004b). Solving dynamic general equilibrium models using a second-order approximation to the policy function. *Journal of Economic Dynamics and Control* 28(4), pp. 755–775.