

Guidelines for master's theses at the Faculty of Medicine and Health Sciences

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The guidelines apply from the 2024/2025 academic year.*

1. Purpose of the master's thesis

The purpose of the master's thesis is for students to carry out an independent, defined research project, under supervision and in accordance with applicable research ethics norms.

The master's thesis can either be an individual piece of work or two students can write a thesis together. The programme of study management, in consultation with the department management, determines what applies to each individual programme of study, and this must be stated in the master's thesis course description.

2. Supervision

Appointment of supervisor(s)

The programme of study management determines how the supervisor(s) is/are appointed. The supervisory relationship is formalised in a master's agreement: [NTNU's digital master's agreement](#)

Who can be a supervisor?

The student must have a supervisor who is employed in an academic position at NTNU throughout the entire master's project period. This supervisor is responsible for ensuring that the project and the supervision are in accordance with NTNU's regulations. Supervisors employed at NTNU must have a doctorate or be formally qualified for employment in positions which entail a completed doctorate or equivalent, but exceptions can be made in consultation with the head of department. The student may have several supervisors, including from external environments. If the student has several supervisors, the master's agreement must state who the main supervisor is. The supervision must include the academic, scientific and practical aspects of completing the master's thesis.

Content and scope

The student is entitled to supervision in accordance with the scope of the master's thesis (1 hour per credit). This includes all pre- and post-work for the supervisor(s) and not just supervisory meetings between the student and supervisor(s). The number of supervision hours applies per thesis, including when two students write a thesis together. In special cases, the supervisor's department may grant a greater number of supervision hours upon application.

The master's thesis must be an independent piece of work in which the student(s) is/are responsible for form and content. The supervision is a shared responsibility and the student(s) must play an active role. The supervision should primarily be at a general level and involve only minimal

attention to details. The supervisor(s) is not considered a co-author of any part of the master's thesis and should avoid leaving their own mark on the piece of work.

What happens if the supervisory relationship is problematic?

If either party fails to meet their obligations satisfactorily (according to the descriptions in the guidelines and the master's agreement) or if the supervisory relationship becomes problematic, the other party may request to be released from the supervision agreement. The student can then ask the department to appoint a new supervisor. If the supervisor is absent for a lengthy period of time due to the research term, illness, travel etc., the department must appoint a new supervisor, if the student so wishes. Any challenges/problems are managed by the responsible department.

3. Topics, research questions and project description

The student must choose a topic for the master's thesis that is relevant to the subject area, and in accordance with the course description for the master's thesis. Topics, research questions and project descriptions are developed in consultation with the supervisor(s).

The project description must be clearly formulated and should, for example, include:

- Title of the master's thesis
- Introduction/background
- Purpose and research question(s)
- Methodology
- Research ethics (any plan for obtaining approvals REK/SIKT/DPIA etc.)
- Risk assessment of the project
- Timetable
- Budget (if applicable)
- References
- Any attachments (forms, approvals, etc.)

Approval of the project description

The topic, research question(s) and project description for the master's thesis must be approved by the programme of study. This is done through the master's agreement.

4. Form, content and scope of the master's thesis

Within the framework described here, the programmes of study may have additional specifications regarding the form, content and scope of the master's thesis. In such cases, the programmes of study must have a written description of these specifications and make it known to the students.

The master's thesis scope requirements are specified in the course description of the master's thesis.

The master's thesis must be designed systematically, for example according to IMRaD structure, and may include the following points:

- Title page
- Table of contents
- Summary
- Introduction/background/any theoretical specialisation
- Purpose and research question(s)
- Methodology (including research ethics considerations)
- Results
- Discussion of results and methodology
- Conclusion
- References
- Any attachments/appendices

Results and discussion of results may be written as a combined chapter.

The master's thesis may be designed as a scientific article. In such cases, students choose a scientific peer-reviewed journal (national or international), and the article must follow the article guidelines stipulated by the journal in question. The programme of study determines whether the scientific article should be accompanied by an explanatory text (kappe) and what content and scope this text should have.

The master's thesis may, if the course description allows for it, be conducted as a systematic literature review. A master's thesis based on a systematic literature review (review study) may employ different review methods depending on the scope and objectives of the research. Systematic reviews must be structured in a way that is appropriate for the type of review study, meet academic standards for the field of study, and be scaled according to the scope of the master's thesis. Students must, together with their supervisors, determine the most appropriate type of systematic review for their project.

Language used in the master's thesis

Students admitted to a Norwegian-language master's programme can write their master's thesis in Norwegian, other Scandinavian languages or English. The master's thesis must contain a brief summary in both English and Norwegian/other Scandinavian languages.

Students admitted to an international master's programme must write the master's thesis in English. The master's thesis must contain a brief summary in both English and Norwegian/other Scandinavian languages. Students who are not proficient in Norwegian or other Scandinavian languages may write summaries in English only.

5. Ethics and data management

All master's projects must follow national and international research ethics principles [Ethics at NTNU - Knowledge base - NTNU](#). This includes both general research ethics guidelines [General guidelines | Forskningsetikk](#) and specific research ethics guidelines for medicine and health sciences [Medical and health research | Forskningsetikk](#). In addition, all research must take place in accordance with applicable legislation and internal guidelines at NTNU.

The main supervisor is responsible for relevant applications and for ensuring that the necessary approvals and documentation are in place before the work on the project begins. This includes REK approval for health research projects or a notification form to Sikt (Norwegian Agency for Shared Services in Education and Research) when processing personal data. In addition, a risk assessment for data protection/information security and, if applicable, a Data Protection Impact Assessment (DPIA) for the project must be carried out and documented. For projects involving animals, guidelines and legislation regarding animal testing must be followed. Projects classified as clinical treatment research must be registered in relevant registries before initiation in accordance with the requirements of this type of study. If the master's project is carried out in collaboration with external institutions such as health trusts or municipalities, it is important to ensure strong support from and alignment with the organisation's leadership. Even if the master's project involves the use of data that has already been collected, it may still be necessary to seek approval for a new research question. All research projects at NTNU must have a data management plan [Data management plan - Knowledge base - NTNU](#).

If the master's project is part of a larger research project, NTNU still recommends that a risk assessment and data management plan be created for the part of the project covered by the master's thesis. If this is not done, the supervisor must review these documents with the student so that the student is aware of the risks and consequences of the research they are conducting.

Students' access to and handling of confidential information must comply with the restrictions set by applicable laws and guidelines. Before personal data is processed in student projects, either the e-learning course '[Introduction to personal data in research](#)' or '[Introduction to personal data in health research](#)' must be completed by the student. Personal data must be processed as described in the guidelines for 'Collection of personal data for research projects' [Collection of personal data for research projects - Knowledge base - NTNU](#) and in accordance with Guidelines for health research (<https://i.ntnu.no/helseforskning>).

According to applicable guidelines at NTNU, the head of department is the person responsible for the master's project. Where several departments are involved, the head of department at the main supervisor's department is the person responsible for research. For clinical projects involving patients, the person responsible for research at the external institution(s) must also be stated. See also 'Roles and responsibilities in health research projects - health research' [Roles and responsibilities in health research projects - health research - Knowledge base - NTNU](#)

6. Submission of the master's thesis

Students register for the examination under the course code for the master's thesis in StudentWeb during the semester the thesis is to be submitted. The master's thesis is submitted in pdf format in Inspira Assessment. More information about the submission and completion of master's theses can be found at: [Master Thesis at the Faculty of Medicine and Health Sciences - MH - Knowledge base - NTNU](#)

The master's thesis is considered submitted when the pdf file is submitted in Inspira Assessment.

Submission deadline

The submission deadline for the master's thesis is 15 May for students who finish their master's degree in the spring semester and 15 November for students who finish their master's degree in the

autumn semester. If the submission date falls on a Saturday, Sunday or other public holiday, the deadline is moved to the next working day. If the master's thesis is not submitted before the deadline expires without this being agreed on and approved by the department in advance, the thesis will be registered as not being submitted and the student will have used up one of their two attempts to have the thesis assessed.

Leaves of absence and deferred submission deadline

In the event of illness, childbirth or military service, students may apply for a leave of absence. The submission deadline will then be extended corresponding to the amount of leave granted. It is preferable that the master's thesis is submitted on the next ordinary submission date. Applications for leaves of absence are submitted to the department.

For other compelling reasons, such as data collection issues or short-term illness, students can apply to the department for a three-month deferred submission deadline. Applications for deferred submission deadlines must be submitted as early as possible and no later than two weeks before the original submission deadline. If a student is unable to complete their thesis before the new deadline expires, it is possible to apply for an additional three-month deferred deadline. It is not possible to apply for a deferred deadline more than twice. Deferred submission does not entitle students to additional supervision beyond what is outlined in Section 2.

7. Grading and examination

Examiners

The master's thesis must be assessed by two examiners, at least one of which must be an external examiner. The external examiner must not have had an employment relationship at NTNU in the last year. The student's supervisor(s) cannot be the examiner(s). The examiners must have at least a master's degree or equivalent qualifications. At least one of the examiners must be formally qualified for employment in positions which entail a completed doctorate or equivalent.

The head of department appoints the examiners and assesses impartiality in accordance with Section II of the Public Administration Act. If the assessment scheme includes an adjusting oral examination, the student must be made aware of who the examiners will be prior to the final oral examination.

Assessment of the master's thesis

The master's thesis is generally assessed based on the written work and an adjusting oral examination involving the student and both examiners. Alternatively, the master's thesis can be assessed based on the written work alone. The applicable assessment scheme is determined by each individual programme of study in consultation with the head of department and must be stated in the course description for the master thesis.

The department must ensure that the master's thesis is submitted for grading and that the deadline for submitting grades is complied with. Grading normally takes place within three months after the master's thesis has been submitted. Determination of grades is a joint decision, taking into account the assessments of both examiners. In the event of disagreement, the external examiner's assessment is given the greatest weight.

If the assessment scheme includes an adjusting oral examination, the examiners give the master's thesis a preliminary grade prior to the oral examination. If the written work is given a grade F (fail), the oral examination is not held. The oral examination can be used to adjust the grade given to the written work by one grade up or down. If the supervisor(s) is/are present during the examination, they must not participate in the oral examination. Final grades must be given immediately after the oral examination is held. The only information the student receives is the final grade.

Grading scale

In relation to master's thesis assessment, NTNU's applicable grading scale and associated descriptions of the grades are used: [Description of grades for master thesis - Knowledge base - NTNU](#)

Failed master's thesis

If a student receives a grade F (fail), a new or revised thesis with significant changes may be submitted for assessment one additional time. In consultation with the student and supervisor(s), the course coordinator for the master's thesis sets a new submission deadline not exceeding six months. The head of department determines how much supervision the student is entitled during the revision process (approximately 10 hours).

Once a student has received a pass grade for their master's thesis, they cannot have a new thesis assessed within the same programme of study.

8. Publishing and delayed publication of master's theses

NTNU strongly encourages the publication of all bachelor's and master's theses, as this enhances the visibility of NTNU's scientific activities. All master's theses submitted through the use of the thesis sets in Inpera Assessment can be automatically published in [NTNU Open - NTNU's institutional archive](#). Students must agree to the publication of their thesis in a publishing agreement with NTNU. This agreement is entered into in Inpera as part of the submission process.

It is possible to agree on delaying the publication of a thesis. The thesis will be put on hold until the delayed publication date has passed, and then it will be sent for archiving/publication. Delayed publication must always be agreed on with the responsible department and supervisor(s) before submitting the thesis. The delayed publication is registered in Inpera Assessment by the department administration.

A common reason for delayed publication is that the thesis is intended to be used in later work with regard to publication. Any publication is agreed on between the student and the supervisor(s). The publication must adhere to standard authorship rules (cf. Vancouver recommendations). Upon publication, the student's department and faculty at NTNU must be used as the author's address.