

**GUIDELINE FOR STUDENT THESES AT THE WORKING GROUP “ENVIRONMENTAL
ANALYSIS AND PLANNING IN METROPOLITAN REGIONS”**

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INHALTSVERZEICHNIS

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ABSTRACT

This document shall provide guidance for students aspiring to write a graduation thesis (bachelor or master) in cooperation with and under the supervision of members of the Working Group of Environmental Analysis and Planning in Metropolitan Regions at the Institute of Geography at Ruhr University Bochum.

It is meant only as an additional information without a guarantee for completeness or correctness. For official rules and regulations, please always refer to the official **Studiengangsordnung (study regulations)** for the respective degree programme you are enrolled in. Students are requested to only adhere to those official documents.

1 MAJOR STEPS TO WRITE A THESIS

Ten major steps should be considered for the preparation, writing and submission of the student thesis. Beforehand, you should check that all requirements of the **study regulations** are met and you are officially approved to write a thesis. The ten major steps include:

1. Schedule the thesis.
2. Identify a topic and get acquainted with it.
3. State interest in supervision by contacting our team assistant, Mrs. Ingrid Bode. Also ask her to coordinate a preparatory meeting with your potential first supervisor.
4. Write a brief exposé of your envisioned thesis in the form of a synopsis for the introduction (including statements on the relevance, the knowledge gap, thesis aim, research questions and objectives), the proposed methods and materials, expected results, and key references. Send it to the proposed supervisor two days before the preparatory meeting (e.g. via a short mail with a meaningful subject).
5. Determine the finale topic with supervisor.
6. Complete the formal signup by sending the fully filled out form to Ingrid Bode.
7. Write the thesis.
8. Ask supervisors for additional support in case needed.
9. Submit the thesis.
10. Organize and hold colloquium (only for master programmes).

	Preparation time		Elaboration time	
1. Schedule the thesis				
2. Identify a topic and get acquainted with it				
3. State interest by contacting team assistant				
4. Write a brief exposé of your envisioned thesis				
5. Determine finale topic with supervisor				
6. Complete the formal signup				
7. Write thesis				
8. Ask supervisors for additional support				
9. Submit thesis				
10. Organize and hold colloquium				

End October/April

Fig 1: Timetable for major steps for preparation and elaboration (incl. writing, submission and colloquium) of the thesis.

1.1 SCHEDULE THE THESIS

Get informed about deadlines of the duration and the formal registration of the thesis for the respective degree programme you are enrolled in. This is essential, for instance, if you want to continue with a master's degree after the successful completion of the bachelor thesis. See an example for the schedule of the B. Sc. degree [here](#). If you want to write a thesis at the Professorship of Environmental Analysis and Planning in Metropolitan Regions, you have to state your interest by contacting the team assistant, Mrs. **Ingrid Bode** via email between October, 01 - 10, for the winter semester or April, 01 - 10, for the summer semester.

Tab 1: Overview of the duration and recommended dates for the completion of the formal registration of the thesis for different degree programmes. Please note, the information on the formal sign up only applies to students which intend to continue their study career after completing their thesis (e.g. transition from bachelor to master or another degree programme).

Degree programme	Duration	Complete formal signup
B. Sc.	10 to 16 weeks	October, 31 (winter semester), April, 30 (summer semester)
B. A.	6 weeks	October, 31 (winter semester), April, 30 (summer semester)
M. Sc.	4 to 6 months	October, 31 (winter semester), April, 30 (summer semester)
M. Ed.	4 to 6 months	October, 31 (winter semester), April, 30 (summer semester)
TuL	4 to 6 months	October, 31 (winter semester), April, 30 (summer semester)

1.2 IDENTIFY A TOPIC AND GET ACQUAINTED WITH IT

The topic for the student thesis can be suggested on the student's own initiative as a proposal (initiated topic) or chosen directly by suggestions from the supervisors (appointed topic).

- Initiated topic: Prepare a proposal in the form of a brief synopsis that introduces the topic of choice, the research question (-s) and the methodological approach within max. of two pages.
- Appointed topic: Depending on the current state of work of working group, topics can be chosen ([LINK current projects](#)).

1.3 STATE INTEREST IN SUPERVISION

Please, contact first the team assistant, Mrs. **Ingrid Bode**, to state your interest in writing a thesis at the working group of Environmental Analysis and Planning in Metropolitan Regions. Please, provide information on the topic and favoured supervisor. If the contact with a supervisor already exists, a meeting can be arranged directly and the team assistant just needs to be informed about the appointment.

For an initiated topic follow step 1.4. Appointed topics require a preliminary meeting to discuss and agree upon a topic. This meeting will be arranged by the team assistant. After the meeting follow step 1.4.

1.4 WRITE A BRIEF SYNOPSIS

Write a brief synopsis about the selected topic of the thesis (max. four pages). The synopsis should include chapters for the introduction, methods and materials, expected results, and basic references.

- Introduction: State relevance of the topic, knowledge gap, aim of thesis and research questions.
- Methods and Materials: Short description of how you will address the research objectives or questions. Sketch a workflow diagram with major steps of the research design. Based on the diagram methods you plan to use for each step are described and materials such as tools and input data elucidated.
- Expected results: Results should be structured according to the research question (-s) and the intended knowledge gain broadly described (e.g. in a table, a diagram, or a figure).
- Basic references: Explore and list the key literature to be considered for the thesis.

1.5 DETERMINE FINAL TOPIC WITH SUPERVISOR

Contact supervisor, asking for a preparatory meeting to present and discuss the synopsis from step 1.4. Please, send the synopsis to the supervisors two days in advance of the meeting via email.

1.6 COMPLETE FORMAL SIGNUP

Required documents for the formal signup can be found [here](#). Please consider deadlines of the respective degree programme you are enrolled in (see. Step 1.1). One of the documents: "Themenvorschlag für die Bachelorarbeit", entails contents (suggestion of title) that need to be completed and signed by the first supervisor. For students supervised by Prof. Dr. Christian Albert, please send the aforementioned document to Mrs. **Ingrid Bode** in order to get it completed and signed.

When all documents are complete and filled out, they must be submitted to the **examination office**. Finally, the examination office checks the submitted documents and confirms the registration for the thesis within a few days.

1.7 WRITE THE THESIS

The thesis should be structured in the following parts: title page, table of content, list of figures, list of tables, abstract, *Zusammenfassung*, introduction, methods and materials, results, discussion, conclusions, references, and (where appropriate) appendix.

- The cover page includes the following aspects: title, name of author, aimed degree, matriculation number, semester, email address, supervisors and date of submission (see appendix).
- The table of content is a summary of chapter headings and according page sites that gives an overview of the content and structure of the thesis.

- The list of figures represents an overview of all visualisations depicted in the thesis and on which pages to find them.
- The list of tables shows an overview of all tables used in the thesis and according pages sites where to find them.
- **Abstract and Zusammenfassung:** Please include a brief abstract (and eventually a german language *Zusammenfassung*) of maximum 250 words. The abstract should be structured, with 1-2 sentences on the introduction, 1-2 sentences on methods and materials, 1-2 sentences on results, and 1-2 sentences on discussion and conclusions.
- The introduction section needs to explain the relevance of the work, the knowledge gap, aim of the thesis, research questions.
- The methods and materials section provides insight into the overall research design (major steps), the methods applied in each research step, and which materials or data are used.
- The results section presents the research findings. Please use sub-sections relating to results to each of the major research questions.
- In the discussion section research findings are interpreted. It reflects the degree to which research objectives have been addressed or research questions answered. It discusses the findings in light of other, existing literature and points to similarities and differences. It also discusses potential implications of the choice of methods on the research findings.
- The conclusion section summarizes major findings at a higher level of abstraction. It also outlines recommendations for further research and for practice.
- The reference section contains sources cited in the aforementioned sections.
- The appendix includes all information that would make the body text of the thesis too long and too confusing and that is not absolutely necessary for the direct understanding of the text – e.g. statistics, supplementary tables or questionnaires.

Additionally, the following formal requirements need to be considered:

- Page margins: Left: 4 cm, Right/Top/Bottom: 2 cm
- Justify text
- Line spacing: 1.5
- Font size: 12
- Font: Arial, Calibri or RUB Flama

Also, consider the **citation guidelines** of the Geographic Institute as well as **additional hints on how to write scientifically**.

Tab 2: Maximum word count of thesis for different degree programmes.

Degree programme	Words
B. Sc.	10,000
B. A.	75,000

Table continues

M. Sc.	20,000
M. Ed.	150,000 to 170,000
TuL	To be determined

1.8 ASK SUPERVISORS FOR ADDITIONAL SUPPORT IN CASE NEEDED

Meetings can be arranged individually, at any time, if challenges arise that cannot be overcome independently.

1.9 SUBMIT THE THESIS

The final thesis will be submitted to the examination office. Please double check the current requirements of the examination office regarding the exact submission address for the graduation thesis as well as the type (digital, printed) and number of copies.

1.10 ORGANIZE AND HOLD COLLOQUIUM

In all three specialisations of the master degree in Geography the attendance at the Master's colloquium is mandatory. This means that the students - in addition to attending lectures - also present their master thesis. This presentation usually comprises a 20-minute lecture in German or English, followed by a discussion (about 10 minutes). The colloquia are organised within the specialisation of the study programme and are open to all students and lecturers.

Tab 3: Compulsory participation and presentation of the thesis at a colloquium according to the degree programme.

Degree programme	Oral defence required
B. Sc.	No
B. A.	No
M. Sc.	Yes
M. Ed.	Yes
TuL	Yes

2 EVALUATION GUIDELINES FOR THESES

Tab 4: Evaluation criteria used for the grading of a thesis.

1. Contents

Contents: Contents are factually correct, complete and understandable. The selection and weighting of the facts are based on the objective. The state of research is reflected. Key terms are defined and operationalized.

Summary: Briefly informs about the introduction, objectives of the study, applied methods and results of the work. This is divided into introduction, main part and conclusion. The W-questions: Who? What? When? Where? Why? have been answered.

Introduction: Introduces the topic. Shows the relevance of the topic. Presents the objective and question(s). Derives the structure of the thesis from this.

Objective: This is clearly formulated and appropriate to the scope of the work; in addition, there is a comprehensible justification.

Structure: Makes sense with regard to the objective. Chapters are meaningfully separated from each other (sections) and build on each other. There are transitions between the chapters.

Methodology: Expertise in the formation of a solution approach is shown. The method as well as materials and data used are described transparently and comprehensibly. The choice of the particular method is explained. Objectivity and completeness of data evaluation.

Results: Results must correspond to the objectives. Results must be presented in a factually correct and comprehensible manner. The findings represent new information/knowledge. The findings represent a factual progress in the field of the task.

Discussion and conclusion: In the discussion, results have to be interpreted, evaluated and critically scrutinized. Major research questions need to be answered. Theory and, if applicable, case studies are brought together. The conclusion answers wraps up key messages and lessons learnt of the thesis. The conclusion is derived from the preceding information. If applicable limitations and open questions are shown.

Illustrations, tables, maps, etc.: Are sensibly selected and named accordingly.

Source base: Scientific literature is used. Incorporates different perspectives into the work. Essential areas of the state of research are covered. The source material is appropriately up-to-date.

2. Language

Expression: Statements are understandable and comprehensible. Technical terminology is used.

Grammar: German or English grammar is free of errors.

Punctuation and spelling: Punctuation and spelling are free of errors.

Table continues

3. Form

Source references: Are always available and are made according to the guidelines of the Geographic Institute of the Ruhr University Bochum.

List of sources: Is complete and complies with the GI specifications.

Quality of figures, tables, etc.: Figures and tables are easy to read and have a high resolution. Subheadings or headings as well as references are available.

Layout: Formal specifications, such as page numbers, line spacing, etc. are correct.

Timely submission: Has been made.

Scope: Corresponds to the specifications.

3 SUPPORTIVE WEBSITES

Tab 5: Overview of websites that provide guidance on the preparation, writing and submission of a thesis.

Description	URL
Study regulation and formal documents for registration of the thesis	http://www.geographie.ruhr-uni-bochum.de/studium/studiengaenge/
Examples of deadlines for B. Sc. degree	https://www.geographie.ruhr-uni-bochum.de/studium/studiengaenge/bachelor-of-science/uebergang-2022/
Supervisors from PLACES	https://eap.geographie.rub.de/team.html.en
Research activities and potential topics for theses from PLACES	https://eap.geographie.rub.de/mam/places/pdf/graduation_theses.pdf
Guidelines on how to write a term paper, bachelor's thesis, diploma thesis and master's thesis	https://www.ruhr-uni-bochum.de/mak/mam/content/guidelines_rub_papers_2020.pdf

4 GLOSSARY

B. A.

is the abbreviation for the academic degree: "Bachelor of Arts" in the **two-subject bachelor's programme** at the Ruhr University Bochum.

B. Sc.

is the abbreviation for the academic degree: "Bachelor of Science" in Geography.

Examination office ("Prüfungsamt")

is in charge of all formal tasks related to the student's thesis.

M. Ed.

is the abbreviation for the academic degree: "Master of Education" in Geography.

M. Eng.

is the abbreviation for the academic degree: "Master of Engineering" in Engineering Science.

M. Sc.

is the abbreviation for the academic degree: "Master of Science" in Geography.

Supervisor

is an authorized examiner according to the responsible examination office.

For BSc theses, supervisors need to have at least a master's degree. In other words, BSc. thesis students can be supervised by PhD students. MSc. students can only be supervised by postdoctoral team members.

Student

refers to the person who is officially enrolled at the Ruhr-University Bochum and intends to complete the thesis at the Chair of Environmental Analysis and Planning of Metropolitan Regions (incl. B. A., B. Sc., M. Sc., M. Ed. as well as double-degree M. Sc./M. Eng. in TuL).

Study regulations ("Studienordnung")

are the official documents that contain regulations issued by the Geographic Institute on the course of the study programme up to the examination. Please adhere to the regulations laid down in these official documents.

Thesis ("Abschlussarbeit")

is a scientific paper to complete a study programme at the Geographic Institute. The thesis is a systematically structured text in which the results of independent research are presented. Within the thesis, students must demonstrate the key competences acquired during their study career, such as working independently on a geographical topic (research question) using scientific methods and presenting the results in an appropriate manner.

TuL

designates the international double-degree master's programme: "Transformation of Urban Landscapes".

APPENDIX

Template for the cover page of a thesis (see next page).

Titel der Arbeit

**Ausarbeitung
zur Erlangung des
Bachelor-/Mastergrades (B. Sc./B. A./M. Sc./M. Ed./M. Eng.)**

der

Fakultät für Geowissenschaften
Geographischen Instituts
der Ruhr-Universität Bochum

vorgelegt von
Herrn/Frau Name
Martikelnnummer: XXX
Fachsemester: XX
Email: XXX
geb. am XX.XX.XXXX in Ort

1. Gutachter /-in:

2. Gutachter /-in:

Bochum, den (Tag der Abgabe)