

# Master Thesis in SE

## Intro Lecture

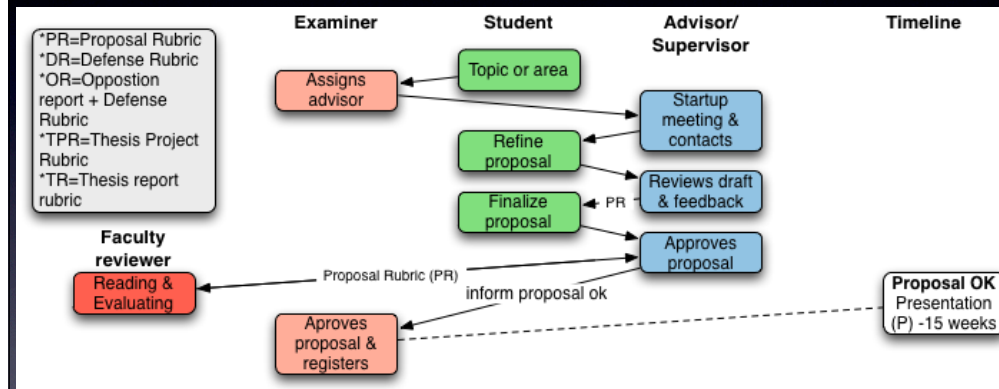
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# Master Thesis Project

- In pairs of two students
  - Academic Supervisor (+ Faculty Reviewer)
  - Maybe industry advisor/contact
- 30 ECTS points => 20 weeks of work
  - Start Sept => Finish Jan with March/June as backup
  - Start Jan => Finish June with Sept/Oct as backup
  - After backup, you **fail if not finished (3 attempts!)**
- Three main parts: Proposal, Work, Presentation

# Proposal phase



# Thesis Proposal Template (TPT)

- Basic info
- Students suitability
- Background
- Aims and Objectives
- Research Questions
- Expected Outcomes
- Research Methodology
- Time plan
- References

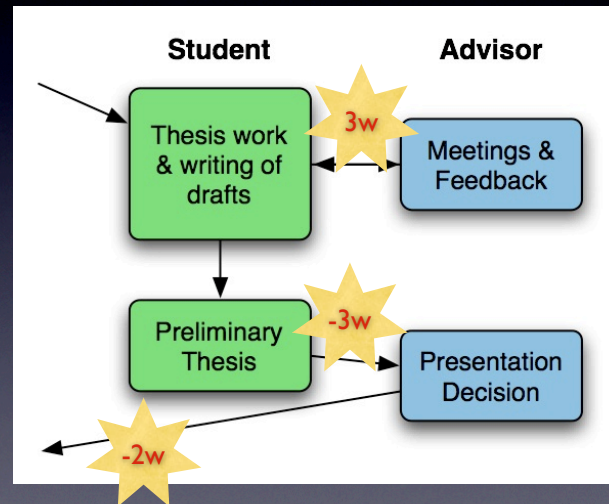
# Key areas to address

- Introduce subject area (1 paragraph)
- Current research (2-4 paragraphs)
- Identify a gap (1 paragraph)
- Describe how work will fill gap (rest)
- Formula (who? when? how? etc)

# Proposal Rubric (PR)



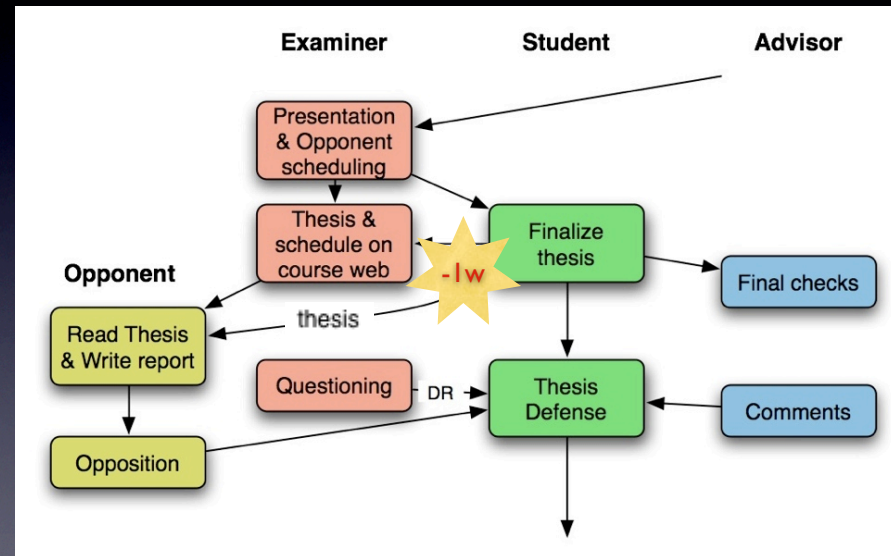
# Work phase



# Thesis Project Rubric ()



# Presentation Phase

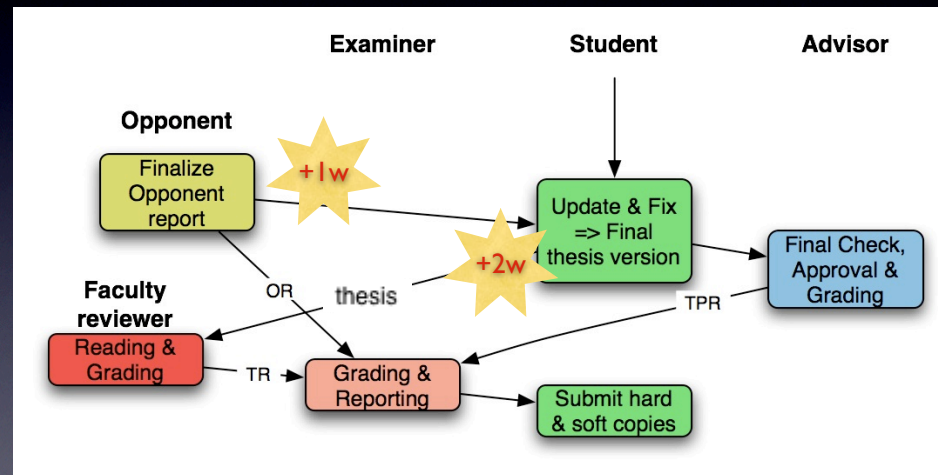


# Defence Rubric

# Opposition

- Each student must also be opponent once:
  - Get thesis 1 week before its presentation
  - Read thesis and criticize
  - Answer questions for opposition
  - Write opponent report
  - At defence: Pose 3-5 key/critical questions
  - Finalize opponent report and submit

# Finalization phase



# Thesis Rubric

# FAQ I. How find topic?

- List of projects/topics on web
- Web search: Companies
- Past projects/papers (check future work)
- Read recent papers in your area
- Think / Brainstorm
- Talk with colleagues or companies
- NOT: Contact other univs



## FAQ2. Work alone?

- NO, experience shows:
  - More likely to finish if two
  - Better theses if two
- Solo only if:
  - 3 directly relevant courses with A-B/VG grade
  - and there is some reason for the project itself
  - exception for EMSE/FUB

## FAQ3. Distance presentation?

- Not allowed! Must present thesis, physically in Ronneby on the upcoming presentation date
- Dates listed on course web

# Indications of failure

- Student **DOES NOT**:
  - Send proposal / work on time
  - Write continuously
  - Write text that is readable
  - Keep in contact with advisor (long periods of silence, “has to go back home” etc)
  - Update thesis/work based on feedback

# Tips

- Weekly status emails. When in doubt or stuck, ask.
- Write early, write often, write all the time.
- Write a log.
- Write with the reader in mind.
- Be honest and modest. Be bold.
- Logical structure and clear line-of-thought.
- Consider alternatives & motivate choices.
- Avoid plagiarism.

# Online

- <http://iaser.tek.bth.se/pa2403/>
- <http://se-ts.weebly.com/snippets.html>

# Now What?

- You must start working ASAP!!!
- Today and tomorrow:
  - Find partner & topic/area => Draft Proposal
  - [http://iaser.tek.bth.se/pa2403/index.html#Starting\\_thesis](http://iaser.tek.bth.se/pa2403/index.html#Starting_thesis)
- Next week:
  - Contact advisor, meet and refine proposal
  - Search literature and finalize proposal
- Final proposal OK'ed by deadline!



# What is good research?

- Open minds
- Critical analysis
- Generalisations
- Considers alternatives
- Motivates choices
- Has impact (someone would care)

# Readable English

- You MUST be able to write good English!
- Or you will fail or get a very low grade
- Study the slides available on course page
- Take the “Academic English Writing” course
- contact: Victoria Dryselius,  
[victoria.dryselius@bth.se](mailto:victoria.dryselius@bth.se)

# Know your limits!

- Don't go for a very technical thesis if you are not up to it
- Don't go for a management/industry thesis if you find it hard to contact companies, prefer technical work or have a strong background in it

# Some small but important stuff

- When you communicate with me ALWAYS state full name, email, personal number in the mail. ALSO use the same as you register in the thesis system