



Guidelines Master Thesis in Materials Science

Notes: (i) According to the “Schedule of Studies and Exams,” Master Thesis (MT) and Defense are located in the fourth semester. There is, however, no obligation to start with the MT at the beginning of the fourth semester. (ii) The rules given here are for the study regulations from 2015. The related rules for the regulations from 2011 are indicated in parentheses, where necessary. (iii) There are special additional rules for a MT prepared in partial or in total outside of TU Darmstadt. Download the “Guidelines External Master Thesis” from the Master web page. (iv) You have to be enrolled as a student of TU Darmstadt until your last exam/achievement. If no other exams are pending this means that you have to be enrolled as a student until the day you have submitted your MT to the Materials Science study office and had your defense, even if the MT is prepared externally.

Process:

1. You need to ask the office of student affairs for a **certificate of non-objection** (“Bescheinigung über das Vorliegen der Voraussetzungen für den Beginn einer Masterarbeit”). This will be issued as soon as you meet the following criteria:
 - a. You have successfully completed an **Industrial Internship** or something comparable, approved by the chair of exams or his/her authorized representative. Students in the FAME+, AMIS, AMIR, and Tongji double degree programs need no industrial internship. Graduates from the Materials Science Bachelor program at TU Darmstadt already finished their industrial internship before starting their Bachelor thesis.
 - b. You have obtained at least **75 CP** counting towards your degree in completed modules of the mandatory and elective areas.
 - c. You have successfully completed the **Advanced Research Lab**.
 - d. You have fulfilled all **obligations**, if applicable.
Take this certificate to your intended TU advisor.

— **Exception for students in the FAME^{ALS} and AMIS double degree programs, who spent their first year in Grenoble and came to TU Darmstadt for the second year: The grades for these students have to be communicated by 20th September to Grenoble, so these students will receive permission from the office of student affairs to start with their MT even if they do not yet fulfil all of the above requirements. They should start their MT by March 10 at the latest in order to ensure submission of their grades to Grenoble in due time.**
2. **Choose a Research Group:** Look for a TU advisor in a materials science research group of your choice. This advisor must be either a professor, an “apl.” professor, a “Priv.-Doz.,” a “Habilitationer,” or the leader of a junior research group. With permission of the chair of the exams commission, the MT may be prepared at another department of TU Darmstadt or at another university. For a MT carried out partially or in total outside any university (= “external thesis”), you still need to have a TU advisor in a materials science research group who is willing to act as your university tutor.
3. **Define a Subject:** Upon fulfillment of the formal prerequisites (see 1.), the TU advisor fills the information including the MT subject, the date of issuance, and the deadline in the form „Issuance of a MT Subject“ (download from the Master web page). This filled-out form or a scan of it needs to be returned to the office of student affairs. You should keep a copy for yourself!

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4. **Implementation of the MT.** Reach agreement with your MT advisor about the scientific work. The length of the MT should be about 70-80 pages.
Often students stay in the lab for too long and then may not have enough time to write and to have the thesis corrected by supervisors and tutors. Bases on examples of best practice, the following time plan is suggested, which should be discussed between the student and the tutor before and during the MT.

Action	Content	6 month long work
Preparation	Read literature, learn instruments, get access to lab, etc.	6 weeks
Official start of thesis	As soon as boundary conditions are sufficiently established.	
Starting presentation	10-minute presentation in the group meeting about what the project is about.	1 st month
Hand in draft of literature review	To make sure the writing process starts early. Fix a date for this.	At the end of 2 nd month.
Review meeting #1	Meet with another person besides the direct supervisor (e.g. Prof. or Post-doc) and present an action plan for lab and understanding Fix a date for this.	At the beginning of the 3 rd month.
Review meeting #2	Meet with another person besides the direct supervisor (e.g. Prof. or Postdoc) and present what few further measurements will complete the topic. Fix a date for this.	At the end of the 4 th month.
Thesis draft review with direct supervisor	Get advice for the writing of the thesis with an almost complete draft ready. Fix a date for this.	4 weeks before submission in e.g. "0-draft" with figures and explanation in bullet point wise.
Thesis draft review from another supervisor	Get advice from another perspective with an almost complete draft ready. Fix a date for this.	2 weeks before submission. Maybe have a complete draft already.
Final presentation	10-15 minute presentation in the group meeting. Fix a date for this.	1-5 weeks after submission.

It is strongly recommended to have an intermediate or final presentation in the presence of the direct supervisor/tutor and the second reviewer. The two reviewers can take the opportunity to discuss preliminarily their opinions on the grade.

5. Submission of the MT after maximally 26 weeks (rules from 2011: six months). The MT has to be uploaded in pdf/A format to the [TUbama portal](#) of TU Darmstadt (test the upload in due time before!). No paper version is needed. The MT must contain a signed "Thesis Statement pursuant to § 22 paragraph 7 of APB TU Darmstadt". Alternatively, a scan of this statement may also be sent separately to studienbuero@mawi.tu-darmstadt.de when turning in the thesis.

In exceptional cases you may request an extension of the deadline for max. half of the original preparation time with an extension application form (available for download on Master web page) signed by you and your advisor. This request should be directed towards the chair of the exams committee and should be submitted to the office of student affairs. Extensions of the deadline can only be granted in justified exceptional cases and must be requested in time, i.e. as soon as you know that there is a delay. Last-minute extensions are usually due to bad time management during writing and thus are not justified. Please note that your time management is part of your graded research performance. Late submissions will result in a "fail" grade.

6. Refereeing will be done by two professors of TU Darmstadt (at least one of the two should be from the materials science department). If the MT is prepared externally, special rules apply. See the "Additional Guidelines external Master Thesis" on the Master web page. The referee reports should be submitted within four weeks after MT submission.

FAME^{AlS} and AMIS program students with first year in Grenoble: To avoid problems in obtaining your degree from the partner university and the FAME^{AlS} or AMIS certificate, your MT should be graded before 20th September (Please inform your thesis referees about this deadline!). For this reason, the MT should to be submitted before September 10th.

The chair of the exams commission, the dean of studies, the coordinator of studies
Status May 2024