

Information sheet on theses in the working group 'Foundations of Statistics and their Applications'

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1 Prerequisites and procedure for a thesis

- Check the necessary prerequisite for starting a Bachelor's or Master's thesis according to the examination regulations!
- Search/find topic (see below)
- Send an exposé on one (or more topics) (specifications can be found on the homepage of our working group (see also below))
- We will contact you and assign a main supervisor to each thesis main supervisor
- Familiarization period
- Registration (→ Follow the instructions of the examination office)
- Submission
- Oral examination; work must be passed in order to take the examination (plan the examination date in good time!)
- Supervision:
 - individually by the supervisor(s)
 - Thesis colloquium

2 Possible principle types of theses at the working group

The members of the working group offer different thesis topics for Bachelor's and Master's degrees. You can find the individual topics on the personal websites of the individual members. If you are interested in one of these topics, please write directly to the person responsible and to Christoph Jansen (christoph.jansen@stat.uni-muenchen.de). Please submit the short exposé as well.

If you would like us to supervise a topic that has not been suggested, please send the short expose to Christoph Jansen (christoph.jansen@stat.uni-muenchen.de). Please note that we do not accept every proposed topic. For the thesis topics that are suggested by the students, please use the following points as a guide:

- Generalization of a classical method by adapting generalized methods
- Implementation and investigation of a method from the literature or comparison of two methods
- Simulation studies for the critical evaluation of methods
- Conceptual or explorative further development of previously unestablished approaches
- Analysis of a complex data example using a suitable combination of established methods and critical discussion of the methodological problems that arise
- Detailed literature review on a topic with structured preparation from a methodological point of view, including documentation of the research process

- An overview of possible topics for a final thesis can be found on the homepage of our working group. We also welcome your own suggestions for topics related to our research interests listed on the homepage; specific calls for proposals for current thesis projects are also announced on the homepage of the working group.

3 Thesis colloquium

- Offer of a regular colloquium in addition to individual supervision
- Regular attendance at the colloquium and active participation in the discussion of the work presented is expected
- Presentation of your own work at around the time of registration and after about two thirds of the processing time in a short presentation
 - Duration of the first presentation (without discussion): approx. 15 min. for Bachelor, approx. 20 min. for Master
 - Duration of the second presentation: approx. 20 min. for Bachelor, approx. 25 min. for Master
- Please let us know if you are unable to attend an appointment!
- Please send us slides or other material for your presentations no later than four days before your presentation at the latest!

4 Short-exposé

- Max. 4 pages with the following information to christoph.jansen@stat.uni-muenchen.de:
- Thesis project:
 - Desired topic (or topics) and motivation of the project
 - Where do you see your strengths and which skills would you like to develop in your work in your work?
 - Rough, possible structure of the work
 - Desired deadline for submission
- Study situation:
 - Minor subject
 - Elective courses attended
 - Seminar attended
 - Current study progress (Which exams are you still missing until graduation? completion of your studies?)
- Special features when choosing an advertised topic: In your exposé, please also describe the current status of your familiarization with the topic you have chosen
- Please also let us know your campus ID so that we can enrol you in the Moodle course for the thesis colloquium

5 General specifications [format specifications]

- General principles for academic work must be observed. Plagiarism is unacceptable academic misconduct and also has consequences under examination law. As an aid, a course on scientific work in statistics is usually offered.
- The thesis and the slides for the disputation presentation should be created according to the standard of our discipline with the text typesetting program LATEX
- The number of pages is based on the examination regulations. From our side there is no specific requirement for the number of pages, but attention must be paid to completeness and comprehensible argumentation.
- Theses should always contain a motivation/introduction, explain all methods used, critically scrutinize methods and results, give an outlook and include a correct bibliography.
- Use a spell checker before submitting your thesis.
- Each thesis must contain a declaration under oath stating the independence of the of the thesis.
- Pay attention to uniform and unambiguous notations!

6 Disputation

- The examination record must be collected from the contact point of the examination office and bring it to the disputation yourself.
- The main content of the presentation should cover the most important results and findings of the thesis; in view of the time constraints, a selection must be made if necessary. be selected.
- Duration of the disputation: approx. 30 minutes in the Bachelor's program, approx. 40 minutes in the Master's program
- Length of presentation:
 - Bachelor: 15-20 minutes
 - Master: 20-25 minutes
- Followed by questions about the lecture and the work, including questions about the background fundamental concepts in the context of the work and on the classification of the topic in the overall context of the study program.