**Assessment form – Master’s thesis at the Faculty of Engineering**

Name of student: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Assessment of:** | **Criterion:**  | **Max. score:** | **Assessment:** | **Comments/explanation:** |
| **Introduction and theory****(max. 20 p.)** | Academic foundation | 5 |  |  |
| Theoretical insight | 7 |  |
| Description of objectives | 3 |  |
| Own contribution  | 5 |  |
| **Methods and approach to work****(max. 30 p.)** | Level of skill |  |  |  |
| Work method |  |
| Independence |  |
| **Results and discussion** **(max 35 p.)** | Result (the work)  | 10 |  |  |
| Analysis, discussion  | 15 |  |
| Critical reflection  | 5 |  |
| Own contribution/ achievement of goals  | 5 |  |
| **Presentation****(max. 15 p.)** | Structure | 5 |  |  |
| Language | 5 |  |
| Form  | 5 |  |
| **Total** |  | **100** |  |  |

Name of censor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Use of the assessment form**

The assessment form is intended as a working document for assessment commissions and will not be suitable as a justification of the assessment or as feedback to students. It is also not intended as a record of the assessment. A separate assessment record is submitted to the examination commissions.

For the elements included in the assessment form, separate descriptions have been drawn up for the aspects to be assessed. See below.

**Description of assessment elements**

**Academic foundation**

Is the theoretical and academic basis well described, so that the work is positioned in the international research for the discipline?

**Theoretical insight**

Does the thesis, especially the introduction, document the candidate’s advanced knowledge of the discipline’s theory and methods in general as well as specialized insight into a delimited area of particular importance to the thesis?

**Description of objectives**

Are the objectives and/or relevant hypotheses presented in a clear and understandable way?

**Level of skill**

Does the candidate have a command of relevant methods and use them in his or her own work in an appropriate and integrated way?

**The work**

Does the work reflect creativity and/or contribute to innovation? Does the work appear to be particularly extensive? What is the assessment of the quality and significance of new knowledge/results generated in the work?

**Analysis and discussion**

Are the analysis, interpretation/synthesis and discussion grounded in the discipline, well-reasoned and clearly linked to the research question? Does the discussion reflect a high academic standard? Can the candidate apply his or her knowledge and skills in new areas and place the results in a broader context?

**Critical reflection**

Does the candidate provide a reasonable evaluation of the significance of the results? Does the candidate have a critical approach to different sources of information? Are elements of uncertainty, such as method errors, measurement errors and others, considered and discussed? Are relevant issues in the subject area, profession, and research ethics analysed?

**Own contribution/achievement of goals**

Can the candidate clearly distinguish his or her own contribution from that of others? Does the written work include a conclusion in which the results are well summarized with an evaluation of the extent to which the objectives have been achieved? Is there a reasonable and justified proposal for further studies or the potential for further research?

**Structure**

Does the written work have a rigorous structure (normally IMRaD: Introduction, Methods, Results and Discussion)? Is the work generally clearly structured?

**Language**

Can the candidate present the research question and results with the required academic precision? Is the work easy to read, using language of high quality?

**Form**

Is a consistent style used for references, figures and tables? Is the quality of figures and tables satisfactory? Does the candidate have a command of the subject area’s language and terminology?

*Sources: Universities Norway (UHR), the Norwegian Qualifications Framework (NQF)*

**Scoring guidelines**

Each assessment criterion is given a subtotal so that the possible grand total is 100. If a criterion such as “academic foundation” has a maximum score of 5 points, the points are allocated according to the following scale:

5 points - almost perfect

4 points - very good, only minor shortcomings

3 points - good, but with clear shortcomings

2 points - just enough to be a satisfactory performance for the master’s degree

1 points - some value, but not good enough to be acceptable

0 points - little or nothing of value

**Indicative point ranges for letter grades**

|  |  |
| --- | --- |
| **Grade** | **Points range** |
| A | 89 - 100 |
| B | 77 - 88 |
| C | 65 - 76 |
| D | 53 - 64 |
| E | 41 - 52 |
| F | 0 - 40 |

*Source:* [*NTNU – Descriptions of the grades for master's theses*](https://innsida.ntnu.no/wiki/-/wiki/Norsk/Karakterbeskrivelse%2Bfor%2Bmasteroppgaver)

**Description of grades for Master’s thesis**

|  |  |  |
| --- | --- | --- |
|  A |  Excellent | * Excellent work which is outstanding.
* The candidate has very good insight into the scientific theory and methods in his/her field and has demonstrated scientific knowledge at a very high level. The objectives of the thesis are well defined and easy to understand.
* The candidate is able to select and apply relevant scientific methods convincingly, has all the technical skills required for the work, can plan and conduct  advanced experiments or computations and works very independently in cooperation with a supervisor.
* The thesis is very thorough and contains new knowledge and is an  innovative contribution. The analysis and discussion have an extremely good scientific foundation and justification and are clearly relevant to the topic that is addressed. The candidate demonstrates extremely good critical reflection and distinguishes clearly between his/her contributions and the contributions from others.
* The form, structure and language in the thesis are at an extremely high level.
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|  B | Very good | * Very good work that is clearly distinguishable.
* The candidate has very good scientific knowledge and insight into the scientific theory and methods in his/her field. The objectives of the thesis are well defined and easy to understand.
* The candidate is able to select and apply relevant scientific methods soundly, has almost all the technical skills required for the work, can plan and conduct experiments or computations very well and works independently in cooperation with a supervisor.
* The thesis is thorough and contains some new knowledge and some innovative contributions. The analysis and discussion have a very good scientific foundation and justification and are clearly relevant to the topic that is addressed. The candidate demonstrates very good critical reflection and distinguishes clearly between his/her contributions and the contributions from others.
* The form, structure and language in the thesis are at a very high level.
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|  C |  Good | * A good piece of work.
* The candidate has good scientific knowledge and insight into the scientific theory and methods in his/her field. The objectives of the thesis are generally well defined, but may contain some unclear formulations.
* The candidate uses the relevant scientific methods satisfactorily, has most of the technical skills required for the work, can plan and conduct experiments or computations well.
* The thesis is considered good with elements that are creative. The analysis and discussion have a good scientific foundation and justification and are relevant to the topic that is addressed. The candidate demonstrates good critical reflection and usually distinguishes clearly between his/her contributions and the contributions from others.
* The form, structure and language in the thesis are at a good level.
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|  D |  Satisfactory | * A clearly acceptable piece of work.
* The candidate has quite good scientific knowledge and insight into the scientific theory and methods in his/her field. The objectives of the thesis are defined, but contain some inexact formulations.
* The candidate is generally able to apply relevant scientific methods, has the main technical skills required for the work, and can plan and conduct experiments or computations without help. The candidate works independently to some extent, but needs quite close supervision to achieve satisfactory scientific progress.
* The thesis is considered satisfactory. The analysis and discussion have a satisfactory scientific foundation and justification, and are relevant to the topic that is addressed, but there is room for improvement. The candidate demonstrates his/her ability for critical reflection, but has problems
* distinguishing clearly between his/her contributions and the contributions from others.
* The form, structure and language in the thesis are at an acceptable level.
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|  E |  Sufficient | * A piece of work that is acceptable and satisfies the minimum criteria.
* The candidate has sufficient scientific knowledge and insight into the scientific theory and methods in his/her field. The objectives of the thesis are described, but are vague and imprecise.
* The candidate is able to apply some relevant scientific methods, has a minimum of technical skills required for the work, and can plan and conduct experiments or computations generally without help but achieves limited scientific progress unless there is close supervision.
* The thesis is considered limited and somewhat fragmented. The analysis and discussion have an adequate scientific foundation and justification, but ought to have had a better relevance to the topic that is addressed. The candidate demonstrates sufficient critical reflection, but has problems distinguishing between his/her contributions and the contributions from others.
* The thesis is generally acceptable, but has definite shortcomings with respect to form, structure and language.
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|  F |  Fail | * A piece of work that does not satisfy the minimum requirements.
* The candidate does not have sufficient scientific knowledge and insight into the scientific theory and methods in his/her field. The objectives of the thesis are unclearly defined or lacking.
* The candidate demonstrates a lack of competence in the use of scientific methods, does not have the required technical skills and achieves very limited scientific progress, even with close supervision.
* The thesis is considered very limited and fragmented. The analysis and discussion do not have an adequate scientific foundation and justification, and are only partly relevant to the topic that is addressed. The candidate does not demonstrate the necessary critical reflection, and does not distinguish between his/her contributions and the contributions from others.
* The thesis has major shortcomings with respect to form, structure, and language.
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