

# Master Thesis @ SPSC

## Finding a Thesis...

There are generally two ways to find a topic suitable for you:

- Attend our semiannual project and thesis topic presentations (usually at the beginning of March/October). Get to know the topic and the supervisors behind it in a relaxed atmosphere. If you can't make it to our presentation, visit the website [1] for open topics.
- If you have an idea for a project, just visit us! The floor plan hanging in the hallway will help you finding a supervisor working in your field.

## Getting Started!

After your initial meeting with your supervisor you will have a vague idea of your tasks. Before starting, there are a few things to do:

- You have to officially register your thesis at the dean's office. You can find the necessary forms on the website of the dean's office. Fill them out (ask your supervisor if you are not sure about the working title or the examination subject), let them be signed and submit them in time.
- You may need access to our infrastructure! Go to our system administrators to set up an account and to get access to our student's lab. Your student's ID card will be set such that it can open the door to the student's lab and the building, if it is locked. For more information about card usage see [2]. The student's lab is equipped with PCs and a laser printer, which you are allowed to use for your studies. If it is necessary for your thesis, you can also gain access to the sound studio, sound lab, RF lab, etc. Ask your supervisor for handing you out the key!

## Working on your Thesis

Now that you have everything you need, it's time to start working. You will most probably encounter some problems or dead ends, and there is a lot you can gain from this experience. We will try to provide you with as much help as possible:

- If you want (or if your supervisor insists), you can make a project plan, breaking your tasks into work packages, identify milestones, and set up a schedule. A template can be found in [3].
- Set up regular meetings with your supervisor! He/she will notice immediately if you are working in the wrong direction, and he/she can most probably point you to solutions if you encounter a problem. Above all, your supervisor is interested in your progress and to learn from you as well!
- After about one half or two thirds of the work is done, it is time to present your preliminary results to a wider audience. The Midterm-Presentation will be held in front of the lab members and lab students. After presenting your results for approx. 25 min., devote the last two or three slides to the remaining tasks, to your own ideas, and to problems you currently encounter. Maybe the audience can help you to solve the problem, or at least point you in

the correct direction.

- Do not postpone writing on your thesis until the last month! Try to document your work continuously and, ideally, digitally. Keep a log of your simulation parameters, your results, your derivations. Sure, for the thesis you will have to rewrite or even throw away many things, but at least you have something to start with. In addition to that, these logs or intermediate reports can be helpful in the regular meetings with your supervisor. Templates for the written thesis can be found in [1] and [4].

## Finish your Work

The last steps in your thesis are mostly formal, but equally necessary. Here they are:

- Finish your written thesis (templates in [1] and [4])! Consider the official examination dates announced by the dean's office. Note that you shall hand in your first complete version of the thesis two-three months prior to your desired examination date (depending on the deadlines of the dean's office). The printed thesis has to be submitted to the dean's office approx. 1-1.5 months prior to this date, and you and your supervisor will need another month for corrections, changes, and proof-reading.
- There will be another mandatory, official presentation after submitting the thesis in the framework of the master student's seminar. The presentation shall last 15 min and contain an overview of your work. Don't go into too much detail, as this presentation is intended for a wider audience. This is a good exercise for the exam, where you also have to present your work. If you need the course "AK Nachrichtentechnik", note that you have to attend all midterm presentations and all presentations in the master student's seminar scheduled during you work.
- Now you're almost finished. To make sure your work is reproducible, we want you to hand in all the material you created or used during your thesis for our records. This includes source codes, results, papers you downloaded, presentation slides, the written thesis and many other things. Make sure that everything is ordered properly, so that your supervisor can find the things he/she needs quickly. The minimum requirements are the following:
  - A PDF of your thesis
  - The slides of your midterm and seminar presentation (either PDF or PPT).
  - A folder with all your working files (Matlab scripts, source codes, results, etc.), basically everything that makes your work reproducible
  - A folder with the most important papers concerning your thesis
- In addition to these minimum requirements we would appreciate if you hand in other material as well, e.g.,
  - A folder containing all the LaTeX/Word files of your thesis, including all objects in it (figures, tables, etc.) in original format.
  - If available, videos/audio files/pictures documenting your results
- Some of this material will be published on our website (at least the PDF of your thesis and its abstract; if available, also some audio/video files) after we obtained your permission. You will receive a mail when the material is online so that you can review it and request some changes.

- One of the last tasks you have to do before you get the certificate of your thesis and before you can hand it in at the dean's office is the plagiarism check of your thesis. Therefore download form [5], fill it out, sign it and send a scanned version together with a PDF of your thesis via e-mail to your supervisor. Note that the plagiarism check takes between 6 and 48 hours. The result is delivered to your supervisor and he will inform you. In [6] you find further details about the plagiarism check and the form you need when handing in your thesis at the dean's office.
- Note: the file size of the PDF has to be less than 15 MB. If the PDF of your thesis is larger, then make a plagiarism-check version, in which you delete all the pictures and diagrams till you get a smaller PDF than 15 MB.

[1]: [www.spsc.tugraz.at](http://www.spsc.tugraz.at)

[2]: Card: more information see:

[http://portal.tugraz.at/portal/page/portal/Files/audiotechnik/Tonstudio/Files/elektronisches\\_Schloss\\_Procedere\\_V1.pdf](http://portal.tugraz.at/portal/page/portal/Files/audiotechnik/Tonstudio/Files/elektronisches_Schloss_Procedere_V1.pdf)

[3]: Project Plan:

[http://portal.tugraz.at/portal/page/portal/Files/audiotechnik/Lehre/BA\\_DA-Themen/DA\\_Projektplan.xls](http://portal.tugraz.at/portal/page/portal/Files/audiotechnik/Lehre/BA_DA-Themen/DA_Projektplan.xls)

[4]: Word-Template:

[http://portal.tugraz.at/portal/page/portal/Files/audiotechnik/Lehre/BA\\_DA-Themen/DA-Muster.doc](http://portal.tugraz.at/portal/page/portal/Files/audiotechnik/Lehre/BA_DA-Themen/DA-Muster.doc)

[5]: Declaration of agreement for the plagiarism check:

<http://www.spsc.tugraz.at/sites/default/files/AgreementPlagiarismCheck.pdf>

[6]: <http://www.spsc.tugraz.at/sites/default/files/Plagiatspruefung.pdf>

## Dean's Offices Website Addresses

Below you will find the addresses of the official websites with information you need to finish your thesis (forms, dates, requirements, etc.)

Electrical Engineering (MSc):

[http://portal.tugraz.at/portal/page/portal/TU\\_Graz/Einrichtungen/Fakultaeten/FakElektrotechnik/dek4001/studien/masterstudium%20et](http://portal.tugraz.at/portal/page/portal/TU_Graz/Einrichtungen/Fakultaeten/FakElektrotechnik/dek4001/studien/masterstudium%20et)

Audio Engineering (MSc):

[http://portal.tugraz.at/portal/page/portal/TU\\_Graz/Einrichtungen/Fakultaeten/FakElektrotechnik/dek4001/studien/masterstudium%20et%20toningenieur](http://portal.tugraz.at/portal/page/portal/TU_Graz/Einrichtungen/Fakultaeten/FakElektrotechnik/dek4001/studien/masterstudium%20et%20toningenieur)

Telematics (MSc):

[http://portal.tugraz.at/portal/page/portal/TU\\_Graz/Einrichtungen/Fakultaeten/FakInformatik/dek7001/studium/Abschlussarbeit](http://portal.tugraz.at/portal/page/portal/TU_Graz/Einrichtungen/Fakultaeten/FakInformatik/dek7001/studium/Abschlussarbeit)

Electrical Engineering (Dipl.-Ing.):

[http://portal.tugraz.at/portal/page/portal/TU\\_Graz/Einrichtungen/Fakultaeten/FakElektrotechnik/dek4001/studien/diplomstudium%20et](http://portal.tugraz.at/portal/page/portal/TU_Graz/Einrichtungen/Fakultaeten/FakElektrotechnik/dek4001/studien/diplomstudium%20et)