Degree Project Course, Introduction

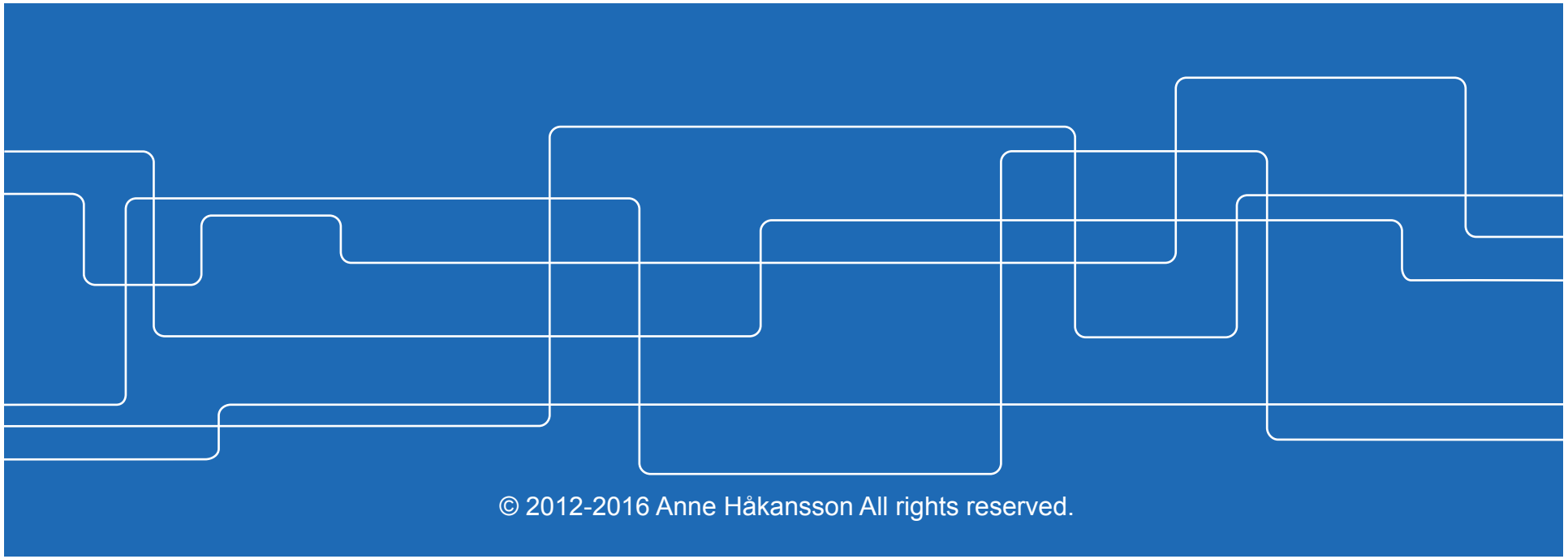
MSc of Engineering, Master Degree

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Prerequisites

To begin the degree project:

MsC of Engineering (Civilingenjör) at least

- 210 credits of studies for a 270 hp program
- 240 credits of studies for a 300 hp program.

Master: at least 60 credits of studies for a 120 hp program.

These requirements are checked by the administration *before* the student is registered for the degree project course and can begin the course.

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Degree project course

- Starts two times per year:
  - 1 period (Aug/ Sept)
  - 3 period (Jan)

Students start 3-4 months earlier in order to find a project

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Before course starts (in Jan)

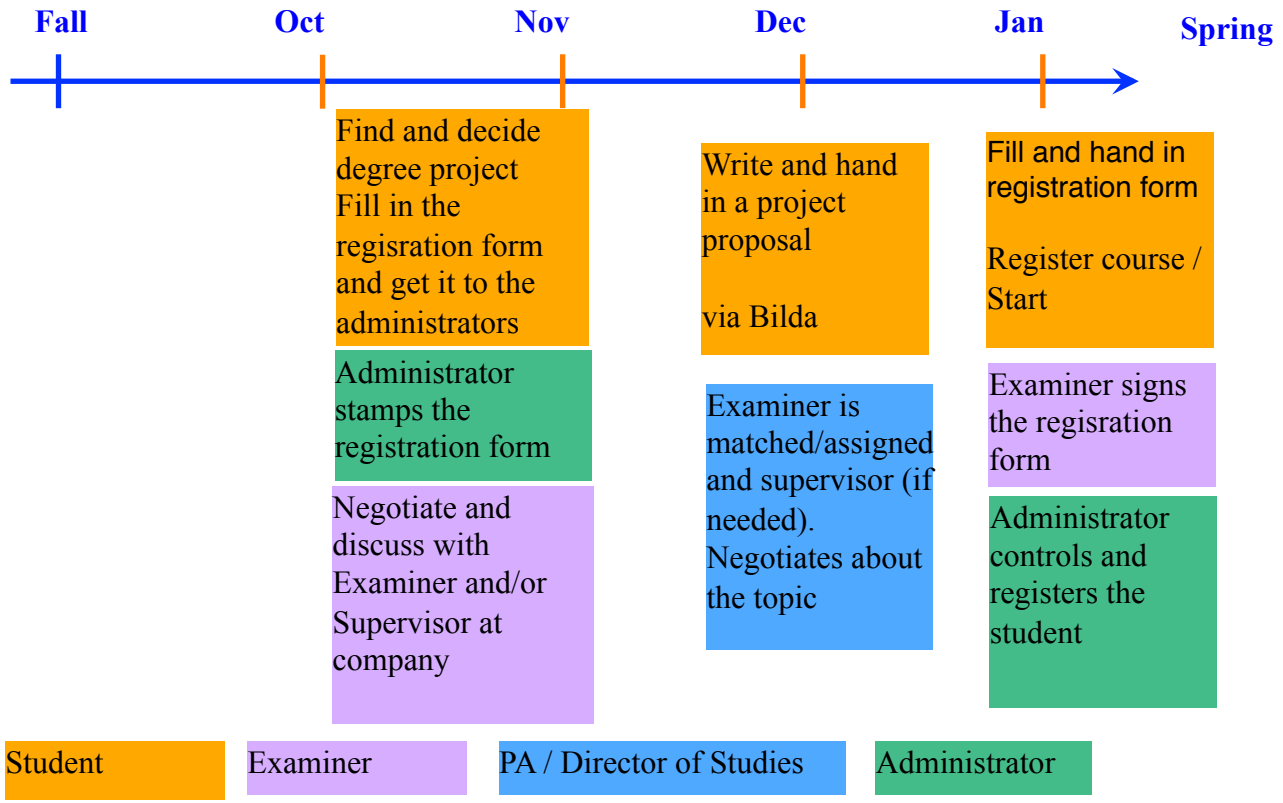


Figure. Start-up phase for degree project, Fall - Spring.

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@ICT- school

Task order:

Find a degree project

Registration form

Write a project description (project proposal)

– Negotiate! AND/ OR – Hand it in!

@another KTH-school – talk to them – follow their routines! May have a start early in January!

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@ICT-school
Get an registration form approved

Fetch the registration form via:

https://www.kth.se/polopoly_fs/1.599894!/UT-EXAR%20Ans%C3%B6kan%20om%20examensarbete.pdf

Fill it in

Take the registration form to the administrators

Get a stamp!

Then :

Upload a copy of the registration form in Bilda system

& Give it to the examiner

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Stamp
&
Signature

Application form Degree Project

To be filled in by Applicant		
Last name	First name	
Date of Birth (civic registration number)	Phone number	Cell phone
Programme	Admission year	Obtained credits
E-mail @kth.se		
❑ I assure that I have fulfilled the prerequisites, completed 60 hp/ECTS credits		
❑ I am registered on the third (3rd) programme term		
ICT will publish the project reports via the publishing service DIVA. ❑ Yes, I consent to publishing my report. ❑ No, I do NOT consent to publishing my report.		
❑ Graded from A – F ❑ Graded Pass/Fail (Only for students admitted 2006 or earlier)		

Registration form

Make sure that you got right code

Different for:

- A/F

- P/F

https://www.kth.se/social/group/degree-projects-ict-/page/course-codes/

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About the course - Work Phase

21 weeks of work (number of weeks, not calendar weeks)

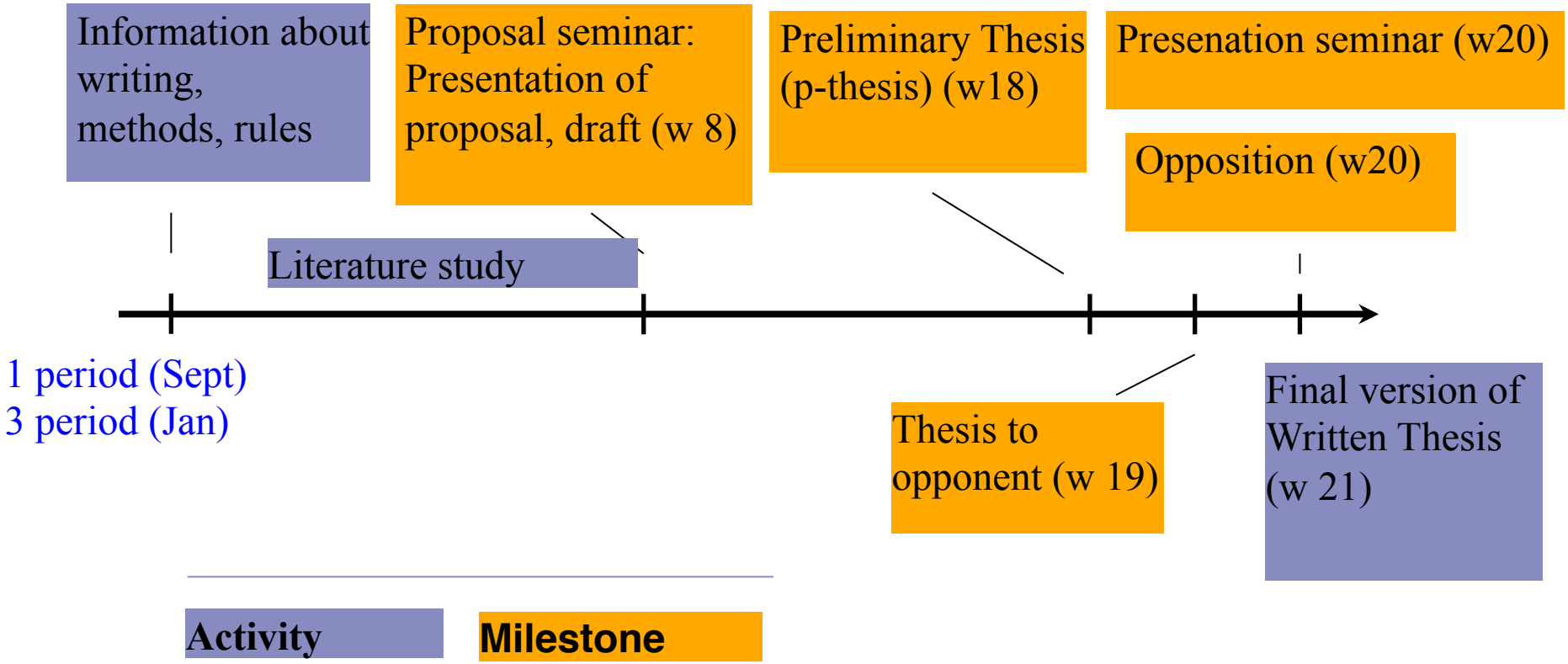


Figure. Activities and milestones of degree project (***Ends in Jan or June***)

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Activities

Information: writing, method, rules. How to write a master thesis, how to choose methods for conducting the degree project, and the rules that govern the conduct of a degree project. *(Lectures, books, Web)*

Literature study. The literature study is *essential* for all degree projects and will identify required background and related work. Typically, the literature study takes around four weeks (but may in some cases be continued throughout the course).

Written thesis. The written thesis is the degree project most important part. It is a third of the grade of the degree projects and is a tool for judging the process.

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Mile stones

Proposal seminar and draft of the thesis (8 weeks).

A first draft of the thesis is to be delivered to the examiner. The draft *should* include the result of the literature study and an outline of the entire thesis.

Preliminary thesis (18 weeks).

The preliminary thesis is meant to be the complete thesis *before* getting comments from the examiner, and the opponent is involved.

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Mile stones

Thesis to Opponent. When no major revisions of the written thesis are required, the preliminary thesis is given to the opponent.

If possible, the comments from the examiner are already addressed in the thesis that is given to the opponent.

Final Thesis. The final thesis, *at the very latest*, 1 week *after* the degree project has been presented (that is, 21 weeks).

Must address the revisions required by the examiner and the opponent.

A short summary of how the comments from examiner and opponent have been addressed in the thesis should be given.

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Mile stones

Opposition. Must be opponent of another master thesis. The critical comments from the opponent *should improve* the written thesis;

the opponent must demonstrate that he/she is able to *reflect on, evaluate, and critically review* the work of another student.

An opposition report that evaluates and critically reviews the preliminary thesis and suggests improvements (language, structure, content, and so on) *must be submitted* to the examiner and examiner of the opposed degree project, *at least*, one day before the seminar, as well as, to the examiner of the opponent's degree project (for grading).

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Mile stones

Oral presentation. The student contacts the examiner sufficiently early so that the time for the presentation can be *agreed* between *student, examiner, and opponent and the opponent's examiner.*

The student, or student's examiner, announces the date, and place together with a short abstract well in advance of the seminar.

If confidential material - it is possible to produce two documents: one for the company *including* confidential material; the other for KTH *excluding* the confidential material. KTH grade and archive and so on only the document without the confidential information.

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Checkpoints / Seminars with supervisors - examiners

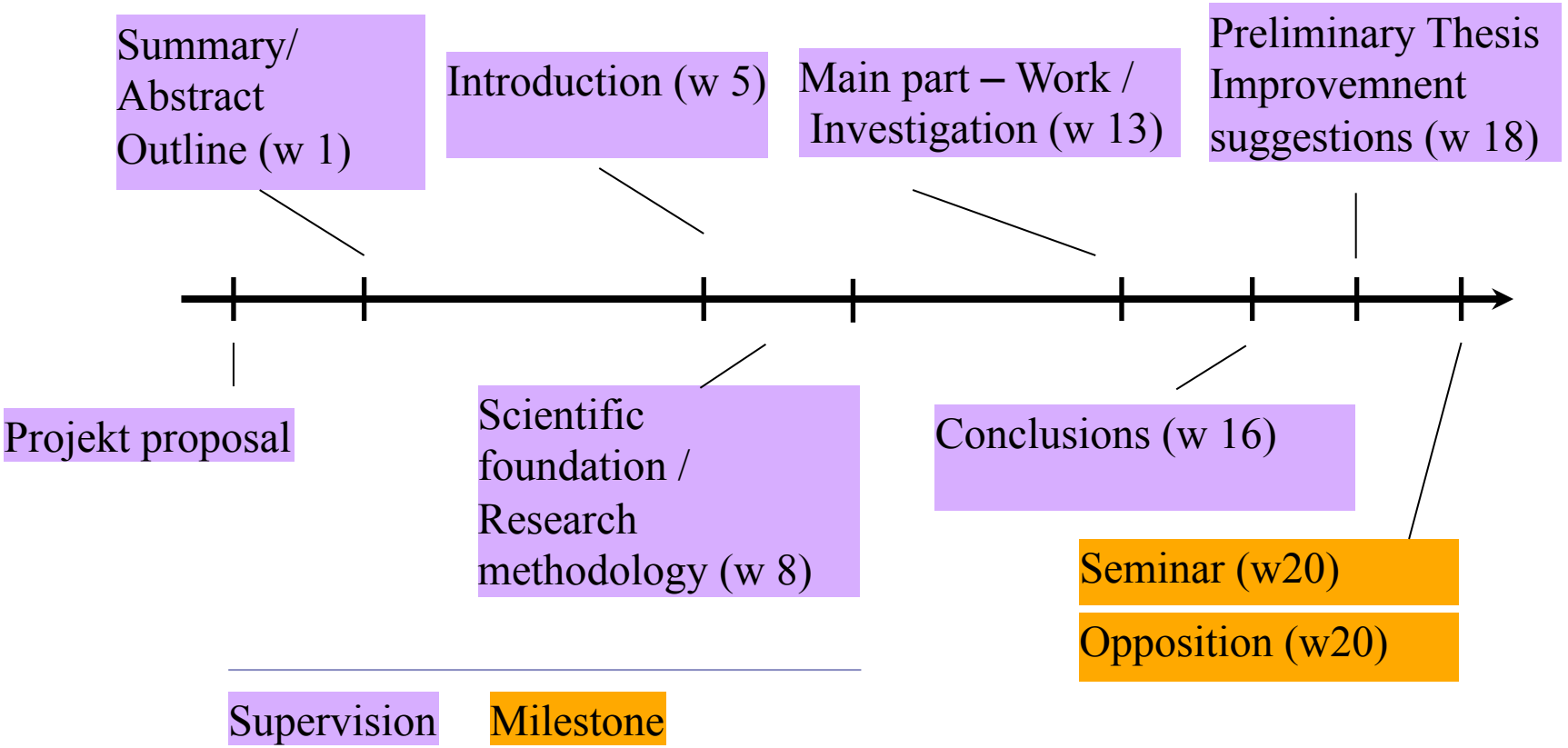
Several checkpoints and compulsory seminars:

- Summary, Abstract, and Outline
- Introduction
- Research Methodology
- Main thesis
- Conclusions
  - Presentation seminar
  - Opposition seminar

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(* red = milestones)

Supervision matches the working phases



Figur 3. Supervision /Seminars with supervisor and students.

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Student activities /seminars

w 0 – Registration form (fill-in, signatures, hand in)

w 1 – Summary, Abstract, Outline /Table of Contents

w 5 – Introduction

w 8 – Research Methodology

w 8 – Proposal seminar

w 13 – Main thesis

w 16 – Conclusions

w 18 – Preliminary thesis

w 19 – Thesis to opponent

w 20 – Presentation seminar/ Opposition seminar

w 21 – Final version of the thesis + evaluation template

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Supervisor – Examiner

w 1 - Summary, Abstract, Outline / Table of Contents

w 5 - Introduction

w 8 - Research Methodology

w 8 - Proposal seminar

w 13 - Main thesis

w 16 – Conclusions

w 18 – Preliminary thesis

w 20 Presentation seminar/ Opposition seminar

w 20 - Presentation seminar/ Opposition seminar

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w 21 –

Final version of the thesis
Opposition report

-> TurnItIn

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Alterations in process

The guidelines should be followed *closely* and the dates for the milestones should be attained.

If there is a *need to deviate* from the original plan, then the student must request approval from the examiner (and supervisor, if applicable) well before modifying the original plan.

Any unplanned and non-negotiated deviation reduces the grade.

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For success

Regular meetings.

It is recommended to have regular meetings between examiner, supervisor, and student.

Discuss the progress of the thesis and, possibly, refining the plan for the remainder of the degree project.

Writing process.

The approach to writing consists in continuously developing, refining, and extending the written material. It is important to continuously work on the written thesis. Any intermediate result of the degree project should be put in the draft so that nothing is lost.

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For success –
Degree project goals – must be fulfilled!

- 11 goals for civil engineering programs

- 10 goals for master programs

The Higher Education Ordinance

http://www.uhr.se/sv/Information-in-English/Laws-and-regulations/The-Higher-Education-Ordinance/

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Degree project goals (selected)

- Be able to apply relevant knowledge and skills within a technical area to a given problem.
- Within given constraints, even with limited information, be able to independently analyze and discuss complex problems and handle large problems on an advanced level in a technical area.
- Reflect on, evaluate, and critically review their own and others' scientific results.
- Be able to document and present their own work, for a given audience, following strict requirements on structure, format, and language.
- Be able to identify the need for further knowledge and continuously develop their own knowledge.

-> All goals in evaluation template

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Information about degree project

Find more information about degree project:
https://www.kth.se/social/group/degree-projects-ict-/

Forms: Application form, Project Proposal, Thesis, Opposition etc:
https://www.kth.se/social/group/degree-projects-ict-/page/forms-application-form-project-proposa/

Some material in Bilda:
Examensarbete / Degree projects, ICT-skolan/ ICT-School 2016

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Lectures, recorded

https://www.youtube.com/watch?v=uIDfEF8ePp8

https://www.youtube.com/watch?v=ry-j98hy1zk&index=6&list=PLVfhkUBOclBFaUb0z1owZCVcHgO4JY8CW

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Abstract (1 eng – 1 swe)

Short, concise and readable summary of the thesis:

- Mention the research/working area
- Problems (addressed and solved in the thesis)
- Study /Develop artefact
- Summary of the major results
- Major implication of your work

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Abstract

Length should be ~ 1-2 paragraphs, approx. 150-200 words.

No citations.

Title should not be repeated.

Be explicit.

Answers the questions:

- In which area did you work? What did you do?
- What question were you trying to answer? Why did you do it?
- What are the results? What did you learn?
- What are the implications? Why does it matter?

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Summary

Summarizing the whole thesis

- Short description of research/working area
- Problems (addressed and solved in the thesis)
- Study /Develop artefact
- Summary of the major results
- Major implication of your work

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Summary

Length should be max one A4 page, approx. 400 words.

Citations can be used but sparsely

Information in title should not be repeated.

Be explicit.

Answers the questions:

- In which area did you work? What did you do?
- What question were you trying to answer? Why did you do it?
- How did you do it? How did you make it happen?
- What are the results? What did you learn?
- What are the implications? Why does it matter?

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Outline / Table of Contents

- Describe sections in the thesis
- One section at the time: Chapter 2 presents…, Chapter 3 gives…, Chapter 4 describes…

NOT:

- Introduction section
- Reference section
- Appendices

Table of Contents

- Structure of the thesis
- List headings and subheading (with page numbers)

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Questions

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