

RULES ON THE FORM OF A MASTER'S THESIS, SUBMISSION, DEFENSE AND GRADING.

Adopted by the Department Council May 29th 2019

The following rules are an addition to RULES FOR MSc PROGRAMMES AT REYKJAVIK UNIVERSITY'S DEPARTMENT OF ENGINEERING as adopted by the council of the Dept. of Engineering May 29th 2019.

The Council of the School of Science and Engineering first adopted these rules on 19th March 2010 and they have since undergone minor revisions.

In order to graduate with an MSc degree from the Dept. of Engineering all students must complete a project that results in a formal thesis and a public defence of the thesis. The thesis can be submitted either in English or in Icelandic and should sufficiently present a body of work commensurate with the number of credits of the particular MSc project.

THESIS LAYOUT AND FORM

The layout and form of the thesis shall in general be according to good practice for a thesis of this type. The student shall consult his/her supervisor on an appropriate structure for the thesis, appendices to the thesis and the reference system, taking into account established practice within the specific field of research.

In general, the thesis is expected to contain the following:

- Front cover (standard)
- Front page (standard format)
- Title page (standard format)
- Abstract (in English and Icelandic)
- Signature page (standard format)
- Acknowledgements (optional)
- Preface (optional)
- Table of contents
- List of tables
- List of figures
- List of drawings and enclosed material, e.g. CD (as appropriate)
- Introduction
- Methods
- Results
- Discussion
- Conclusion
- References
- Appendices (as appropriate)
- Back cover (standard)

The front cover, front page, title page and back cover have a specific form as shown in the attached examples and shall contain all information requested. No variation from this form is permitted. If the thesis is written in English, the title on the title page shall be in English; however, an Icelandic translation of the title must be presented with an Icelandic abstract, and vice versa if the thesis is written in Icelandic.

An abstract is mandatory, both in English and Icelandic. The maximum length of abstract is 300 words. At the end of the abstract there should be a list of up to five keywords reflecting the content of the thesis.

A printed version of the thesis shall be on white paper, size A4 and weight 80 g/m². In general, the font should be Times or Times New Roman of size 12 points.

Guidelines for page numbering and layout:

- Page numbering is normally i, ii, iii, iv, ... for material preceding the first chapter of the thesis (i.e. for abstract, signature page, acknowledgements, preface, table of contents etc.) and then 1, 2, 3, starting from the 1st chapter (Introduction) and continuing throughout the thesis, including the appendices.
- Page numbers should in general be centered at the bottom of each page.

Only in exceptional cases may the thesis have a different form. While the thesis itself has to comply with the layout

instructions in regards to the cover pages, abstract and the signature page, it can consist mainly of publishable research paper manuscripts. In this case, the manuscript(s) shall be preceded by a detailed section of introduction to the research topic with a corresponding in-depth literature review and detailed description of the methods used in the MSc project. The minimum length of this section shall be 20 pages excluding a reference list. This format of the MSc thesis should only be used if the supervisor of the thesis assesses the outcome of the MSc project to be publishable in indexed peer reviewed journals in the relevant field of research. If this format of the MSc thesis is used, the student's supervisor has to request a formal acceptance of both the student's Program Director and the Director of Graduate Studies, with a letter summarizing the findings of the project, the novelty beyond the state of the art and the contribution of all authors of the manuscript. This request has to be sent to the Program Director and the Director of Graduate Studies prior to t-50 (where "t" is the graduation date). The Program Director and Director of Graduate Studies can forward the request to the Graduate Study Council for further evaluation if they find it necessary.

LIMITED ACCESS

In general, access to the MSc thesis shall be open. If restricting access to a thesis is sought, e.g. for the purpose of protecting intellectual property or protecting commercial interests of an industrial partner participating in the MSc project, permission needs to be acquired, see *Reglur um skil á lokaritgerðum og lokaverkefnum við Háskólann í Reykjavík* (www.ru.is/bokasafn/skemman). If restriction of access to a thesis is granted it should be clearly stated in the thesis right after the keywords following the abstract with specification of the date at which the restriction of access should be lifted.

SUBMISSION AND DEADLINES

The official completion of the MSc thesis is signified by the student submitting the final electronic version of the thesis, by uploading to Skemman, (see www.skemman.is). See also RU's rules for submission of theses and final projects (*Reglur um skil á lokaritgerðum og lokaverkefnum við Háskólann í Reykjavík*, www.ru.is/bokasafn/skemman).

If a student plans to graduate in a particular graduation ceremony, the following deadlines must be respected. Should any of the deadlines below not be respected the student will have to wait for the following graduation ceremony before he/she can graduate. Students are responsible for adhering to these deadlines and are advised to deliver their work in good time.

The deadline schedule for the purpose of graduation is as follows (where t is the graduation date and the numbers refer to the number of days prior to graduation):

- | | |
|--|----------------------|
| ● Final draft of thesis delivered to supervisor ^{a)} | t-50 ^{b)} |
| ● Supervisors comments delivered to student | t-40 ^{c,d)} |
| ● Thesis delivered to supervisor(s), examiner and Program Director | t-20 ^{c)} |
| ● Examiner confirms that thesis may be put up for defence | t-17 ^{c)} |
| ● Defence | t-14 ^{c)} |
| ● Grade posted to the Registrar by Dept. of Engineering office | t-11 ^{c)} |
| ● Graduation | t ^{c)} |

^{a)} Paper and/or electronic form, as requested by the supervisor(s) and/or examiner.

^{b)} Date can be modified by mutual agreement of the supervisor, student and examiner.

^{c)} Firm deadlines.

^{d)} Or within 10 days after the supervisor has received the final draft, whichever comes first.

^{e)} Or within 5 days after the defence, whichever comes first.

THESIS DEFENCE (ORAL EXAMINATION PROCEDURE)

The examiner is selected by the Program Director in consultation with the supervisor(s). The choice of examiner needs to be approved by the Director of Graduate Studies. The examiner shall have the qualifications necessary to supervise the thesis, but must not have collaborated in the project on which the thesis is based and must fulfil the rules of Reykjavík University on impartiality of examiners.

The oral examination shall be open to the public and shall be announced through appropriate channels with at least 3 days notice. The examination should take the form of an approximately 30 minute presentation by the student, followed by questions from the examiner, Department representative), supervisor(s) and the audience. The audience then leaves the room and the examiner(s), supervisor and Department representative have the opportunity to put further questions to the candidate and, as appropriate, request modifications to the thesis. Subsequently, the candidate leaves the room and the examiner, Department representative and supervisor(s) deliberate and decide upon the grade. Normally, the student will be informed of

the grade the next day. If the thesis is subject to confidentiality, or for other valid reasons approved by the Director of Graduate Studies, the oral examination may be closed to the public.

GRADING

The appointed examiner shall evaluate the thesis and the oral defense of the thesis, together with the supervisor(s) and the department's representative. One grade shall be awarded for the thesis and defence. The minimum passing grade is 6.0, see *Guidelines for grading MSc theses* in the appendix. The following factors shall be taken into account:

- Significance and originality of work
- Scientific and technological challenge and results
- Methodological quality
- Presentation

The number of ECTS credits awarded for the Master's project shall be taken into account. Thus, significantly more demands in terms of originality, quantity and scientific quality of the work should be placed on the student for a 60 ECTS thesis than a 30 ECTS thesis.

APPENDICES

Guidelines for grading MSc theses (in English and Icelandic)

Example of a title page

Example of a signature page

List of MSc degrees awarded

GUIDELINES FOR GRADING MSc THESES

The guidelines below describe typical projects in different grading brackets. This is meant for examiners and instructors in grading master's theses. The projects need not fulfil every aspect of these descriptions in order to be awarded the corresponding grade.

Superior (9,0-10,0)

The project is excellent. The handling of the material shows considerable originality and independent thought. Considerable skill in the definition and organized solving of the problem. Very good understanding of concepts. Academic approach and handling of material. Exemplary methods in collection and processing of data. Use of references is very precise and supports the projects well. The thesis may well lead to a publishable article. Exceptionally well polished thesis with very good grammar, spelling and language use. The thesis is in English. The student's performance in the defense is excellent.

First grade (7,5-8,5)

The project is very good and handling of material is good and somewhat original. Clear understanding of the material and the definition of the problem is good and the solving well organized. Data gathering and processing without major weaknesses and intelligent use of references. The thesis is well arranged and grammar, spelling and language is good. The student's performance in the defense is either good or very good.

Second grade (6,0-7,0)

The project is acceptable. Handling of material is fair and some independent thinking. Definition and analysis of project reflects some understanding. Data collection and processing is without major flaws. Deficiencies in the literature review. Flaws have not been addressed despite the instructor's suggestions. Language, grammar and spelling is fair. The student's performance in the defense is fair.

Fail (1,0-5,5)

The project is unacceptable. The project has major flaws that have not been addressed despite the instructor's suggestions. Limited understanding of the material. Definitions and analysis do not show understanding of what is relevant in solving the problem at hand. Major errors or misunderstanding. Data collection and analysis has deficiencies and literature review is weak. The subject is not adhered to or major inconsistencies. Language, grammar and spelling is fair or poor. The student's performance in the defense is fair or poor.

VIÐMIÐ UM EINKUNNAGJÖF FYRIR MSc RITGERÐIR**Viðmið fyrir einkunnagjöf.**

Eftirfarandi er lýsing á dæmigerðum verkefnum í mismunandi einkunnabilum sem er ætluð til stuðnings fyrir prófdómara og leiðbeinendur við mat á MSc verkefnum. Lýsingin þarf ekki að eiga við verkefnið í öllum atriðum til að verkefnið geti hlotið viðkomandi einkunn.

Ágætiseinkunn (9,0 – 10,0)

Verkefni er afburðagott. Efnistöð endurspeglar umtalsverðan frumleika og sjálfstæði í hugsun. Umtalsverð færni í skilgreiningu og skipulegri úrlausn viðfangsefnisins. Mjög góður skilningur á hugtökum. Vísindaleg nálgun og efnistöð. Fyrirmyndar vinnubrögð við öflun og úrvinnslu gagna. Heimildanotkun mjög nákvæm og styður vel við verkefnið. Ætla má að ritgerðin geti leitt til birtingarhæfrar greinar. Frágangur sérlega góður og stafsetning og málfar mjög gott. Ritgerðin er skrifuð á ensku. Frammistaða nemanda í vörninni afburðagóð.

I. einkunn (7,5 - 8,5)

Verkefni er mjög gott og efnistöð góð og nokkuð frumleg. Skýr skilningur á viðfangsefninu og góð færni í skilgreiningu þess og skipulegri úrlausn. Vinnubrögð við öflun og úrvinnslu gagna án verulegra veikleika og heimildanotkun skynsamleg. Frágangur góður og stafsetning og málfar gott. Frammistaða nemanda í vörninni góð eða mjög góð.

II. einkunn (6,0 – 7,0)

Verkefnið er þökkalegt. Allgóð efnistöð og sjálfstæð hugsun á köflum. Skilgreining og úrvinnsla viðfangsefnis endurspeglar nokkurn skilning á viðfangsefninu. Öflun og úrvinnsla gagna án verulegra galla. Heimildanotkun nokkuð áfátt. Finna má galla sem ekki hafa verið lagfærðir þrátt fyrir ábendingar leiðbeinanda. Málfar og stafsetning þökkaleg. Frammistaða nemanda í vörninni þökkaleg.

Falleinkunn (0,0 - 5,5)

Verkefni fullnægir ekki lágmarkskröfum. Verkefnið hefur áberandi galla sem ekki hafa verið lagfærðir þrátt fyrir ábendingar leiðbeinanda. Takmarkaður skilningur á viðfangsefninu. Skilgreining og úrlausn viðfangsefnis sýnir ekki nægilega góða tilfinningu fyrir því hvað skiptir máli við lausn þess. Verulegar villur eða misskilningur. Öflun og úrvinnsla gagna er töluvert áfátt sem og heimildanotkun. Farið út fyrir efnið eða umtalsverð ósamkvæmni. Málfar og stafsetning sæmileg eða slök. Frammistaða nemanda í vörninni sæmileg eða slök.

This is the the front page.



The Full Title of the Thesis

Name O.F. Student

Thesis of xx ECTS credits submitted to the Department of Engineering
at Reykjavík University in partial fulfillment
of the requirements for the degree of
Master of Science in xx (list of degrees in appendix)

January 2015

Supervisor(s):

Superior A. Teacher, Supervisor
Professor, Reykjavík University, Iceland

Examiner(s):

Tough E. Questions, Examiner
Associate Professor, OSU, USA.

This is the the front page.



Titill ritgerðar

Nafn nemanda

xx ECTS eininga ritgerð lögð fram við verkfræðideild
Háskólans í Reykjavík til
meistaraprófs (MSc) í xx (sjá lista yfir prófgráður í viðauka).

Janúar 2015

Leiðbeinandi/leiðbeinendur:

Dr. Alltaf Á. Fundi
Dósent, Háskólanum í Reykjavík

Prófdómari:

Dr. Tough E. Questions,
Associate Professor, OSU, USA.

The Full Title of the Thesis

Name O.F. Student

xx ECTS thesis submitted to the Department of Engineering
at Reykjavík University in partial fulfillment
of the requirements for the degree of
Master of Science in xx (list of degrees in appendix).

January 2015

Student:

Printed name of student

Supervisor(s):

Printed name of supervisor 1

Printed name of supervisor 2 (if relevant)

Examiner:

Printed name of examiner

Titill ritgerðar

Nafn nemanda

xx ECTS eininga ritgerð lögð fram við verkfræðideild
Háskólans í Reykjavík til
meistaraprófs (MSc) í xx (sjá lista yfir prófgráður í viðauka).

Janúar 2015

Nemandi:

Prentað nafn nemanda

Leiðbeinandi/leiðbeinendur:

Prentað nafn leiðbeinanda 1

Prentað nafn leiðbeinanda 2 (ef við á)

Prófdómari:

Prentað nafn prófdómara

LIST OF DEGREES AWARDED

Master of Science in Biomedical Engineering
Meistarapróf (MSc) í heilbrigðisverkfræði

Master of Science in Civil Engineering
Meistarapróf (MSc) í byggingarverkfræði

Master of Science in Electrical Engineering
Meistarapróf (MSc) í rafmagnsverkfræði

Master of Science in Engineering Management
Meistarapróf (MSc) í rekstrarverkfræði

Master of Science in Financial Engineering
Meistarapróf (MSc) í fjármálaverkfræði

Master of Science in Mechanical Engineering
Meistarapróf (MSc) í vélaverkfræði

Master of Science in Mechatronics Engineering
Meistarapróf (MSc) í hátækniverkfræði

Master of Science in Sustainable Energy Engineering - ISE
Meistarapróf (MSc) í orkuverkfræði - ISE

Master of Science in Sustainable Energy - ISE
Meistarapróf (MSc) í orkuvísindum – ISE

Master of Science in Electric Power Engineering – ISE
Meistarapróf í raforkuverkfræði – ISE

Master of Science in Electric Power Management - ISE
Meistarapróf (MSc) í rekstri raforkukerfa