Aalto University School of Science

SCI Master's Thesis Event
How to get started with your thesis?

8 October 2024

Speakers

✓ Professor **Petri Vuorimaa**

✓ Alumnus, MSc **Basak Amasya**

✓ Study Coordinators (SCI Learning Services)
Elsa Levo, Meeri Heimo & Jasmin Seppälä

Today's objectives & agenda

❑ Master's thesis process: what, when, why, how?

❑ How to find the supervisor, topic and advisor(s)?

❑ Important practicalities

❑ Support and contact

❑ Student experience: Alumnus Basak Amasya, MSc

❑ Q&A with Professor Petri Vuorimaa

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The aim of the event is to create an understanding of starting the thesis process, help you get oriented, and give inspiration and tools to get started.

Post your questions on Presemo

https://presemo.aalto.fi/scithesisevent

Study Coordinators will be replying to your questions during the event. In the Q&A session of the event, Professor Petri Vuorimaa will answer questions.
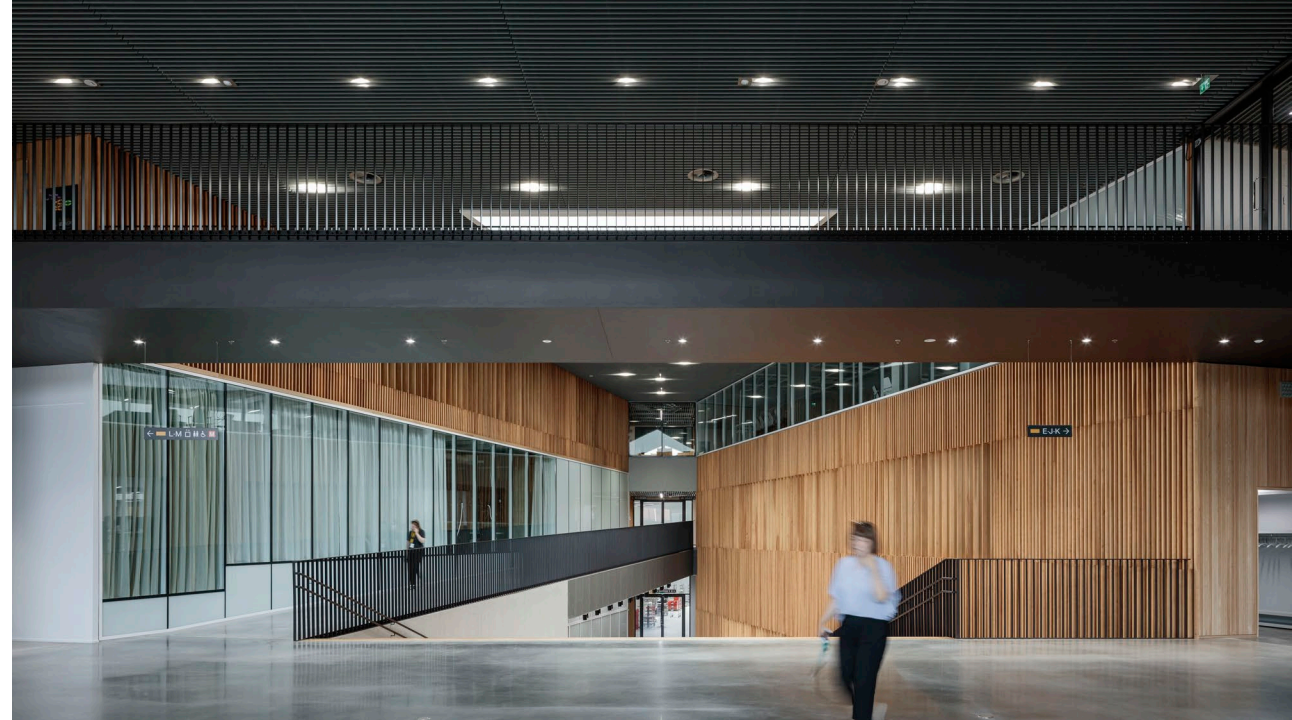
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Master's thesis process
Study Coordinator Elsa Levo (SCI Learning Services)

Master's thesis
What, when, why, how?

- Scope 30 ECTS

- Target time 6 months

- Done to the major (or minor) from a technical field

- Supervisor, topic & advisor(s)

- Skills needed:

  - ✓ project & expectations management
  - ✓ substance knowledge
  - ✓ communication skills
  - ✓ self-compassion & resilience

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It's a big task, but still

"just a thesis"

Thesis terminology at Aalto

Term	Meaning
Supervisor	• Ensures the thesis meets all requirements, <u>evaluates</u> it, and writes a statement with proposed grade. • Must be a professor or lecturer from an Aalto technical school (SCI, ELEC, ENG, CHEM). • Can be from any department if the thesis topic is related to student's advanced studies (major or minor). • Can also act as the advisor.
Advisor(s)	• Must hold at least an MSc degree ("ylempi korkeakoulututkinto"). • Can be from e.g., the commission company, a doctoral student at the department, or any other professor or researcher in the university or elsewhere. • An expert in the field of thesis and can give advice on the content and writing of a thesis. • Thesis can have 1–2 advisors.
Thesis topic	• Working title of the thesis (not the same as final title of thesis). • The student and supervisor have a common understanding of the topic and the scope of the thesis. • A master's thesis is part of advanced subject studies. • On reasonable grounds, the school may also grant permission for the thesis to be written on a topic related to the minor.
Maturity essay	• Abstract of your thesis serves as maturity essay. • **NB!** *In addition,* IEM students complete a maturity test, please see programme-specific instructions.
Thesis presentation	• Thesis must be presented; details on the presentation are agreed with the supervisor. • **NB!** IEM students complete a maturity test *instead* of thesis presentation.

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Prerequisites for starting the thesis

- ✓ **Enrolled as an attending student**
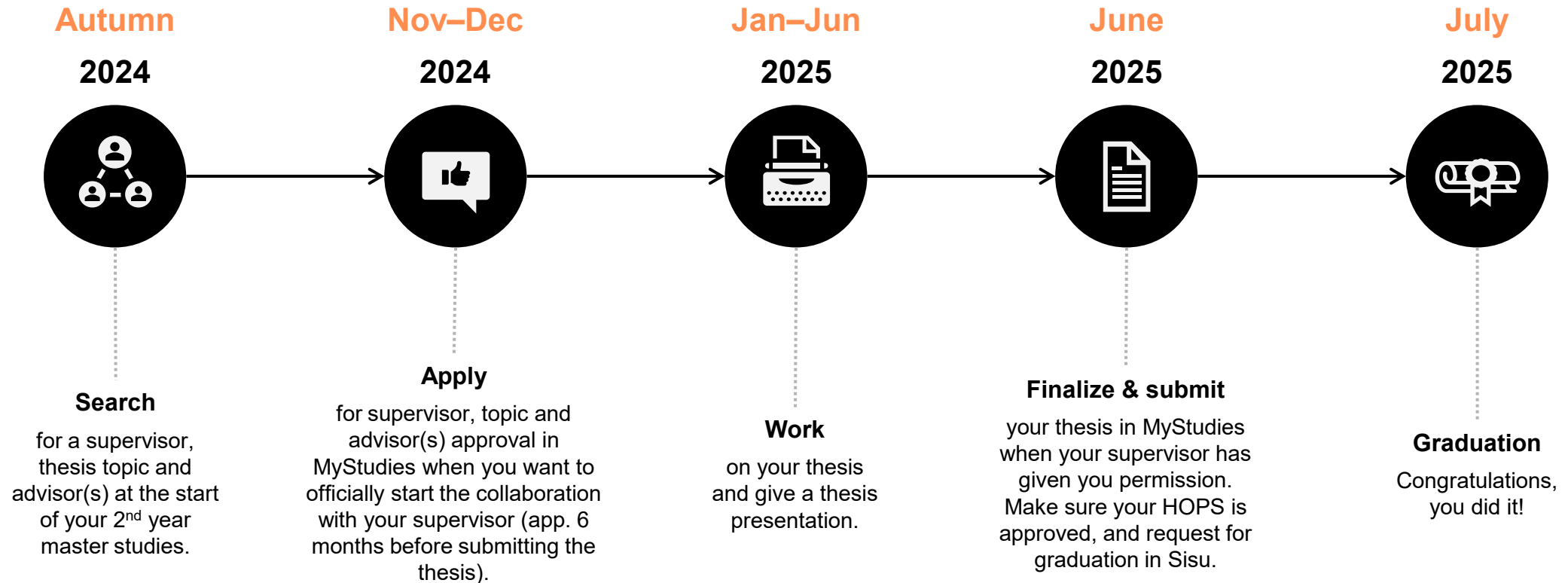- ✓ **Bachelor's degree completed**

Other important things to check:

- ✓ Study plan HOPS approved
- ✓ Correct codes in study plan:
  - • Master's thesis XX.thes
  - • Maturity essay XX.matr

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Thesis process path & timeline example

Autumn
2024

Nov–Dec
2024

Jan–Jun
2025

June
2025

July
2025

Search

for a supervisor, thesis topic and advisor(s) at the start of your 2nd year master studies.

Apply

for supervisor, topic and advisor(s) approval in MyStudies when you want to officially start the collaboration with your supervisor (app. 6 months before submitting the thesis).

Work

on your thesis and give a thesis presentation.

Finalize & submit

your thesis in MyStudies when your supervisor has given you permission. Make sure your HOPS is approved, and request for graduation in Sisu.

Graduation
Congratulations, you did it!

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How to find the supervisor, topic & advisor(s)?
Study Coordinator Jasmin Seppälä (SCI Learning Services)

Few important things about the topic

Students are responsible for finding the topic and supervisor. No one will propose you to make a thesis (unless you are very lucky).

Topic is the **working title of the thesis** and can differ from the final title.

Student and supervisor must have a **common understanding** of the topic and scope of the thesis.

NB! ICT Innovation and SECCLO students: please check the programme specific topic and supervisor requirements.

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What to consider when looking for a topic

The topic might emerge from:

Business and industry

Academic community

Personal interest

Something for the student:

- Fits your study background **70%**
- Let's you explore topics in new areas **16%**
- Interest and motivates you
- Matches your values, interests, and strengths
- Expands your horizons in the field
- Supports your career plans
- To get a compensation and afford living while completing the thesis
- With a suitable scope – understandable with a brief look and not too broad
- I can get answers to from the faculty
- Fun & whatever to get the work done
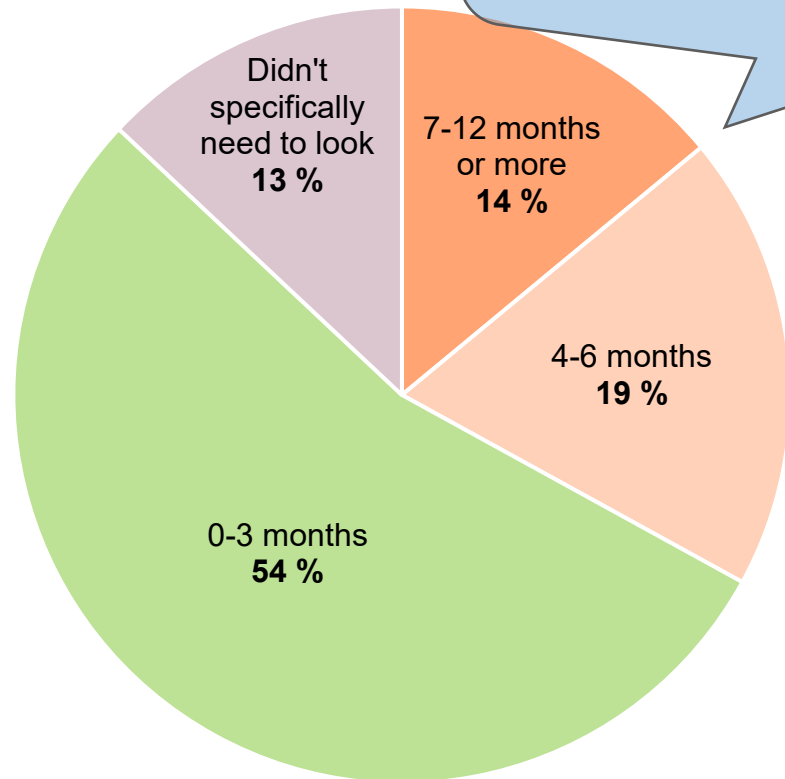
Something for the (possible) commissioner:

- Is beneficial and useful for the commissioner

*Survey on thesis topic search in SCI. Data collection 1.–31.10.2023. Sample size 511, Final response rate 28,6% (N=146).

Finding a topic might take time

How long did it take for you to find a topic?

*Survey on thesis topic search in SCI.

Didn't specifically need to look **13 %**

7-12 months or more **14 %**

4-6 months **19 %**

0-3 months **54 %**

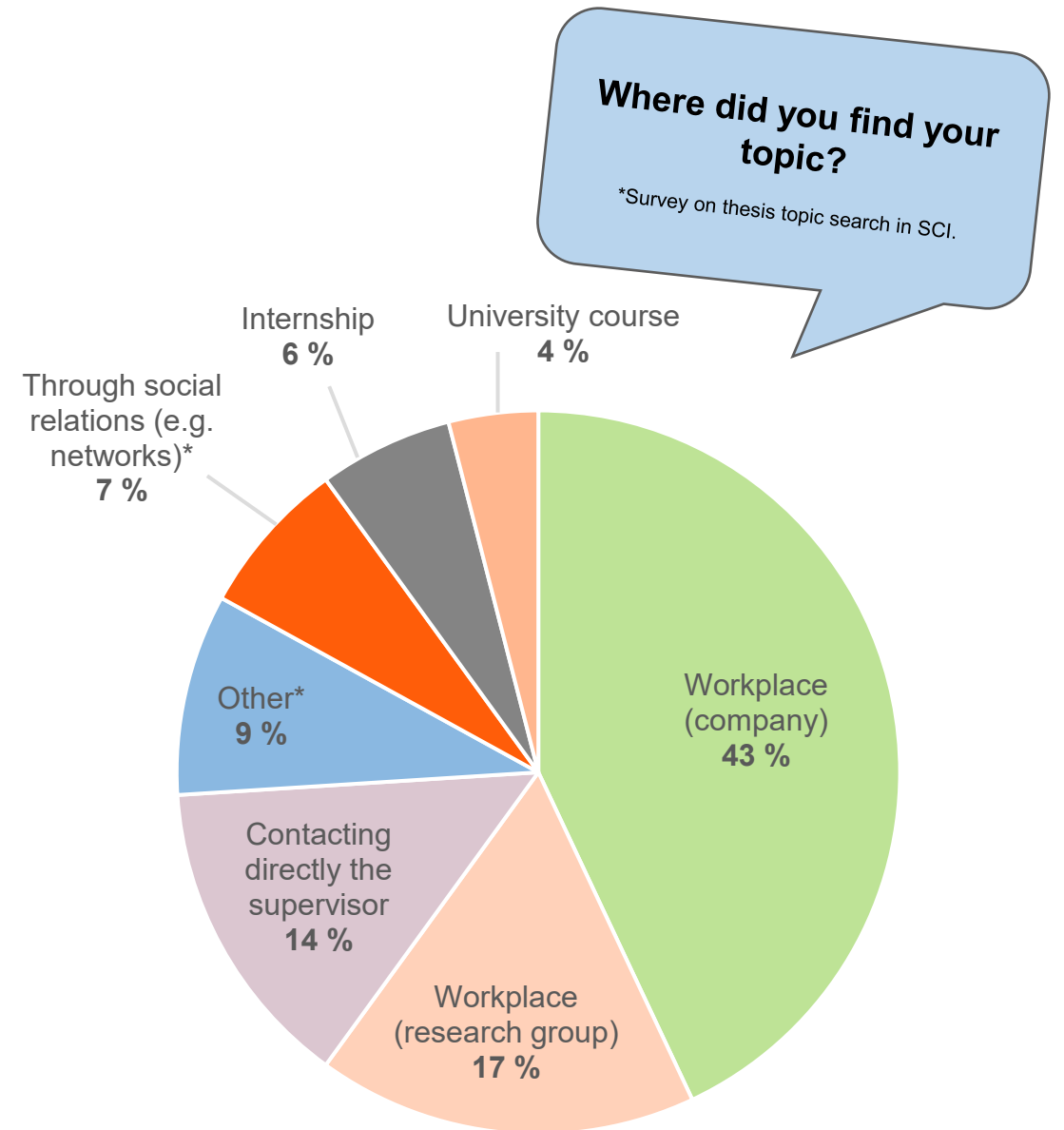**Orientate yourself for the thesis at an early stage in your studies!**

Searching for the thesis topic takes time and requires contacting multiple parties.

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Where to look for topics?

Different ways students came by a topic:

- Contacted the supervisors, professors, or head of majors with their own topic ideas.

- Worked on another study/work project, which eventually formed into a thesis topic.

- Applied directly for a thesis position mentioned in a job ad or internship application and got a topic from there.

- Student's workplace suggested a topic directly to the student.

- Student defined their own areas of interest at their workplace, suggested topics based on own ideas.

- Participated into networking events.

Keep your eyes open and think outside the box! Networks, friends, LinkedIn, alumni, previous employers, student organization channels, newsletters, job lists, Telegram groups…

Where did you find your topic?

*Survey on thesis topic search in SCI.

Internship 6 %

University course 4 %

Through social relations (e.g. networks)* 7 %

Other* 9 %

Contacting directly the supervisor 14 %

Workplace (company) 43 %

Workplace (research group) 17 %

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4.10.2024   **13**

Tips from alumni (EIT Digital)

Ask yourself

- What? Where? Funding?
- What do I know, what am I curious about?
- What can bring change or provide value?
- What do I want to find out?
- How do I frame the topic, specify the problem, and the expected results?

Keep looking

- Go for quality, not quantity, when sending applications.
- Be creative and unique, tailor your application for the job.
- Network actively, aim for paid thesis positions.
- Find a professor with interesting publications and good networks in the industry.
- Be persistent, and sell it: how will the company benefit?
- Challenges may appear – prepare to adapt for the unexpected!
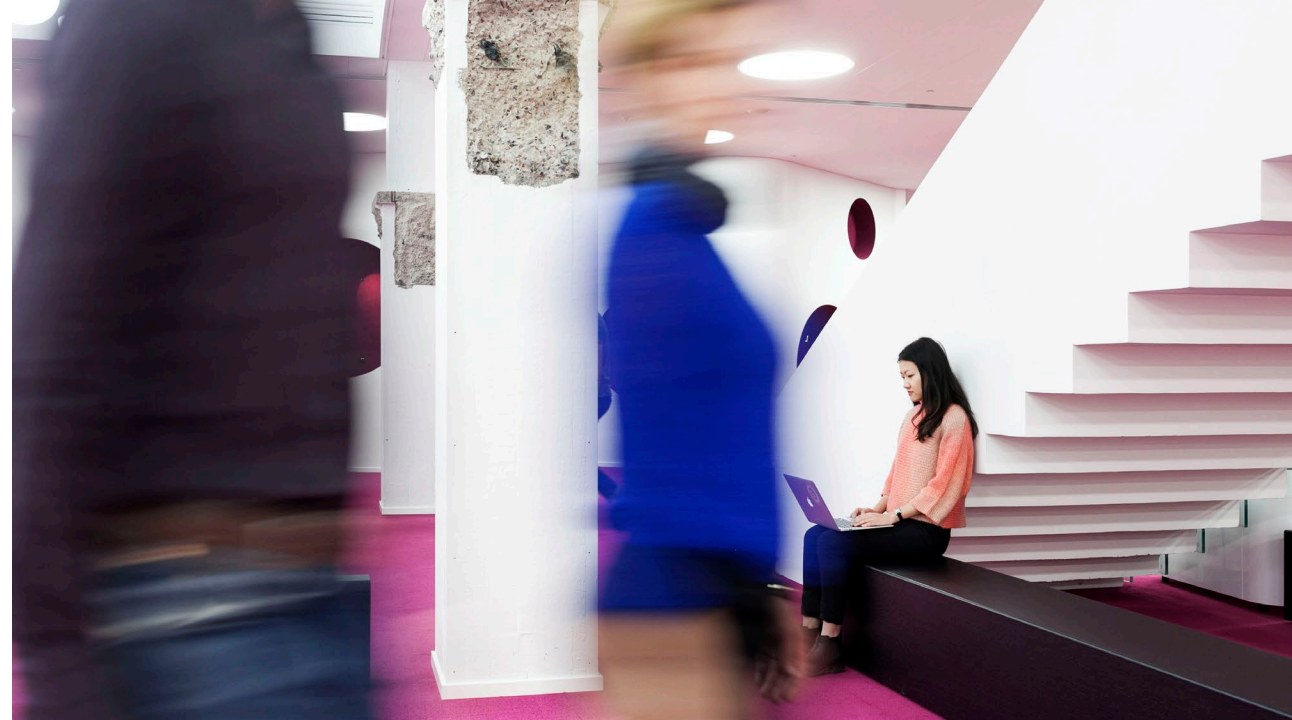- Stay motivated and find mentors and supporters in your network.

Explore and do research on different topics and industries, both inside and outside your area of interests – **be flexible!**

Stay open to interdisciplinary topics; combining different fields can lead to innovative research.

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Support for brainstorming and finding topics

- Published theses in **Aaltodoc**

- List of possible supervisors in **MyCourses**

- Open master's thesis positions and topics available in **Aalto JobTeaser**

Talent Expo

Aalto University's largest recruitment event

14 Nov 2024 at 11.00–17.00 (Dipoli)

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Important practicalities

Study Coordinator Meeri Heimo (SCI Learning Services)

Thesis as a commission

What to take into consideration

- Expectations may conflict: Company excepts a result to a *specific project*, whereas the university expects a *scientific research*.

- Recommended to make a thesis contract for organisations external to Aalto (see templates).

- The recommended salary for a thesis is 3100 €/month (TEK 2024).

- For international students who do the thesis for the private sector, the probability of finding high-quality employment at the time of graduation is 70 %*.

Combining work and studies

- Thesis scope 30 ECTS equals 6 months of full-time studying.

- When do you write the thesis? Have meetings with supervisor? Do you have courses to complete?

- Pay attention to merging the schedule and the contents of work, thesis, and possible coursework properly.

NB! Master's thesis is always a public document according to Finnish legislation.

The thesis submitted for evaluation may not contain any confidential information, as information about the thesis can be retrieved from the Aaltodoc publication archive.

A! *Academic Engineers and Architects in Finland TEK. Master's thesis for a company helps foreign professionals secure jobs. 26.10.2022.

Contacting potential supervisor or company

Introduction

Briefly introduce yourself (program, school) and express your interest in conducting your thesis under their supervision or in collaboration.

Research alignment

Highlight specific projects or research that the potential supervisor/company has been involved that align with your interest.

Preliminary topic or area of interest

Suggest a tentative thesis topic or specific area of interest that you are considering. How would the company benefit? Sell your idea!

Schedule and availability

Offer a proposed timeline for the thesis and collaboration.

Meeting request

Politely request a meeting or discussion to further explore the potential for collaboration.

Example: Inquiry about thesis supervision / topic

Dear [Supervisor's Name],

I am a master's student in [Programme name] at SCI, and I am interested in conducting my thesis under your supervision. I am particularly interested in investigating [Suggested Thesis Topic] by using [Specific Methodology or Approach].

I have developed a tentative schedule for my thesis research, with a planned start date of [Month, Year] and a proposed completion and submission date of [Month, Year].

I would be grateful for the opportunity to meet with you to discuss the potential for collaboration and further explore how our research interests align. Please let me know if you would be available for a meeting, and I am happy to adjust my schedule to accommodate yours.

Thank you for considering my request.

Sincerely,

[Your Name]

[Your Contact Information]

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Start your thesis officially

Apply for supervisor, topic and advisor(s) approval when you want to officially start the collaboration with your supervisor. Fill in the basic starting information in MyStudies Thesis-tab and click "Submit for supervisor approval".

CCIS students: Fill in the basic starting information as soon as you have a preliminary topic idea in mind. Submit for supervisor approval when you are ready to start. If you don't have a supervisor agreed when sending the application, the programme director will appoint a supervisor for you.

SECCLO & ICT Innovation: Please check programme-specific thesis instructions on your programme's own thesis page.

The appropriate time for starting is about six months before submitting the thesis for evaluation.

Remember, the scope of a thesis is 30 ECTS, which is equivalent to 6 months of full-time study.

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**Aalto University
School of Science**

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Support and contact
You're not alone!

Resources and wellbeing

Learning center – Resource guides to help with thesis writing.

Writing clinic – Plan, organize, write and revise academic papers.

Study skills – Develop study techniques and self-management.

Learning services – Groups, workshops and online materials for well-being, study skills and coping.

Turnitin – A tool for practicing scientific writing.

YTHS when you are not able to keep up with studies because of health.

Starting Point of Wellbeing when you need advice and guidance on services related to wellbeing, learning skills, coping with stress, etc.

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Be aware of your personal resources.

Don't exhaust yourself!

Seek for help and advice rather too early than too late. You can always contact your planning officer, study psychologist, professor, tutors, or medical professionals.

Contact information

Master's Programme	Contact person (firstname.lastname@aalto.fi)	Events and support
Computer, Communication and Information Sciences (CCIS)	**Meeri Heimo** Study Coordinator	
Engineering Physics (EngPhys)	**Sanna Aronniemi** Study Secretary	
ICT Innovation (EIT Digital Master School)	**Elsa Levo** Study Coordinator	• Thesis page (programme specific instructions) • 21.11. SCI-E1012 Intro course: Thesis steps
Industrial Engineering and Management (IEM)	**Jasmin Seppälä** Study Coordinator	Master's Thesis Event (in November)
Information Networks (Info)	**Hanna Alve** Study Coordinator	• Thesis page • Telegram-group for support
Life Science Technologies (LifeTech)	**Päivi Koivunen** Planning Officer	
Mathematics and Operations Research (MathOR)	**Elsa Levo** Study Coordinator	
Security and Cloud Computing (SECCLO)	**Elsa Levo** Study Coordinator	• Thesis page (programme specific instructions)

**Check out MyCourses Where to find support?
for more ideas, resources, and tips!**

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Student experience
Alumnus Basak Amasya, MSc (CCIS)

Q&A with

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Professor Petri Vuorimaa

Department of Computer Science

https://presemo.aalto.fi/scithesisevent

Feedback time!

Please give us your thoughts on the event:

https://presemo.aalto.fi/scithesisevent

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Kiitos
aalto.fi