E2DOC Supervisor Meeting

December 1, 2023, Mats Bengtsson

Agenda

• Welcome
• Overview of the programme
• Programme council
• Routines, regulations, practical issues
• Some statistics
• PhD student survey
• Group discussion 1
• Inspiration from other EECS programmes
• Group discussion 2
• Summary
• Lunch
Doctoral Programme in Electrical Engineering, E2DOC

- 200+ current students
- 68 Main supervisors
- 79 Co-supervisors
- 7 Research divisions
- Founded in 2010

Program Council

Mats Bengtsson  Martin Norgren  Mehrdad Ghandhari Alavijh  Henrik Sandberg  Göran Stemme
Tomas Karlsson  Mathias Ekstedt  Saumey Jain  Anubhab Ghosh  Emanuel Borg
Tracks, Representatives & Directors

- Track representatives within E2DOC
  - Energy and Electromagnetics, Martin Norgren (EME) & Mehrdad Ghandhari Alavijh (EPE)
  - Information Science and Engineering, Mats Bengtsson (ISE)
  - Microsystems, Göran Stemme (MST)
  - Plasma Physics, Tomas Karlsson (SPP)
  - Decision and Control Systems, Henrik Sandberg (DCS)

- "PA" Programme Director for E2DOC: Mats Bengtsson

- "FA" Director of 3rd cycle education at EECS: György Dán
- Deputy FAs: Lars Jonsson, Sarunas Girdzijauskas

Finding Information?

KTH Royal Institute of Technology

- School pages
  - Electrical Engineering and Computer Science (EECS)
- Quick links
  - Mats
  - Schedule
  - Courses
  - Programme
  - Groups
  - Services

- EECS
  - Internal pages for EECS
  - Organisation
  - Rules and regulations
  - EECS' University administration
  - First and second cycle education support
  - Research support

- Staff
- Student
- Alumni
Loads of Useful Information

Electrical Engineering

News

Newly adopted policy document containing recommendations on relieving unnecessary stress for doctoral students within the doctoral programme Electrical Engineering

The following policy document contains recommendations on relieving unnecessary stress for doctoral students within the doctoral programme Electrical Engineering:

Policy document containing recommendations on relieving unnecessary stress for doctoral students (pdf 172 kB).

The programme recommends that the principal supervisor and doctoral student
Individual Study Plans

- Always direct your students to the step-by-step guide!
- Ask the student not to push “Submit” until you both have finished editing!
- Don’t forget to update “Work achieved”
- Remove finished courses from the list of planned courses.
- Sect. 4.1: Please provide information on all your qualifications (docent, supervision training, ...)
- Fill in “Forms of supervision”. For example feedback on paper/presentation drafts, rehearsal of presentations, ...
"Recent" News

- All PhD and Licentiate defences must be digitally accessible for spectators.
- For licentiate degrees, the supervisor may not be the examiner!
- The count-down time table before PhD defences has recently been revised. Always check on-line!
- At the grading committee meeting, the opponent and supervisor(s) must leave the meeting before the board makes a decision!

- EECS organized summer schools for PhD students.
  - Lunch-to-lunch.
  - First round 2022.
  - From 2024: Three summer schools, for 1st year, 2nd year and 3rd year students
- Bi-annual retreat for all E2DOC students, 2024, 2026, ...

E2DOC Policy document, on relieving unnecessary stress for doctoral students

- Appoint a local mentor for each new PhD student
- Discuss expectations early – Use the Expectation form
- Frequent discussions of the ISP
- Insight into departmental duties
  - What did you do last year that counts as departmental duties?
  - What is planned for next year?
  - Document in the ISP
- Criteria for the salary ladder
Expectation form

• Use early!
• Supervisor and student fills in separately
• Meet, compare and discuss together
• Mostly no right or wrong
• The discussion often more important than the questions

Salary Ladder

• Salary levels
  • Initial salary: 30 800/month
  • "After 30%": 31 600/month
  • "After 50%": 33 800/month
  • "After 80%": 35 100/month

• Two main options
  • Agree on criteria. Document these in the ISP
  • If no explicit and objective criteria in the ISP: Salary based purely on time!

• Recommendation to organize seminars at 30%, 50% (if no licentiate), 80%
Some Statistics, Students Admitted 2013-2023

- 458 Admitted
- 197 Graduated with PhD, whereof 63 (32% with Licentiate)
- 97 Licentiate Degrees
- 35 Discontinued (whereof 8 after licentiate)

- ~40% monographs, 60% collection of papers, for PhD theses.
- ~65% monographs, 35% collection of papers, for licentiate theses.

Spent Calendar Time
Statistics, Licentiate Degrees

Statistics from this year’s approved ISPs
Results of the PhD Chapter’s Survey (focus on EE)

December 1, 2023

Background and Basic Information

- Open from May 8, 2023
- Sent to doctoral-students@eecs.kth.se
- Questions: 106
- Responses: 211 (30 not employed by KTH) (≈ 44%)
- Responses in EE: 77

Access the whole survey.
Education

Courses and Supervision

Satisfaction

Q: How satisfied are you in general with your third-cycle studies over the past year?

Q: How confident are you that you will continue your third-cycle studies until completion?
Courses

Q: Have you been able to find suitable third-cycle courses for your studies in a timely manner suitable to your study plan?

<table>
<thead>
<tr>
<th>Courses</th>
<th>6 Dec 1, 2023</th>
</tr>
</thead>
</table>

Supervision

Q: How satisfied are you with your KTH-supervisor(s)?

Q: Do you feel that at least one of your supervisors is sufficiently engaged in your research and your topic to give you supervision at an adequate scientific level?

<table>
<thead>
<tr>
<th>Supervision</th>
<th>7 Dec 1, 2023</th>
</tr>
</thead>
</table>

Dec 1, 2023
Supervision

Many think that supervisors lack insights into:

- The guidelines on doctoral studies,
- the expectation form,
- the general syllabi of the doctoral programs, and,
- the collective agreements on doctoral candidate salaries.

Q: Has the progression in the salary steps (30%-50%-80%) been defined reasonably (what research output constitute each stage) in eISP and moving up the ladder took place in a reasonable time line (roughly one step every 12-15 months)?

Employment

Departmental Duties and Occupational Health
Departmental Duties

As per the Higher Education Ordinance (Ch.5.) - Departmental duties is defined as: Work to a limited extent (\(\leq 20\%\)) with education, research, artistic research and administration.

Q: Does your eISP include the right percentage of time you spend doing departmental duties?

Q: On average, did you spend more than 20% of your time doing departmental duties up to now?

Dec 1, 2023

Departmental Duties

- There seems to be confusion about what counts as departmental duty.
- As shown by the survey done in 2023, students aren’t familiar with the terms and conditions of their employment.

Dec 1, 2023
Occupational Health

Q: Have you experienced any of these health issues listed below during the last year caused by your doctoral studies?

- Others
- Problem sleeping
- Depression
- Anxiety
- Back ache
- Injuries

Q: Have you experienced unhealthy levels of occupational stress during the last year as a doctoral student?

- CS
- ICT
- EE

Q: Have you sought professional help to deal with any of the above mentioned health issues during the last year (2023)?
Summary

- Majority of the students are satisfied with their doctoral education, but **there is room for improvement**

- **26% of students** in EE feel that they will not be able to finish their degrees

- Courses: course offerings still remain an issue
  - More high-quality courses at PhD level
  - More structured course offerings so students can plan ahead – big source of stress

- Need to ensure that the **students and supervisors** are aware of the current guidelines and regulations

- Mental Health: **Most of respondents** from the EE program indicated that they had **unhealthy levels of stress**
  - Causes may include lack of structured course offerings, lack of awareness of expectations and regulations, lack of clear definition of responsibilities (e.g., departmental duties)

To Conclude

Q: How would you rate your overall happiness with your position as a third-cycle student at KTH?

![Graph showing happiness ratings](image-url)
Group Work 1

- How work with 30%, 50%, 80% salary levels
- How work with 30%, 50%, 80% seminars? Format? Organization?
- Have you used the expectation form? Experiences?
- Document and report back!

Activities of other doctoral programs at EECS

- Advisory panels. Presentation by Dilian Gurov, PA for the Computer Science programme.
- Thesis proposal (both for licentiate and PhD)
- Summer retreat
How Supervisory Group Meetings are Organized at TCS (brief summary of Dilian’s oral presentation)

- Once a year, usually in connection with the ISP updates
- Every PhD student meets two faculty members different than their supervisor(s)
  - Not necessarily the same every year
  - The student can suggest names
  - Matching done by the PA
- Explicitly stated purpose: Not to put pressure on the student, but to help
- Basis for discussion: a "self declaration" with 12 questions
- The supervisory group informs the PA about the outcome of the meeting
  - May take own actions
  - Typically "everything is fine"
- PA keeps track and tries to push meetings that didn’t happen

Group Work 2

- How work with advisory panels?
- Other ideas to improve for our students?
- Document and report back!
Planned Changes, New General Study Plan

• Introduce official specializations. Will be printed on the degree diploma.
  • Electromagnetics, 60cr courses
  • Electric Power, 60cr courses
  • Information and Signal Processing, 75cr courses
  • Micro Systems, 60cr courses
  • Plasma Physics, 60cr courses
  • Decision and Control Systems, 75cr courses

• Required #course credits reduced 75cr → 60cr for most of the specializations.

• Relaxed admission requirements 120cr → 60cr at master’s level.

• Currently under revision after feedback from KTH Utbildningsnämnd.