



Guideline for the preparation of Master Theses at the Institute of General Management and Organisation

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Introduction

This guideline shall serve the students for a better overview and coordination of their master thesis at the Institute of General Management and Organization at the Graz University of Technology.

In order to successfully complete a Master's program at the Graz University of Technology, writing a Master's thesis is mandatory.

A master thesis is an independent, written work, which is thematically assigned to a course or specialization. The technical level corresponds to the educational level of the Master's program. The thesis comprises 30 ECTS credits.

Goals of a Master's Thesis:

By writing a master's thesis, the student demonstrates that he or she can write a scientific work independently, but with the support of a supervisor.

Legal Situation:

The master thesis is a document and must meet the requirements of a scientific work. Further information on this can be found in the guidelines for scientific work. Special attention must be paid to copyright. An affidavit must be submitted. The work will be subjected to a plagiarism check. Failure to pass the plagiarism check will result in a negative evaluation of the thesis.

The positively assessed master's thesis is, in addition to the positive completion of all examinations provided for in the curriculum, a prerequisite for admission to the final commissioned master's examination. The final board examination consists of:

- Presentation of the Master's thesis
- Defense of the Master's thesis
- Examination on subject areas related to the master's thesis

Organizational

Requirements

The prerequisites to be able to start a master thesis can be seen in the respective curriculum. The student must independently provide proof of fulfillment of the prerequisites before starting the project (see topic identification).

Master's program in Mechanical Engineering and Business Economics; Master's program in Mechanical Engineering

<u>Curriculum 2020 (WI-MB) (in German)</u>; <u>Curriculum 2020 (MB)(in German)</u>: The Master's thesis must be thematically assigned to one of the selected specializations and supervised by an institute of the Faculty of Mechanical Engineering and Business Economics. Exceptions are to be approved by the Dean of Studies.

<u>Curriculum 2022 (WI-MB) (in German)</u>; <u>Curriculum 2022 (MB) (in German)</u>: The topic of the Master's thesis must be assigned to one of the compulsory or elective modules. Exceptions to this rule are decided by the responsible governing body.

• Production Science and Management

<u>Curriculum 2020 (PSM) (in German)</u>: The Master's thesis must be thematically related to a compulsory subject or a compulsory subject of one of the chosen specializations and supervised by an institute of the Faculty of Mechanical Engineering and Business Economics. Exceptions are to be examined and approved by the Dean of Studies.

<u>Curriculum 2022 (PSM) (in German)</u>: The topic of the Master's thesis must be assigned to one of the compulsory or elective modules. Exceptions to this rule are decided by the responsible governing body. [...] The master's thesis must be written in English.

Masterstudium Software Engineering and Management

<u>Curriculum 2020 (SEM) (in German)</u>: The topic of the master's thesis must be assigned to the major or the minor, whereby the thesis can only be assigned to the minor if this has been selected from one of the module groups K-N. Exceptions to this rule are decided by the competent governing body responsible for study law.

<u>Curriculum 2022 (SEM) (in German)</u>: The topic of the master's thesis must be assigned to the major or the minor, whereby the thesis can only be assigned to the minor if this has been selected from one of the module groups K-N. Exceptions to this rule are decided by the competent governing body responsible for study law.

In addition, positive completion of the compulsory subjects provided for in the curriculum at a good or very good level is required.

Time Schedule

The time required for a master's thesis is approx. 750 - 800 working hours. The desired time frame for this achievement is 6 months. The student must ensure that steady progress is possible within the planned time frame and that progress does not suffer from other time-intensive activities (e.g. difficult exams, professional demands, etc.). The shortest possible, but intensive processing of the task is desirable and in the interest of all involved parties.

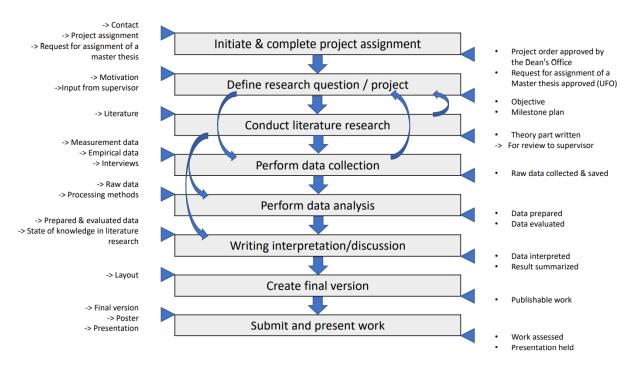


Figure 1: Exemplary flow of a master thesis

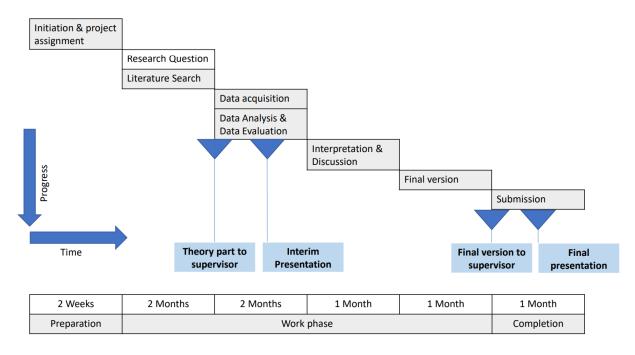


Figure 2: Exemplary chronological course of a master thesis

Topic Identification

Master's theses are published on the <u>institute's homepage</u> and advertised on the institute's notice board.

In addition, there is the possibility of an initiative choice of topics. Below are the research fields and contact details of the institute staff. It should be noted that students have no right to write a paper at the institute if the topic does not fit into the research fields, or the resources of the staff are already fully utilized, the supervision of the desired work at the institute is not possible.

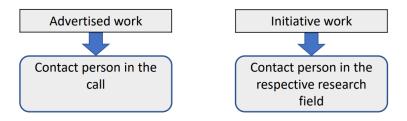


Figure 3: Contact persons for advertised or initiative work

Initial contact originates with the student and should be handled as follows:

An email should be sent to the appropriate contact person with the following content:

- Introduction of the student (CV, Transcript of Records).
- What kind of work is involved?
- What is the current study progress?
- What is the motivation behind the choice of topic?
- Which courses have already been taken at the institute? What was the assessment of these?

List of contact persons:





Business Model Management
Dipl.-Ing.
Florian Ratz, BSc
florian.ratz@tugraz.at

Application & Approval

If the topic identification with the contact person or now supervisor is completed, the "Application for assignment of a master thesis" has to be filled out (at the End of this document you will find useful links to help you find the forms). This request has to be signed by the student, the supervisor and the assessor (head of the institute) and sent to the Dean of Studies. The secretary's office of the UFO Institute will take care of sending it. After approval by the Dean of Studies, the Dean's Office creates the Master's thesis in TUGRAZonline. From this point on, the thesis is visible to the student under "My theses".

The **project order** has to be filled in parallel to the application for assignment of a master thesis and is considered as an agreement between student and institute as well as project partners, if applicable. The template for the project assignment is sent to the student by the supervisor.

If the application and the project assignment are approved, work on the content can begin.

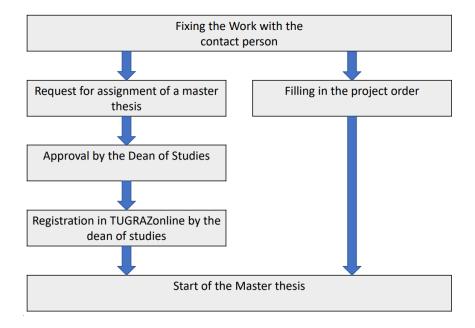


Figure 4: Procedure of the application

Work Phase

Useful tips for writing a scientific work can be found in the Guide for Writing Scientific Works. The formal criteria mentioned in the guide are prerequisites for the acceptance of intermediate and final versions of the work. This applies in particular to

- scientific working method and argumentation, as well as
- clean editing including correct spelling, grammar and expression.

Non-compliance with the formal criteria will result in delay of the work due to correction loops on the part of the student as well as point deductions in the assessment (see Assessment).

Correction

The supervisors of the papers do not make spelling corrections. Supervisors' correction is limited to content.

Note: It is recommended to have the work read through and corrected by persons with very good language and grammar skills. This is especially true for theses written in English.

Interim Presentation

The interim presentation takes place in the scope of 15 min presentation + 15 minutes feedback round. The date for this is determined at the beginning of the project in the project application. For presentations the templates of the institute are to be used.

Completion of the work

Final Presentation

The final presentation consists of a 20 minutes presentation + 20 minutes question and answer session. The date for this is set at the beginning of the project in the project proposal.

Before the presentation, the final version of the work must be submitted to the supervisor for evaluation. The submission to the supervisor has to be done in time. It is to be taken into account that approximately ten working days must be expected for the evaluation. The time frame for the evaluation is to be coordinated with the supervisor in any case.

Handing in & submission of the final version

Before submission, final corrections, feedback and a final meeting with the supervisor take place. The corporate design guidelines of TU Graz must be adhered to.

The submission of the master thesis by the student via "My theses" in TUGRAZonline is required for the completion of the thesis at TU Graz. Once the electronic submission has been completed by the student, a plagiarism check as well as the grading will be carried out by the assessor (professor). Only after the electronic approval by the assessor, the master thesis can be submitted in bound form to the Dean's Office.

A justified request to block the master's thesis can be made. The number of bound copies depends on the requirements of the Dean's Office.

The submission of the final version for the Institute is in digital form.

The minimum requirements are:

- Master thesis in final version as pdf-file
- All online and digital sources (e.g. websites, papers, etc.) have to be handed in as pdf-file.
- Files containing used data, relevant information as well as processing programs must also be submitted in digital form.

In order to simplify the traceability, special attention should be paid to a meaningful and clear designation of the files.

Evaluation

The assessment and entry of the grade will follow the electronic submission by the assessor in TUGRAZonline. The assessment criteria include the following points: Content, procedure, elaboration of the report and presentation.

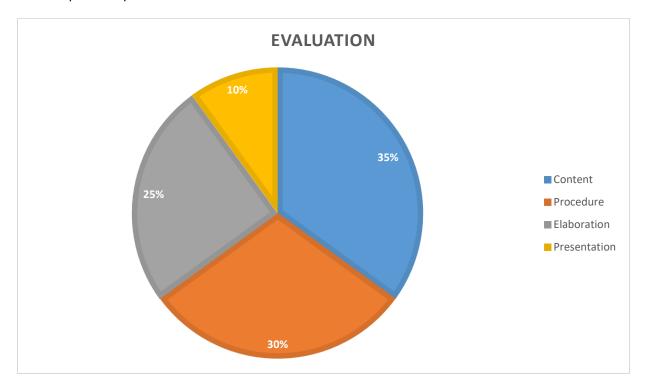


Diagram 1: Percentages of the assessment

For the assessment, the weighting is as follows:

- Content (35%)
 - o Fulfillment of the objective (10%)
 - Usability of the results (7,5%)
 - o Application of theory (literature, methods) to a concrete problem (10%)
 - o Ideas (7,5%)
- Precedure (30%)
 - o Problem identification (5%)
 - o procedural steps (structured work) (7,5%)
 - o Independence (7,5%)
 - Scheduling and meeting deadlines (5%)
 - Contacts, reports, meetings (5%)
- Elaboration of the report (25%)
 - o Structure of the work (9%)
 - Scientific work (10%)
 - o Presentation of text, figures, tables (6%)
- Presentation (10%)
 - o Clarity (5%)
 - o Commitment to defend the solution (5%)

Useful Links

UFO Ongoing and advertised master theses https://www.tugraz.at/institute/ufo/teaching/theses/

UFO Guideline & Templates

https://www.tugraz.at/institute/ufo/teaching/downloads/

TU4U Procedure of master theses (Graz University of Technology)

https://tu4u.tugraz.at/studierende/mein-studienabschluss/masterarbeit/

TU4U Submission of a master thesis in TUGRAZonline (Graz University of Technology)

https://tu4u.tugraz.at/fileadmin/Studierende und Bedienstete/Anleitungen/Masterarbeit einreichen TUGRAZonline.pdf

TU4U Information about the master thesis, graduation and forms (Dean's Office for Mechanical Engineering and Economics)

 $\frac{https://tu4u.tugraz.at/studierende/organisation-und-administration/studienadministration-durch-dekanate/dekanatefuermaschinenbau-und-wirtschaftswissenschaften/masterstudien/#c14759$

TU4U Information about the master thesis, degree and forms (Dean's Office for Computer Science and Biomedical Engineering)

 $\frac{https://tu4u.tugraz.at/studierende/organisation-und-administration/studienadministration-durch-dekanate/dek$

TU4U Templates in Corporate Design (Graz)

 $\underline{https://tu4u.tugraz.at/studierende/organisation-und-administration/vorlagen-im-corporate-design/\#c252670}$

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