

FACULTY OF SCIENCE AND TECHNOLOGY

Examiner's guidance for bachelor's thesis



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1. Appointment

In accordance with the Regulations relating to Studies and Examinations at the University of Stavanger, Section 5-2. Grading, subsection 4 stipulates that there must be two examiners, at least one of which must be external, when assessing bachelor's and master's theses. When two or more sensors are used, the Regulations further state that in case of disagreement, it is the external examiner who has the final word (subsection 12).

1.1 Deadlines for assessment

In accordance with the Regulations relating to Studies and Examinations at the University of Stavanger, Section 5-4, subsection 3:

• Bachelor's theses: 6 weeks from the expiry of the submission deadline* (Submission deadline is normally 15 May).

*Please note that the deadline for submitting applications for admission to master's programmes/supplementary studies at other university colleges/universities is 1 July. In the assessment of bachelor's theses, we ask that this be taken into account (this rule applies only to students applying for admission to studies at institutions other than UiS).

• Master theses: 12 weeks from the expiry of the submission deadline* (Submission deadline is normally 15 May).

1.2 Confidentiality requirements

Please note that examiners for the University of Stavanger have a duty of confidentiality pursuant to Section 13 of the Public Administration Act:

It is the duty of any person rendering services to, or working for, an administrative agency, to prevent others from gaining access to, or obtaining knowledge of, any matter disclosed to him in the course of his duties or work including:

1) an individual's personal affairs, or

2) technical devices and procedures, as well as operational or business matters which for competition reasons it is important to keep secret in the interests of the person whom the information concerns.

The duty of secrecy shall continue to apply after the person concerned has terminated his service or work."

1.3 Exempt from public disclosure

As a general rule, submitted bachelor's theses at UiS are public, but some of the assignments are exempt from public disclosure, cf. The Freedom of Information Act. This may be justified by business matters that are important to keep secret or other matters that may have significance for reasons of competition. Whether an assignment is open or exempt from public disclosure is indicated by a) the front page of the thesis being red, and b) it being listed on the attached grading form.

2. Remuneration

2.1 Salary scale placement

The University of Stavanger calculates the salary of external examiners based on the government's basic collective agreement, Table C. In essence, four alternative salary grades are used: Professor, lecturer/ associate professor, senior lecturer/assistant professor, assistant professor/university teacher (for more information on salary grades and rates, see the remuneration guide attached to the transmittal letter).

Examiners who have their main position in the university and university college sector and who are placed higher in salary positions than the pay grades specified in the attached remuneration guide can be offered

the corresponding pay grade at UiS. Placement on the pay scale must then be documented with a copy of the pay slip submitted as an attachment to the remuneration form.

Examiners who have not been assessed for competence in relation to an academic position in the university and university college sector will undergo an internal assessment of their level of competence in accordance with the position's qualification requirements.

2.2 Standard time spent

- For bachelor's theses written by a candidate, remuneration is paid for 4 hours per thesis.
- For bachelor's theses written by two or more candidates, remuneration is paid for 6 hours per thesis.

2.3 Payment of salary

The remuneration, if the form and contract are received at the faculty's payroll office during the first week of the month, will be paid on the 12th of the following month. Forms and contracts received after this will not be paid until the 12th of the month, two months after submission

3. Contact information

If you have any questions about the information above, please contact us at the email address: <u>post-tn@uis.no</u> or by phone +47 51 83 17 00.

4. Assessment of theses

An external examiner will be appointed based on proposal of the person with academic responsibility. The examiner together with the course coordinator assigns the grade.

(All text in italics is retrieved directly from the circular of the National Council for Technological Education(NRT.)

4.1 Descriptions of Grades and Assessment Criteria for Bachelor's Theses in Engineering

Grade descriptions and assessment criteria for grading bachelor's theses in engineering are prepared by the National Council for Technological Education (NRT). The descriptions are prepared in accordance with the Norwegian National Qualifications Framework for higher education and the National Curriculum Regulations for Engineering Education

laid down by the Ministry of Education and Research on 3 February 2011. The descriptions are used for all bachelor's theses in engineering in accordance with this curriculum, starting spring 2014.

Grade scale steps	Designation	Description:			
A	Outstanding	<i>1.</i> Excellent achievement that is clearly outstanding and is characterized by:			
		2. The candidate has extremely good insight into engineering and demonstrates engineering expertise at an outstanding level			
		3. The candidate is able to select and apply relevant scientific theories and methods in a very convincing way.			
		4. The candidate is able to produce an outstandingly relevant and clear approach to the issue addressed and can plan and execute an extremely high quality piece of engineering work.			
		5. The work is advanced and/or an innovative contribution. The analysis and discussion have an outstandingly good scientific foundation and justification and are very relevant to the issue that is addressed. The candidate demonstrates extremely good ability to reflect critically and distinguishes clearly between their personal contribution and the contributions of others.			
		6. The form, dissemination, structure and language are at an extremely high level.			
В	Very good	1. Very good work characterized by:			
		 The candidate has very good insight into engineering and demonstrates a very high level of engineering expertise. 			
		3. The candidate is able to select and apply relevant scientific theories and methods in a highly convincing way.			
		4. The candidate is able to produce a very relevant and clear approach to the issue addressed and is able to plan and execute an engineering work of very high quality.			
		5. This is very good and/or an innovative contribution. The analysis and discussion have a very good scientific foundation and justification and are clearly relevant to the issue that is addressed. The candidate demonstrates very good critical reflection and distinguishes clearly between their personal contribution and the contributions of others.			
		6. The form, dissemination, structure and language are at an very high level.			

С	Good	1. Good work characterized by:
		2. The candidate has good insight into engineering and demonstrates a good level of engineering expertise.
		3. The candidate is able to select and apply relevant scientific theories and methods at a good level.
		4. The candidate is able to produce a relevant and generally clear approach to the issue addressed and is able to plan and execute an engineering work of good quality.
		5. The work is good and comprises some creative elements. The analysis and discussion have a good scientific foundation and are relevant to the issue that is addressed. The candidate shows good ability to reflect and mostly distinguishes between their personal contribution and that of others.
		6. The form, dissemination, structure and language are at a good level.
D	Satisfactory	1. Clearly acceptable work characterized by:
		2. The candidate has satisfactory insight into engineering and demonstrates a satisfactory level of engineering expertise.
		<i>3.</i> The candidate is generally able to apply relevant academic theory and methods.
		4. The candidate is able to prepare a fairly relevant and clear issue to be addressed but where the objectives of the thesis may be somewhat unclearly defined. Planning and execution of the engineering work is of a clearly acceptable level.
		5. The work is satisfactory. The analysis and discussion have a good scientific foundation and are relevant to the issue addressed but there is potential for improvement. The candidate demonstrates critical reflection but may have some problems distinguishing between their personal contribution and those of others.
		6. The form, dissemination, structure and language are at an acceptable level.
E	Sufficient	 Work that is acceptable as it satisfies the minimum requirements and is characterized by: The candidate has sufficient engineering insight and shows sufficient professional knowledge. The candidate is able to some extent to apply relevant scientific theories and methods. The candidate has an adequate approach to the issue addressed, and the objectives of the thesis are described, but are unclear. The planning and execution result in am engineering work at an acceptable level, but the candidate demonstrates limited progress and requires close supervision. The work is a relatively limited and fragmentary contribution. The analysis and discussion have adequate scientific foundation but should have been more closely linked with the issue addressed. The candidate demonstrates a sufficient ability to reflect critically but has problems distinguishing between their personal contribution and those of others. The presentation is generally acceptable but has clear deficiencies in terms of form, communication, structure and language.

F	Fail	1.	Work that does not meet the minimum criteria and is characterized by:
			The candidate does not have the necessary insight into engineering and demonstrates an inadequate level of engineering expertise.
		3.	The candidate lacks the competence to apply relevant scientific theories and methods.
			The candidate does not have the ability to adequately address the issue, and the objectives are neither clearly defined nor described. Planning and execution of the engineering work is not acceptable.
			The work is marginal and fragmentary. The analysis and discussion have an inadequate scientific foundation and are loosely linked with the issue addressed. The candidate demonstrates an insufficient ability to reflect critically and distinguishes to only a small extent between their personal contribution and those of others.
		6.	The presentation has significant deficiencies in terms of form, communication, structure and language.

More detailed descriptions of the points used in describing the steps in the grading scale for bachelor's theses in engineering.

The term work in these descriptions refers to the written thesis and any products, if relevant, as well as the oral presentation, if relevant.

1. General impression

Overall impression: The overall impression of the work.

Independent work: To what extent has the candidate generated important elements/issues/ideas in the thesis? Is the candidate able to work independently to find and use relevant literature and methods, and complete an independent research or development project under supervision? Does the candidate show personal initiative? What kind of help and supervision has the candidate received in the various phases in the work? Has the candidate demonstrated the ability to take advantage of the scientific expertise available in the department and apply it in their own work?

Level: Assessment of each criterion is done in accordance with the bachelor's degree in engineering.

Time: It is a prerequisite for having the work assessed that it has been submitted within the normal timeframe.

2. Insight into engineering

Is the candidate's academic basis in engineering adequately described? Is the work placed in a comprehensive-system perspective and does it demonstrate for example life cycle, environmental, health, societal, economic and

ethical perspectives? To what degree can the candidate update their knowledge in the field through information retrieval and contact with the scientific communities and practical work experience?

3. <u>Theoretical insight</u>

To what degree does the work document a good theoretical overview, specialization within an area of engineering theory as well as knowledge about relevant research and development, methods and approaches?

4. <u>Execution</u>

Description of objectives: To what degree is the issue, based on the background and objectives that are presented, expressed

in a clear and understandable manner?

Level of skill: To what degree does the work document the ability to plan and execute engineering work (projects, work tasks, assignments, tests and experiments)? To what degree is there documentation of the candidate's ability to collect, assess, use and refer to information and scientific material and apply it to illuminate the issue addressed?

5. <u>Results</u>

The results: To what degree is the work based on earlier research or development work? Does the work demonstrate quality and creativity, and does it contribute towards new thinking, innovation or realization of sustainable products, systems or solutions that are useful for society?

Analysis and discussion: To what degree is the analysis and discussion scientifically grounded and clearly related to the issue addressed? To what degree is the evaluation of the results based on a methodical approach?

Reflection: To what degree is a reasonable assessment given of the significance of the results? Does the candidate critically assess various information sources? Are sources of uncertainty such as methodical error, measurement error and the like assessed and discussed? Are relevant ethical issues relevant to science, the profession, society and research analysed? **Own**

contribution/achievements: To what degree is the candidate able to clearly distinguish between their personal contribution and the contributions of others (source identification and clear referencing)? To what degree does the conclusion clearly reflect the extent to which the objectives were reached? Is there a reasonable and substantiated recommendation for further work or dissemination, implementation or application of the results?

6. <u>Presentation</u>

Structure: Does the written work have a logical and structured form? Is the work generally well organized? Has a uniform style been applied to references, figures, and tables? Form and communication: To what degree are the issue and the results communicated with the required academic and linguistic precision? To what degree is the thesis readable with good linguistic quality? What is the quality of figures and tables? What is the quality of the product, if applicable? What is the quality of the oral presentation, if applicable?

The connection between the sum of points and the grade (the same scale is used as the one proposed for assessing master's theses in MNT subjects):

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

4.2 Bachelor's theses in natural sciences

For bachelor's theses in natural sciences, the Faculty of Science and Technology has used the same grade descriptions and assessment criteria for grading as for the bachelor's degree in engineering, with the exception of the requirement of engineering insight. See 4.1.

4.3 A little about grading

If two or more students collaborate on an assignment, they are normally jointly responsible and receive the same grade. If an oral presentation/examination is part of the grade, it may be possible to give different grades. The student can request a written justification for the assessment.