

Guide to supervision of BSc and MSc theses at the Department of Engineering Geology and Hydrogeology (LIH), RWTH-Aachen University

Four Ways towards Your Thesis Topic

1. Inquire with us any time.
2. Come to the thesis announcements in November during our LIH seminar and apply directly to a topic (the titles will also be published on our website and facebook).
3. Have ideas or a particular interest? Come see us and we can design a thesis together.
4. A thesis may also be arranged with an external partner.

Starting Your Thesis

A ½-page write-up of the thesis objectives has to be handed in and discussed with us before the thesis topic is formally assigned; further prerequisites might be assigned by your supervisor (such as a 1-page summary of 2-3 key papers on your research topic).

Everything concerning the bureaucratic side (correct forms, deadlines, sufficient credit points, etc.) is your responsibility. Get permission to use the LIH logo (there's a form for that, too, but don't ask us where). A template for the title page of your thesis is provided on our website. Please use a sans serif font of size 11-12, and line spacing of 1.2-1.5. For requirements in hydrogeology, please ask your supervisor.

Set-up a timetable with milestones – three/six months are short!

Do check out the Writing Centre (<http://www.sz.rwth-aachen.de>), they offer great courses on scientific writing (in English and in German) and they also proof read excerpts of your drafts (register and get your time slots early, they are quite popular).

Scientific Ethics

At LIH we have zero tolerance for plagiarism. Each case of plagiarism will be reported to the Central Examination Office (ZPA), and the thesis marked as “failed” (5.0).

The Thesis Writing Club (MSc)

We offer an optional course to guide you through the thesis writing process (from correct citation to creating effective figures to presenting data convincingly to chapter structure, time management, and much more). You will be among peers who are also working on their theses and you will receive valuable peer feedback on your work and text during regular peer review sessions. The course is called “Bringing Ideas to Paper” and is part of the elective module “Scientific Research and Writing”.

Sharing Your Work (MSc)

Current master students and recent graduates may give a 15-minute presentation of their work during the LIH seminar series (Thursdays 16:15-17:00 during the semester). This is a great chance for you to receive feedback on your ongoing work or to celebrate the completion of your thesis - you are, of course, welcome to invite friends and family.

On Supervision

The following reflects what supervision with us is like; it outlines your role and responsibilities in the process of successfully completing your degree.

1. Schedule Meetings

“Your supervisor(s) might not even have full command of their own diaries so don’t expect them to manage yours” - a statement by O’Gorman and MacIntosh (2017) we heartily agree with. The best time to schedule the next meeting is at the end the current meeting.

2. Turn Up Prepared

Checklist: What’s my progress since our last meeting (short summary, bullet points, or a few PowerPoint slides)? Which questions do I need to ask? Do I have data to plot, methods to discuss, program steps to check? Do I know all units/methods/etc.? What are my next steps? What feedback/support/references, etc. do I need from my supervisor(s)? What milestones can I set until the next meeting? ...

3. Take Notes

Have your notebook and a pen ready at each meeting and write things down. “Other than undercover agents, few people have mastered the art of remembering every nook and cranny of a complex, free flowing conversation”.

4. Establish Expectations

Each thesis requires different types and amounts of feedback. Some lab work needs regular guidance, field work is ideally supervised for a day or two, literature/data search and learning a new programme can be done without too much supervisory input – you get the drift. Know your task and your way of working. If you need regular input, let us know.

5. Get Creative

Yes, science is a creative beast. First, explore the box put in front of you (i.e. fundamental literature, textbooks, etc.), then think outside the box, explore and make connections to other disciplines. Play, think – then check in with us soon so we can keep you on track (the downside of creativity is that it can lead you down a hundred different paths. Let us guide you, we’ve been on these roads a while).

6. Follow Your Supervisors’ Advice

“This is probably your first [BSc/MSc] but it won’t be theirs so follow their advice”.

7. Don’t Go Off-grid

Three/six months are not a lot of time, so stay in touch and “place yourself somewhere between ‘missing, presumed dead’ and ‘stop stalking me’”.

8. Be Honest

“Speak up when you don’t understand something, don’t agree with something or can’t see yourself being able to do something”. Its fine, we’ve been there, too.

All quotes are excerpt from O’Gorman and MacIntosh (2017) “Top Ten Hints on How to Manage Your PhD Supervisor”.