INFORMATION GUIDE FOR BACHELOR'S AND MASTER'S THESES ADVISERS

Universitetet i Stavanger

THE FACULTY OF SCIENCE AND TECHNOLOGY

1. Contents

1. INTRODUCTION

A bachelor's or master's thesis can be

- An internal or external thesis that the department announces
- An external thesis that the student(s) has/have acquired on their own
- An internal thesis that the student(s) have created

External theses shall have an external adviser. For internal theses, the person with academic responsibility and the adviser are often one and the same person.

Having a person with academic responsibility for a bachelor's or master's thesis means that you shall

- Approve the level and scope of the thesis
- Sign a contract with the student(s) so that selection can be made by the deadline; see Table 1
- Approve the work schedule
- Together with any adviser set aside enough time for following-up the student(s). The student is entitled to five guidance sessions with the person with academic responsibility throughout the semester in addition to any guidance session in any company.
- Review and provide feedback on report drafts prior to submission
- Check the thesis for any plagiarism following submission online (using the UiS approved plagiarism checker)
- Ensure that examiners are appointed. Deadlines are shown in Table 1; cf. Section 4-2 of the Academic and Exam Regulations
- Assess the thesis by the deadlines shown in Table 1

The next chapter will provide supplementary information about some of this, and finally there will be referrals to relevant forms and documents.

1.1 Deadlines

An annual planner for bachelor's and master's theses is shown below.

Thesis:	**Bachelor's thesis, 15 credits** (from spring 2015: 20 credits)	**Master's thesis, 30 credits**	**Master's thesis, 60 credits**
Deadline for the departments to hold the information meeting	15/10	1/11	15/3
Deadline for the departments to announce their theses on *itslearning*	15/10	1/11	15/3
Deadline for thesis application (also applies to registration of external theses)	15/11	1/12	1/4
Deadline for the departments to announce their theses on *itslearning*	1/12	15/12	15/4
Deadline for formal selection of theses	15/1	1/2	15/9
Which semester the thesis involves	Spring	Spring	Autumn and spring
Deadline for the departments to get examiners	15/5	15/5	15/5
Withdrawal prior to deadline for theses that are selected for the spring semester	01/04	01/04	01/04
Withdrawal prior to deadline for theses that are selected for the autumn semester	01/11	01/11	01/11
Submission deadline	15/5	15/6	15/6
Assessment deadline	6 weeks	12 weeks	12 weeks

Table 1

*Note in particular Section 1.7 of the *Rules for Bachelor's and Master's Theses* that states:

«The withdrawal deadline for bachelor's and master's theses can be found in Section 2-9 No. 6 of the academic and exam regulations:

- *Theses registered/selected for the autumn semester: Withdrawal prior to deadline: **1 November***
- *Theses registered/selected for the spring semester: Withdrawal prior to deadline: **1 April***

Oral messages regarding withdrawal are not valid. If a candidate who has registered for a bachelor's or master's thesis withdraws after the set deadline or does not submit their thesis within the deadline without a valid reason, this will be considered as having been presented for assessment. The student is responsible for documenting that withdrawal prior to assessment was done within the set deadline; cf. Section 2-9 No. 4 of the Academic and Exam Regulations»

2. SCOPE 5

The scope of a thesis is 30 hours per credit based on the faculty's prescribed workload. Thus, a master's thesis with a scope of 30 credits will entail a prescribed workload of 900 hours. It is important that the students take this into account when preparing a work schedule. From spring 2015, a bachelor's thesis with a scope of 20 credits will be equivalent to about 600 hours' work. These 20 credits will include a mandatory study section that deals with scientific theory and ethics. This part must be passed in order to be able to submit the actual bachelor's thesis.

The scope for the person with academic responsibility is also specified by the faculty's norms. These can be found in the work plan.

The scope of the follow-up work will vary considerably based on the nature of the project and the relevant students. It should be possible to set aside up to one–two hours per week in addition to preparatory and follow-up work.

3. EXEMPTIONS

Occasionally, it may be necessary to apply for exemption from the body of rules. The persons with academic responsibility must always recommend/not recommend the application before it is forwarded to the head of the department. The head of the department will either make a decision about the case or suggest a decision to the dean.

A common exemption is for doing a thesis at different times to those shown in the year planner in Table 1. In Section 1.11 of the rules, the following is stated:

«*... An written application with reasons must be sent to the department if the time for doing the thesis must be changed. If the student is allowed to do the thesis at another time, an individual schedule for selecting and doing the thesis must be set, and the maximum time from selection and submission cannot exceed five months. For a master's thesis of 60 credits, the maximum time is set at 10 months. An exemption application to change the time of doing the thesis and the individual schedule for selecting and doing the thesis must be approved by the head of the department.*»

Please note here that the department can grant an exemption from the maximum time between selection and submission if during the thesis there are, for example, longer periods where laboratories are closed or the person with academic responsibility is on holidays so that there is no guidance available to the student(s).

During holidays, it is important to check that compliance with HSE (health, safety and the environment) rules is possible.

Another common exemption is an extended submission deadline. Conditions for this and how such an exemption should be processed can be found in Section 3.7-8 of the rules.

As the person with academic responsibility, it is also important to be familiar with the rules that apply when a thesis fails; see Section 3.6 here.

4. OWNERSHIP AND RESTRICTIONS ON USE

In Section 5.1-6 of the Rules for Bachelor's and Master's Theses, there are guidelines on copyright and using a thesis:

The student(s) own copyright of the thesis. The student(s) are entitled to publish their thesis

or parts of it as an independent work, as part of a larger work or in popularised form in an arbitrary public publication. Without permission, however, this does not apply to material that is placed at the disposition of a company and that is directly reproduced in the thesis or in an appendix to it. Similar permission is required by the person with academic responsibility for material that is at this person's disposal.

The copies of the thesis submitted with drawings, models and apparatuses as well as computer software that are included as part of or as appendices to the thesis belong to UiS. UiS is free to make copies of all or parts of the thesis and supplementary material for the purpose of teaching and research. The student(s) shall be named in each copy in accordance with the law and best practice. «

If a thesis should be blocked, an agreement should always be entered into. Other agreements are only required in special cases such as if you are planning to patent the result of a thesis or for other use apart from that specified in Section 5.1-3.

5. ASSESSMENT

5.1 Bachelor's thesis

(All italicised text was taken straight from a document for NRT [*Nasjonalt råd for teknologisk utdanning* – The National Council for Technology Education]).

5.1.1 Grade descriptions and assessment criteria for examiners of bachelor's theses in engineering.

Grade descriptions and assessment criteria for examiners of bachelor's theses in engineering were prepared by NRT. The descriptions are prepared in accordance with the national qualification framework for higher education and the framework plan for engineering education regulations set by Kunnskapsdepartementet (the Ministry of Education and Research) on 3 February 2011. From spring 2014, the descriptions should be used for all bachelor's theses in engineering according to the new framework plan.

Steps in the grading scale	***Designation***	***Description***
A	*Excellent*	1. ***An excellent performance that is clearly outstanding where****:* 2. *The candidate demonstrates a very good engineering insight and a particularly high degree of specialised knowledge.* 3. *The candidate can select and use relevant academic theory and methods in a very convincing manner.* 4. *The candidate can prepare a very clear and relevant topic and plan and carry out very high-quality engineering work.* 5. *The work appears advanced and/or innovative. A sound academic basis and reasoning underlie the analysis and discussion and are clearly connected to the topic. The candidate's ability to reflect is particularly good with a clear distinction between own and others' contributions.* 6. *Form, communication, structure and language are of a particularly high standard.*
B	*Very good*	1. ***A very good performance where:*** 2. *The candidate demonstrates a very good engineering insight and a high degree of specialised knowledge.* 3. *The candidate can select and use relevant academic theory and methods in a very convincing manner.* 4. *The candidate can prepare a very clear and relevant topic and plan and carry out very high-quality engineering work.* 5. *The work appears to be very good and/or innovative. A very good academic basis and reasoning underlie the analysis and discussion and are clearly connected to the topic. The candidate's ability to reflect is very good with a clear distinction between own and others' contributions.* 6. *Form, communication, structure and language are of a very high standard.*

C	*Good*	1. ***A good performance where:*** 2. *The candidate demonstrates a good engineering insight and a good degree of specialised knowledge.* 3. *The candidate can select and use relevant academic theory and methods effectively.* 4. *The candidate can prepare a clear and overall relevant topic and plan and carry out good-quality engineering work.*

		5. *The work appears to be good with a touch of creativity. A good academic basis underlies the analysis and discussion and is connected to the topic. The candidate's ability to reflect is good and, overall, there is a clear distinction between own and others' contributions.* 6. *Form, communication, structure and language are of a good standard.*
D	*Satisfactory*	1. ***A satisfactory performance where:*** 2. *The candidate demonstrates a satisfactory engineering insight and a satisfactory degree of specialised knowledge.* 3. *The candidate can mostly use relevant academic theory and methods.* 4. *The candidate can prepare a clear and overall relevant topic where the objectives of the thesis may be not particularly clearly defined. The planning and execution of the engineering work is of an acceptable standard.* 5. *The work appears to be satisfactory. A good academic basis underlies the analysis and discussion and is connected to the topic, but there is room for improvement. The candidate's ability to reflect is good, but the lines between distinguishing between own and others' contributions can be blurred.* 6. *Form, communication, structure and language are of an acceptable standard.*
E	*Adequate*	1. ***An acceptable performance in that it meets the minimum requirements, where:*** 2. *The candidate demonstrates adequate engineering insight and specialised knowledge.* 3. *The candidate can, to a certain extent, use relevant academic theory and methods.* 4. *The candidate can prepare an adequately-clear topic where the objectives of the thesis are described but unclear. The planning and execution of the engineering work is of an acceptable standard, but the candidate demonstrates limited academic progression and requires close follow-up.* 5. *The work appears to be relatively modest and somewhat fragmented. An adequate academic basis underlies the analysis and discussion, but it ought to have been better connected to the topic. The candidate's demonstrates the required ability for reflection, but the lines between distinguishing between own and others' contributions can be blurred.* 6. *The presentation overall is acceptable but there are noticeable deficiencies in relation to form, communication, structure and language.*

F	*Fail*	***1. A performance that does not meet the minimum requirements, where:*** *2. The candidate lacks the necessary engineering insight and does not demonstrate adequate specialised knowledge.* *3. The candidate demonstrates a failure to use relevant academic theory and methods.* *4. The candidate's fails to prepare an adequately-clear topic, and the objectives are not clearly defined or described. The planning and execution of the engineering work is unacceptable.* *5. The work appears to be modest and somewhat fragmented. An inadequate academic basis underlies the analysis and discussion and is only loosely connected to the topic. The candidate's does not demonstrate the required ability for critical self-reflection, and there is little distinction between own and others' contributions.* *6. The presentation has noticeable deficiencies in relation to form, communication, structure and language.*

Comprehensive descriptions of the points that are used to describe steps in the grading scale for bachelor's theses in engineering.

In the descriptions, work means the written thesis and any product as well as any oral presentation.

1. ***General impression***

   Overall impression*: Overall impression of the work.*

   Independence*: To what extent has the candidate independently generated important elements/topics/ideas in the thesis? Can the candidate find and use relevant literature and methods independently and carry out an independent research or development project under supervision? Does the candidate show initiative? What type of help and guidance has the candidate received during different phases of the work? Has the candidate demonstrated the ability to utilise the research environment's technical expertise in the candidate's work?*

   Level*: Assessment of the individual criteria is done in accordance with the bachelor's degree in engineering.*

   Time*: A prerequisite for assessment of the work is that it is submitted within the prescribed time.*

2. ***Engineering insight***

   How well is the basis of the engineering work described? For example, is the work set in an overall system perspective and does it for example demonstrate life-cycle, environmental, health,
   societal, economic and ethical perspectives? To what extent can the candidate(s) update their knowledge within the field of study, through both gathering information and contact with research groups and practice?

3. ***Theoretical insight***

   To what extent does the documented work demonstrate good theoretical insight, specialisation in a separate engineering subject as well as knowledge of relevant research and development and methods and work methods?

4. ***Execution***

   Description of objectives*: To what extent is the topic together with the background and objectives presented in a clear way that can be understood?*

   Skill level*: To what extent does the documented work demonstrate the ability to plan and carry out engineering work (projects, work tasks, trials and experiments)? To what extent does the documented work demonstrate the ability to obtain, assess, use and refer to information and subject material and present these in a way that highlights a topic?*

5. ***Results***

   The result*: To what extent is the work based on previous research and development work? Does the work demonstrate quality and creativity, and does it contribute to lateral thinking, innovation or the realisation of sustainable socially-beneficial products, systems and/or solutions?*

   Analysis and discussion*: To what extent do the academic basis and reasoning underlie the analysis and discussion and are clearly connected to the topic? To what extent is the evaluation of the results based on a methodical approach?*

   Reflection*: To what extent is a reasonable assessment of the significance of the results given? Does the candidate adopt a critical approach to different information sources? Are uncertainties such as method errors, measurement errors, etc. assessed and discussed? Are relevant subject, occupational, societal and research-ethical topics analysed?* ***Own contribution/achievement of objectives****: To what extent does/do the candidate(s) manage to distinguish between their own and others' contributions (sources and clear references)? To what extent does the conclusion of the report give a good representation of the extent to which objectives were achieved? Is there a reasonable suggestion for further work or dissemination, implementation or use of the results?*

6. Presentation

Structure: Is the written work structured and logically constructed? Is the work generally straightforward? Has a uniform style been used for references, tables and figures? Form and communication: To what extent are the topic and results communicated with the required academic and linguistic precision? To what extent is the topic easy to read and of good linguistic quality? How good is the quality of figures and tables? How good is the quality of any product? How good is the quality of any oral presentation?

Examination form for a bachelor's thesis in engineering

The extent that the individual assessment point will be weighted can be discussed with the candidate(s) and any external adviser before work on the bachelor's thesis is started.

Assessment of	***Weighting percentage***	***Weighting for the relevant thesis*** *(possible example for a practically-orientated thesis)*	***Sub point***	***Comments***	***Assessment***	***Final score/grade***
1. General impression	*10–15*	*10*	*Overall impression* *Independence* *Level* *Time*			
2. Engineering insight	*15–25*	*25*	*In addition to the specified assessment criteria, a sub point can be set for the individual thesis*			
3. Theoretical insight	*15–25*	*15*	*In addition to the specified assessment criteria, a sub point can be set for the individual thesis*			
4. Execution	*15–25*	*20*	*Description of objectives* *Skill level*			
5. Results	*15–25*	*20*	*The result* *Analysis and discussion* *Reflection* *Own contribution/achievement*			
6. Presentation	*10–15*	*10*	*Structure* *Form and communication Work*			
Final grade						

Connection between the score and grades (the same scale as the one suggested for assessing master's theses in MNT [mathematics, natural sciences and technology] subjects is used here):

A: 90–100 points
B: 80–89 points
C: 60–79 points
D: 50–59 points
E: 40–49 points
F: 0–39 points

5.1.2. Grade descriptions and assessment criteria for examiners of bachelor's theses in natural sciences

Grade descriptions and assessment criteria for examiners of bachelor's theses in natural sciences based on the grade descriptions and assessment criteria for bachelor's theses in engineering prepared by NRT. Grade descriptions and assessment criteria for examiners of bachelor's theses in engineering are prepared in accordance with the national qualification framework for higher education and the framework plan for engineering education regulations set by the Ministry of Education and Research on 3 February 2011. From spring 2014, the descriptions should be used for all bachelor's theses in natural sciences.

Steps in the grading scale:	**Designation:**	**Description:**
A	Excellent	1. An excellent performance that is clearly outstanding where: 2. The candidate demonstrates very good academic insight and a particularly high degree of specialised knowledge. 3. The candidate can select and use relevant academic theory and methods in a very convincing manner. 4. The candidate can prepare a very clear and relevant topic and plan and carry out very high-quality academic work. 5. The work appears advanced and/or innovative. A sound academic basis and reasoning underlie the analysis and discussion and are clearly connected to the topic. The candidate's ability to reflect is particularly good with a clear distinction between own and others' contributions. 6. Form, communication, structure and language are of a particularly high standard.

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B	Very good	1. A very good performance where: 2. The candidate demonstrates a very good academic insight and a high degree of specialised knowledge. 3. The candidate can select and use relevant academic theory and methods in a very convincing manner. 4. The candidate can prepare a very clear and relevant topic and plan and carry out very high-quality academic work. 5. The work appears to be very good and/or innovative. A very good academic basis and reasoning underlie the analysis and discussion and are clearly connected to the topic. The candidate's ability to reflect is very good with a clear distinction between own and others' contributions. 6. Form, communication, structure and language are of a very high standard.

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C	Good	1. A good performance where: 2. The candidate demonstrates good academic insight and a good degree of specialised knowledge. 3. The candidate can select and use relevant academic theory and methods effectively. 4. The candidate can prepare a clear and overall relevant topic and plan and carry out good-quality engineering work. 5. The work appears to be good with a touch of creativity. A good academic basis underlies the analysis and discussion and is connected to the topic. The candidate's ability to reflect is good and, overall, there is a clear distinction between own and others' contributions. 6. Form, communication, structure and language are of a good standard.
D	Satisfactory	1. A satisfactory performance where: 2. The candidate demonstrates a satisfactory academic insight and a satisfactory degree of specialised knowledge. 3. The candidate can mostly use relevant academic theory and methods. 4. The candidate can prepare a clear and overall relevant topic where the objectives of the thesis may be not particularly clearly defined. The planning and execution of the academic work is of an acceptable standard. 5. The work appears to be satisfactory. A good academic basis underlies the analysis and discussion and is connected to the topic, but there is room for improvement. The candidate's ability to reflect is good, but the lines between distinguishing between own and others' contributions can be blurred. 6. Form, communication, structure and language are of an acceptable standard.

E	Adequate	1. An acceptable performance in that it meets the minimum requirements, where: 2. The candidate demonstrates adequate academic insight and specialised knowledge. 3. The candidate can, to a certain extent, use relevant academic theory and methods.

		4. The candidate can prepare an adequately-clear topic where the objectives of the thesis are described but unclear. The planning and execution of the academic work is of an acceptable standard, but the candidate demonstrates limited academic progression and requires close follow-up. 5. The work appears to be relatively modest and somewhat fragmented. An adequate academic basis underlies the analysis and discussion, but it ought to have been better connected to the topic. The candidate's demonstrates the required ability for reflection, but the lines between distinguishing between own and others' contributions can be blurred. 6. The presentation overall is acceptable but there are noticeable deficiencies in relation to form, structure and language.
F	Fail	1. A performance that does not meet the minimum requirements, where: 2. The candidate lacks the necessary academic insight and does not demonstrate adequate specialised knowledge. 3. The candidate demonstrates a failure to use relevant academic theory and methods. 4. The candidate's fails to prepare an adequately-clear topic, and the objectives are not clearly defined or described. The planning and execution of the academic work is unacceptable. 5. The work appears to be modest and somewhat fragmented. An inadequate academic basis underlies the analysis and discussion and is only loosely connected to the topic. The candidate's does not demonstrate the required ability for critical self-reflection, and there is little distinction between own and others' contributions. 6. The presentation has noticeable deficiencies in relation to form, communication, structure and language.

Comprehensive descriptions of the points that are used to describe steps in the grading scale for bachelor's theses in natural sciences.

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In the descriptions, work means the written thesis and any product as well as any oral presentation.

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1. **General impression**

   Overall impression: Overall impression of the work.

   Independence: To what extent has the candidate independently generated important elements/topics/ideas in the thesis? Can the candidate find and use relevant literature and methods independently and carry out an independent research or development project under supervision? Does the candidate show initiative? What type of help and guidance has the candidate received during different phases of the work? Has the candidate demonstrated the ability to utilise the research environment's technical expertise in the candidate's work?

   Level: Assessment of the individual criteria is done in accordance with the bachelor's degree in natural sciences. **Time**: A prerequisite for assessment of the work is that it is submitted within the prescribed time.

2. **Academic insight**

   How well is the academic basis described? To what extent can the candidate(s) update their knowledge within the field of study, through both gathering information and contact with research groups?

3. **Theoretical insight**

   To what extent does the documented work demonstrate good theoretical insight, specialisation in a separate subject as well as knowledge of relevant research and development and methods and work methods?

4. **Execution**

   Description of objectives: To what extent is the topic together with the background and objectives presented in a clear way that can be understood?

   Skill level: To what extent does the documented work demonstrate the ability to plan and carry out good-quality academic work (projects, work tasks, trials and experiments)? To what extent does the documented work demonstrate the ability to obtain, assess, use and refer to information and subject material and present these in a way that highlights a topic?

5. **Results**

   The result: To what extent is the work based on previous research and development work? Does the work demonstrate quality and creativity, and does it contribute to lateral thinking or innovation?

   Analysis and discussion: To what extent do the academic basis and reasoning underlie the analysis and discussion and are clearly connected to the topic? To what extent is the evaluation of the results based on a methodical approach?

   Reflection: To what extent is a reasonable assessment of the significance of the results given? Does the candidate adopt a critical approach to different information sources? Are uncertainties such as method errors, measurement errors, etc. assessed and discussed? **Own contribution/achievement of objectives**: To what extent does/do the candidate(s) manage to distinguish between their own and others' contributions (sources and clear references)? To what extent does the conclusion of the report give a good representation of the extent to which objectives were achieved? Is there a reasonable suggestion for further work or dissemination, implementation or use of the results?

6. **Presentation**

   Structure: Is the written work structured and logically constructed? Is the work generally straightforward? Has a uniform style been used for references, tables and figures? Form and communication: To what extent are the topic and results

communicated with the required academic and linguistic precision? To what extent is the topic easy to read and of good linguistic quality? How good is the quality of figures and tables? How good is the quality of any oral presentation?

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Examination form for a bachelor's thesis in natural sciences

The extent that the individual assessment point will be weighted can be discussed with the candidate(s) and any external adviser before work on the bachelor's thesis is started. See the examination form for a bachelor's thesis in engineering in page 12 of this document; the form can be used for bachelor's theses in natural sciences if desired.

Connection between the score and grades (the same scale as the one suggested for assessing master's theses in MNT subjects is used here:

A:	90–100 points
B:	80–89 points
C:	60–79 points
D:	50–59 points
E:	40–49 points
F:	0–39 points

5.1.3 Some information about grading

If two or more students work together on a thesis, they are all usually equally responsible for it and get the same grade. If an oral presentation/exam is included as part of the grade, different grades may be given. A student can request a written explanation of the assessment.

5.2 Master's thesis

5.2.1 Regarding the use of grade "A"

Regarding the grading of master's theses, the Faculty of Science and Technology has made the following decision regarding the use of grade 'A':

«An 'A' grade shall be accompanied by a brief description by the examiners to the head of the department, where originality and the suitability for publishing will be accounted for.»

NB! Separate forms have been prepared for reporting grades given for master's theses. If you are the person with academic responsibility for a master's thesis that is given a grade A, the **"***Reason for awarding a grade A***"** form must be completed and delivered to the department administration together with the completed examination form.

5.2.2 Regarding new grade descriptions for master's theses

In 2012, NFmR (*Det nasjonale fakultetsmøte for realfag* – The National Faculty Meeting for Natural Sciences) and NRT brought out new grade descriptions for master's theses in MNT. These will apply to master's theses submitted from the 2014 spring semester. The following are the reasons why these were introduced:

- Statistics prepared by UHR (*Universitets- og høgskolerådet* – The Norwegian Association of Higher Education Institutions) show that grades A and B were being given too frequently.
- The introduction of the qualification framework for higher education in 2012.

*NFmR and NRT are specialised strategic entities within the Norwegian Association of Higher Education Institutions (UHR)

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The grade descriptions are now specified for both the educational level and subject, e.g. MNT. In addition, the connection between learning outcome and grading has been made clear for advisers and examiners. It is expected that these measures will lead to the increased use of the grading scale.

Grade descriptions are documented as follows:

1. *Grade description for a master's work/thesis.*
2. *Examiner assessment,* which is a document for the examiner and the person with academic responsibility and which explains the criteria used in 1.
3. *Supervisor assessment,* which is a document for the person with academic responsibility and the adviser and deals with the criteria connected with following up masterwork.
4. *Standardised examination form,* which can act, for example, as a method for systematising assessments.

In addition NFmR and NRT created a report on their work, but this is not attached here.

5.2.3 *Grade description for a master's work/thesis*

What is required to achieve the different grades, is presented in the table below.

(All italicised text was taken straight from a document for NFmR and NRT).

Steps in the grading	***Designation***	***Description***
A	*Excellent*	***- An excellent performance that is clearly outstanding and, in a Norwegian context, demonstrates obvious researcher talent and/or originality.*** *- The candidate demonstrates a very good academic insight into the subject area's scientific theory and methods* *and has a high degree of specialised knowledge. The objectives of the thesis are clearly defined and easy to understand.* *- The candidate can select and use relevant academic methods in a convincing manner, possesses all the technical skills for the thesis,* *can plan and carry out very advanced tests or calculations unaided and works independently.* *- The work appears to be very comprehensive and/or innovative. A sound academic basis and reasoning underlie the analysis and discussion and are clearly connected to the topic. The candidate's ability for critical self-reflection is particularly good with a clear distinction between own and others' contributions.* *- The form, structure and language of the thesis are of a very particularly high standard.*
B	*Very good*	***- A very good performance that stands out.*** *- The candidate has a high degree of specialised knowledge and demonstrates good academic insight into the subject area's scientific theory and methods. The objectives of the thesis are clearly defined and easy to understand.* *- The candidate can select and use relevant academic methods, possesses most of the technical skills for the thesis, can plan and carry out very advanced tests or calculations unaided and works independently.* *- The work appears to be comprehensive and/or innovative. A very good academic basis and reasoning underlie the analysis and discussion and are clearly connected to the topic. The candidate's ability for critical self-reflection is particularly good with a clear distinction between own and others' contributions.* *- The form, structure and language of the thesis are of a particularly high standard.*

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C	*Good*	***- A good performance.*** *- The candidate has a good degree of specialised knowledge and demonstrates good academic insight into the subject area's scientific theory and methods. Overall, the objectives of the thesis are clearly defined, but some of the wording is unclear.* *- The candidate uses relevant academic methods effectively, possesses most of the technical skills for the thesis, can plan and carry out quite advanced tests or calculations unaided and works independently.* *- The work appears to be good with a touch of creativity. A good academic basis and reasoning underlie the analysis and discussion and are connected to the topic. The candidate's ability for critical self-reflection is good with a clear distinction between own and others' contributions.* *- The form, structure and language of the thesis are of a good standard.*
D	*Satisfactory*	***- A satisfactory performance*** *- The candidate has satisfactory specialised knowledge and demonstrates good insight into the subject area's scientific theory and methods. Some of the objectives of the thesis are not clearly defined.* *- The candidate can mostly use relevant academic methods, possesses the most important technical skills for the thesis, and can carry out tests or calculations unaided. The candidate works fairly independently, but requires close follow-up to ensure good academic progression and can have problems utilising the research environment's expertise in own work.* *- The work appears to be satisfactory. An academic basis and reasoning underlie the analysis and discussion and are connected to the topic, but there is room for improvement. The candidate's demonstrates the required ability for critical self-reflection but the lines between distinguishing between own and others' contributions can be blurred.* *- The form, structure and language of the thesis are of an acceptable standard.*
E	*Adequate*	***- An acceptable performance in that it meets the minimum requirements****.* *- The candidate has adequate specialised knowledge and demonstrates good academic insight into the subject area's scientific theory and methods. The objectives of the thesis are described but can be unclear.*

		- The candidate can use some relevant academic methods, possesses minimal technical skills for the thesis and can carry out some tests or calculations unaided, but demonstrates limited academic progression and requires close follow-up and has some topics utilising the research environment's expertise in own work. The work appears to relatively modest and somewhat fragmented. An adequate academic basis underlies the analysis and discussion, but it ought to have been better connected to the topic. The candidate's demonstrates the required ability for critical self-reflection but the lines between distinguishing between own and others' contributions can be blurred. *- The presentation is acceptable overall but there are noticeable deficiencies in relation to form, structure and language.*
F	*Fail*	***- A performance that does not meet the minimum requirements.*** *- The candidate does not have the required specialised knowledge and fails to demonstrate good insight into the subject area's scientific theory and methods. The objectives of the thesis are not clearly defined or are not described.* *- The candidate demonstrates a failure to use the subject area's methods, does not possess the desired technical skills and independence for the thesis and only utilises the research environment's expertise in own work to a minimal degree.* *- The work appears to be modest and somewhat fragmented. An inadequate academic basis underlies the analysis and discussion and is only loosely connected to the topic. The candidate's does not demonstrate the required ability for critical self-reflection, and there is little distinction between own and others' contributions.* *- The presentation has noticeable deficiencies in relation to form, structure and language.*

A student can request a written explanation of the assessment.

5.2.4. ***Examiner assessment***

The list below was designed for the examiner and the person with academic responsibility to assess the degree to which the candidate has achieved the objectives that have been described. The different objectives are included in the table in Section 5.2.3, and the text below provides a more detailed description of these.

(All italicised text was taken straight from a document for NFmR and NRT. Underlined words and terms were taken from the national qualification framework.)

Assess for each of the points below the extent to which the candidate has achieved the objectives that have been described.

Academic basis
Is the theoretical and academic basis well described so that the work is put into international research for the field of study?

Theoretical insight
Does the thesis, and in particular the introduction, document that the candidate has advanced knowledge of the field of study's general theory and methods and specialised insight into a specified area that is of particular significance for the thesis?

Description of objectives
Are the objectives and/or relevant hypotheses presented in a clear way that can be understood?

Skill level
Does the candidate have a good command of and use relevant methods in own work in an appropriate and integrated way?

The work
Does the work demonstrate creativity, and/or does it contribute to lateral thinking/innovation? Does the work give the impression of being particularly comprehensive? How are the quality and significance of new knowledge/results generated in the work assessed?

Analysis and discussion
Does an academic basis and reasoning underlie the analysis, interpretation/synthesis and discussion, and are they clearly connected to the topic? Is the discussion of a high academic level? Can the candidate use their knowledge and skills in new areas and use the results within a wider context?

Critical self-reflection
Does the candidate give a reasonable assessment of the significance of the results? Does the candidate adopt a critical approach to different information sources? Are uncertainties such as method errors, measurement errors, etc. assessed and discussed? Are relevant subject, occupational and research-ethical topics analysed?

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Own contribution/achievement of objectives
Can the candidate distinguish between own and others' contributions? Does the written work contain a conclusion where the results are summarised effectively together with an assessment of the extent to which the objectives were achieved? Is there a reasonable suggestion for further investigation or the potential for such?

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Structure
Has the written work been stringently constructed (according to an IMRaD [Introduction, Methods, Results and Discussion] structure)? Is the work generally straightforward?

Language
Can the candidate present the topic and results with the required academic precision? Is it easy to read and of a good linguistic quality?

Form
Has a uniform style been used for references, tables and figures? Is the quality of figures and tables satisfactory? Does the candidate have a good command of the forms of expressions used in the subject area?

5.2.5. *Supervisor assessment*

The supervisor assessment is a document for the person with academic responsibility and the adviser and deals with the criteria connected with following up masterwork. It also contains additional criteria that the person with academic responsibility and any adviser use for assessments.

(All italicised text was taken straight from a document for NFmR and NRT. Underlined words and terms were taken from the national qualification framework.)

Assess for each of the points below the extent to which the candidate has achieved the objectives that have been described.

Theoretical insight
Has the candidate generated important elements/topics/ideas in the thesis? Does the student use relevant resources (databases, etc.) to acquire relevant and updated literature and background knowledge for the work?

Skill level
Does the candidate have a good command of and use relevant methods in own work in an appropriate and integrated way?

Method of working
Does the candidate demonstrate the ability to plan and work methodically?

Work effort
Does the candidate demonstrate a very good work effort and solid academic engagement?

Independence
Can the candidate work and use relevant methods independently and carry out an independent research or development project under supervision? Does the candidate show initiative? What type of help and guidance has the candidate received during different phases

of the work? Has the candidate the ability to utilise the research environment's technical expertise in the candidate's work?

The work
Does the work demonstrate creativity, and/or contribute to lateral thinking/innovation? Does the work give the impression of being particularly comprehensive?

Time
A prerequisite for assessment of the work is that it is submitted within the prescribed time.

5.2.6 Standardised examination form for master's theses

The person with academic responsibility and the examiner agree on an examination plan. NFmR and NRT have designed an examination form that is shown below to assist with this. This can act, for example, as a method for systematising assessments.

Assessment of	***Sub point: Comments***	***S/E****	***Maximum points***	***Pre assessment***	***Final points***	***Comments***
Introduction and theory (maximum 20 credits)	*Academic basis*	*E*				
	Theoretical insight:	*E*				
	Description of objectives:	*E*				
	Own contribution:	*S*				
Methods and method of working (maximum 25 credits)	*Skill level:*	*E+S*				
	Method of working:	*S*				
	Work effort:	*S*				
	Independence:	*S*				
Results and discussion (maximum 35 credits)	*The work:*	*E+S*				
	Analysis and discussion:	*E*				
	Critical self-reflection	*E*				
	Own contribution/ achievement of objectives	*E*				
Presentation (maximum 15 credits)	*Structure:*	*E*				
	Language:	*E*				
	Form:	*E*				
Oral (maximum 5 credits)	*Presentation in connection with the final exam:*	*E+S*				
		Total	*100*			

The assessment is done primarily by the **Examiner or **S**upervisor*

Maximum score is suggested for each point (the total of which should not exceed 100) while the maximum score is not suggested for each sub point (the total of which should be 100). The reason for this is that different types of theses (theoretical/experimental, 30/60 credits, etc.) may need to have points and subsections weighted differently.

Using the examination form

Scores:
The faculty/department/research group must set a maximum score for each point so that the total equals 100. Similarly, each subsection must have a maximum score so that the total of the subsections equals 100. Subsections and associated points should have the same maximum score.
A challenge posed by the examination form and setting a score is that if 1 point in a criterion is considered acceptable and the master's thesis is assessed at one 1 point for all criteria, the entire criteria list will give a total of 16 points. This is in accordance with the grade table in the interval for F (0–39), a fail. One point, therefore, cannot put someone "above the listed/acceptable" value. If a sub point, such as "Academic basis", gives a maximum of five points, the points are divided up according to the following scale:
5 points — almost perfect
4 points — very good, just some small deficiencies 3 points — good, but with obvious deficiencies
2 points — accurate enough to be an acceptable performance for a master's degree 1 point — fairly good, but not good enough to be acceptable
0 points — of little or no value

Assessment:
The examiner and supervisors do a pre assessment and set provisional scores for their points (marked E and S). After the oral exam and a grading meeting, all scores apart from the "Presentation" and "Oral exam" points can be adjusted. The subsections that the examiner (E) and supervisor (S) respectively are responsible for assessing are highlighted. The examiner and supervisor (E + S) have shared responsibility for setting a score for three points.

Grading table

Grade	***Score interval***
A	*90–100*
B	*80–89*
C	*60–79*
D	*50–59*
E	*40–49*
F	*0–39*

5.2.7 Supervisor assessment

The supervisor assessment is a document for the person with academic responsibility and the supervisor and deals with the criteria connected with following up masterwork. It also contains additional criteria that the person with academic responsibility and any supervisor use for assessments. The supervisor assessment is included in its entirety as information for the external examiner.

Assess for each of the points below the extent to which the candidate has achieved the objectives that have been described. (All italicised text was taken straight from a document for NFmR and NRT. Underlined words and terms were taken from the national qualification framework.)

Theoretical insight
Has the candidate generated important elements/topics/ideas in the thesis? Does the student use relevant resources (databases, etc.) to acquire relevant and updated literature and background knowledge for the work?

Skill level

Does the candidate have a good command of and use relevant methods in own work in an appropriate and integrated way?

Method of working
Does the candidate demonstrate the ability to plan and work methodically?

Work effort
Does the candidate demonstrate a very good work effort and solid academic engagement?

Independence
Can the candidate work and use relevant methods independently and carry out an independent research or development project under supervision? Does the candidate show initiative? What type of help and guidance has the candidate received during different phases of the work? Has the candidate the ability to utilise the research environment's technical expertise in the candidate's work?

The work
Does the work demonstrate creativity, and/or does it contribute to lateral thinking/innovation? Does the work give the impression of being particularly comprehensive?

Time
A prerequisite for assessment of the work is that it is submitted within the prescribed time.

RELEVANT DOCUMENTS AND FORMS

You require some forms and documents in conjunction with doing your bachelor's or master's thesis. You can access these from the faculty's home pages, www.uis.no. It is important that students as well as the person with academic responsibility for a thesis are familiar with the content of these documents:

Guide to bachelor's and master's theses

- Application for a bachelor's or master's thesis
- Contract for a bachelor's or master's thesis
- Front page of the bachelor's thesis
- Front page of the master's thesis

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- Rules for bachelor's and master's theses
- Information for companies about bachelor's and master's theses
- Agreement on restrictions on the use of bachelor's and master's theses
- Examiner guidance for the bachelor's thesis
- Examiner guidance for the master's thesis

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