

Guidelines for the Master's Thesis in Medical Photonics

These guidelines contain the most important facts you have to keep in mind when applying for the assignment of your master's thesis. Please note, that the legally binding documents are only the German versions of the Study regulations and the Examination regulations of the M.Sc. programme 'Medical Photonics'.

Application

A student can apply for the master's thesis if he/she meets the conditions named in §17(2) of the examination regulations:

- he/she has to be enrolled as a student of the M.Sc. 'Medical Photonics' programme,
- has earned at least 72 credit points (ECTS) in the programme,
- has successfully completed all the practical training sessions (labworks) and
- has not definitely failed the master's thesis in the study programme 'Medical Photonics', or is involved in another examination process.

The application to register a master's thesis must be submitted at least three weeks before the candidate will start working on it and is to be addressed to the Examinations Committee. The master's thesis must be registered at the latest three weeks after the candidate has been informed that he/she has earned 90 ECTS.

Attached to the application must be

- proof that all prerequisites as stipulated in § 17 (2) of the examination regulations are met;
- a suggestion for the topic for the master's thesis as well as the desired supervisor, and
- a declaration on whether or not the candidate has already failed or definitely failed a master's thesis in the study programme 'Medical Photonics', and whether or not he/she is involved in any other examination process.

The examination committee or its chairperson decides on admission or non-admission to register a master's thesis.

Duration

The estimated workload of a master's thesis is 900 hours. It should be completed in a time frame of **six months**. Under some conditions, the deadline might be extended by three months (examination regulations §18(5)).

Topic of the Master's Thesis

A suggestion for the topic is supposed to be made by the student. The subject of the master's thesis can only be allocated after admission to write the master's thesis has been obtained. Upon reception of the application from the student, the chairperson of the Examination Committee ensures that the student is allocated a subject for his/her master's thesis in due time. The subject of the master's thesis can only be rejected and returned once and only in the first four weeks after the allocation thereof.

By writing and defending the master's thesis, students prove to be able to independently work on a problem or question from a subfield of medical photonics using scientific methods and within a given time frame (§6 Study regulations).

Supervisors / examiners

The work on the master's thesis is supervised by a supervisor appointed by the Examinations Committee from among the professors of the M.Sc. programme. The master's thesis is evaluated and graded by two examiners. One of the examiners is to be the one who supervised the work on the master's thesis. The second examiner is appointed by the chairperson of the examinations committee and suggested by the supervisor of the master's thesis.

Submitting the Master's Thesis

The master's thesis must be written in English and must be submitted to the Examinations Office of the Faculty of Medicine in **three printed and bound hard copies** within the approved time frame. In addition, an **electronic copy** (MS Word or PDF format) must be submitted.

When submitting his/her master's thesis, the candidate confirms in writing that he/she has written the thesis—or in case of group work, the part marked as his/her contribution—on her/his own, that no other sources or resources than those indicated were used, and that direct and indirect citations and ideas from somebody else are marked as such.

Oral presentation

The candidate presents the most important results, outcomes, or findings of his/her master's thesis in a **20 minute presentation** in English. In a subsequent academic discussion, the candidate is given the opportunity to defend the results, outcomes, or findings of his/her thesis. The defense takes place in a session open to all members of the faculties contributing to the programme.

Grading

The evaluation reports must be ready within 6 weeks of submission of the master's thesis and reasons for the grading are to be given. The final grade for the written part of the master's thesis is the arithmetic average of the two evaluations if the difference of the two is less than 1.5 grades. If the difference of the two grades given by the two examiners is higher than 1.5, a third expert opinion is sought. This also applies if one of the two examiners awards the grade 'not sufficient'.

Evaluation and grading of the presentation is done by the speaker, the examiners of the thesis, and the present members of the Examinations Committee in an open vote.

The overall final grade for the master's thesis is the weighted average of the grades given for the **written (2/3)** and the **oral (1/3)** parts. However, the master's thesis can only be graded as 'sufficient' if both, the grade for both, the written and the oral part are 'sufficient' or better.