

MASTER OF SCIENCE PROGRAM IN MOLECULAR AND CELLULAR BIOLOGY



Master's thesis guidelines

General information regarding the Master's thesis and all relevant forms (internal master's thesis registration and external master's thesis application and registration, list of internal supervisors, start and ending dates, application for master's thesis extension and the last page) can be found in the downloads section of the master's website:

https://www.mcb.bio.lmu.de/downloads/index.html

Master's thesis project (26 ECTS credits)

- The master's thesis consists of an independent research project over a period of 24 weeks.
- You can only start your master's thesis if you have successfully completed your first semester (i.e. the two mandatory modules "Lab Methods" and "Computational Biology" and 18 ECTS credits from the compulsory elective modules) and at least 30 ECTS credits from the compulsory elective modules of the second and/or third semester.
- The master's thesis project should be carried out under the supervision of a member of the Faculty of Biology of the LMU Munich
- The topic of the master's thesis project should be in the field of biology. The topic can only be changed once and only within two weeks after the beginning of the project.
- No ECTS credits can be awarded for research courses for which you receive pay.
- The total length of the thesis should be 40-60 pages, excluding attachment.

For thesis projects with starting date on August 1, 2024 or later

Rules for the use of artificial intelligence (AI) tools for examination-relevant activities

- 1. The use of Al tools for examination-relevant performances is possible.
- 2. The use of AI tools to optimize, translate and correct the spelling and grammar of self-generated texts and to optimize self-generated illustrations is permitted without indication.
- 3. Text sections and illustrations de novo generated by AI tools and used in the thesis must be clearly marked by footnotes/annotations at the appropriate places and the AI tool must be indicated analogously to literature sources. The prompts used have to be listed in the appendix.
- 4. Sections of the text generated through iterative use of Al tools should be marked.
- 5. The author is responsible for the correctness and proper presentation in written performances and presentations.
- 6. Sources / references must be cited in accordance with the rules of good scientific practice.

External master's thesis project

It is possible to carry out a master's thesis project in another institution or faculty than the Faculty of Biology of the LMU Munich if the Examination Board of the Master of Science program in Molecular and Cellular Biology approves the external project. In this case, it is necessary to arrange for an internal supervisor. The internal supervisor is responsible for assigning the grades.

Whether a master's thesis project is considered to be an external or internal one depends on your supervisor: If your supervisor is included in the list of internal supervisors, the master's thesis project will be regarded as an internal one - even if the project does not take place in the Biocenter or another building of the Faculty of Biology of LMU Munich.

Prior to starting a master's thesis project with an external supervisor, **the student is responsible for finding an internal supervisor** to sign for the project, ensuring that its content and execution meet the faculty standards. For this, student and external supervisor should provide a short outline of the goals of the master's thesis project.

After having arranged for an internal supervisor, but **prior to** starting the master's thesis project, the student must apply for its approval to the Examination Board of the Master of Science program in Molecular and Cellular Biology through the Examination Office ("Prüfungsamt"). Approval of the Examination Board must be obtained before the project begins, which in practice means that students will have to submit the combined *External Master's Thesis Application and Registration Form* to the Examination Office via E-mail (bpa@bio.lmu.de) or in person (LMU Biocenter, B00.056) at least 2 weeks prior to starting the external master's thesis project.

In addition to the filled and signed form the application for an external master's thesis project must include:

- a brief project description (1–2 pages),
- a timetable with monthly planning that is signed by the external supervisor.

Master's thesis disputation (1 ECTS credit)

As part of their thesis work, students should present their research to their supervisor(s), coworkers, and fellow students. The disputation (around 45 minutes in total) begins with a presentation of the thesis (around 20 minutes) and is followed by questions and a discussion. The graded disputation should take place within the group where the research was carried out or in the group meeting of the internal supervisor. The internal supervisor must attend the disputation, even in case of an external master's thesis project.

It is recommended to have the disputation take place within 2 weeks after submitting the thesis It can occur before thesis submission.

The remaining 3 ECTS credits for the completion of 30 ECTS for the entire master's module must be awarded for

- the regular participation in the lab group meetings of the research group in which the master's thesis is conducted (1.5 ECTS),
- the completion of the colloquia list (1.5 ECTS).

Registering the master's thesis

The thesis project and its official starting date must be registered with the Examination Office. The internal supervisor and the student must sign the forms:

Internal master's thesis registration form for internal projects,

or

• External master's thesis application and registration form for external projects.

Please note that the **starting date** of the thesis has to be on a **Monday!** The registration form can be submitted via email or in person anytime during the opening hours of the Examination Office, but by the Monday on which the master's thesis project starts at the latest.

If you plan to graduate before the start of a new semester, the master's thesis should start by the beginning of March (in case of a master's thesis in the summer semester) or by the beginning of September (in case of a master's thesis in the winter semester). You need to both submit and defend your thesis successfully **before** the start of a new semester if you do not wish to be enrolled for another semester.

Once registered, the master's thesis **must be completed within 24 weeks**. The exact due date will be provided by the Examination Office at the time of registration.

Extensions of deadline and interruption of the master's thesis

Extensions of the submission deadline are not granted in order to do more experiments or analyses, or to repeat failed experiments. An interruption of the thesis is only allowed in cases where the student is unable to work on the project due to medical reasons. In such cases, the student must apply to the Examination Office using the form "Application for master's thesis extension" and provide medical documentation of the exact dates that she/he was unable to work. The deadline can only be extended for this period of time.

Submitting the master's thesis

Two hard copies of the master's thesis with fixed, non-spiral binding must be submitted by the individual submission deadline that the student received upon registering the master's thesis project.

- The first hard copy of the master's thesis must be submitted to the Examination Office. It is recommended to do this in person so that it is confirmed that the thesis was submitted in time and arrived properly. However, if you do not manage to submit it during the office hours of the Examination Office, you can put the hard copy of the master's thesis in the mailbox of the Examination Office next to the porter on the ground floor of the Biocenter. In that case, you should request the porter to add a date stamp to the master's thesis of the day on which you hand in the thesis.
- The second hard copy of the master's thesis should be provided by the student to the internal supervisor by the individual submission deadline.

For the hard copy of the master's thesis to be submitted to the Examination Office **the filled** and signed *last page (including statement of originality)* is to be included (please see the different versions for thesis projects with starting date before or after July 15, 2024).

Grading of the master's thesis

The thesis can be submitted up to 4 weeks before the official submission date. After the thesis is submitted, the internal supervisor will be contacted by the Examination Office and asked to provide within 2 weeks:

- a signed hard copy or digital version of thesis evaluation with the thesis grade, and
- the date and grade of the thesis disputation.

For external thesis projects the external supervisor is to send an evaluation of the student's work to the internal supervisor within after the submission deadline.

Supervisors should contact their students directly to inform them of their grades and provide feedback. The Examination Office does not inform students of their grades for the master's thesis.

Please note that it is not possible to improve your grade of the master's thesis if you passed it (i.e. if you received a grade 4.0 or better).

Insufficient master's thesis project

- Late submissions are not accepted. If the master's thesis is not submitted by the submission deadline, the thesis will be marked "insufficient" and ECTS credits cannot be awarded.
- If a master's thesis is marked worse than "sufficient" (4.0), it can be repeated only **once** at the next possible time.