Institute of Construction and
Infrastructure Management

IBI Guidelines for student work

The aim of the IBI guidelines is to enable students to gain a comprehensive overview of the knowledge and skills needed for a successful student project or thesis (referred to as "student work") at IBI.

What applies to me?
This guideline has been set up by IBI members for students at Chairs of Infrastructure Management, Sustainable Construction or Circular Engineering for Architecture.

This guideline builds on those requirements and regulations set by the ETH and the Civil, Environmental and Geomatics Engineering department, D-BAUG (see D-BAUG webpage for more information).

Furthermore, each chair within IBI may apply further guidelines as necessary. Ask your supervisor how you can best apply these guidelines to your work.

When writing any student work at IBI, all of the above apply.

Research integrity and citation etiquette
Scientific work includes the independent, structured investigation of a topic using scientific methods and the logical presentation of the achieved research results. Scientific work is honest, objective, unambiguous, homogenous, clear and replicable. Further information on research integrity can be found in the ETH guidelines on research integrity. IBI enforces a zero tolerance policy for plagiarism.

Citing effectively is crucial to any scientific work. It saves a lot of work to cite properly from the get-go. Many reference management tools update your citation and bibliography automatically. The ETH library can be a helpful resource and even offers courses on citing. ETH has also provided a "Citation etiquette".

There are multiple tools available to you for reference management. The standard tool is the citation plug-in in Microsoft Word. LaTeX users often use BibTeX. Other reference managers include Mendeley, EndNote, Zotero. Ask your supervisor what they recommend and/or prefer.

When choosing a citation style, APA is preferred. It is possible to deviate from this in agreement with your supervisor. Most importantly, be consistent.

Structure & what to hand in
At the kick-off meeting, make sure you have a clear vision for the end result of your work. Seek advice on how best to structure your work

A structure for the project and a vision for the end result is to be created at the beginning and guide the student during the project. Document templates for hand-in (.tex / .docx / .ppt) are available for works from all Chairs on the IBI Website. You may deviate from these templates in agreement with your supervisor.

The template folder provides a structure of all those elements that are expected to be handed in:

- A read-me file including a project summary, overview of folder structure and personal email to contact you after your time at ETH
- A report
- A poster
- Your presentations
- All extra material requested, such as sketches, meeting minutes, lab journals, figures, tables, literature or code produced during the project.

All materials are to be handed in in digital format (both pdf and source file (docx or tex)). In addition, the poster is also to be handed in in printed form, size A0. Ask your supervisor if you have any questions.

Please save your files with the following name-structure (e.g. FS20**xx**-MScProject-**LastName**-Report-**ProjectName**.pdf).

Don't forget to fill out the "Declaration of originality".

The importance of unambiguous scientific writing
Writing clearly is the most important skill required for reporting results of any kind. No one is perfect, but practicing gets you closer to that goal.

A few general tips to guide the way:

- Start every paragraph with a sentence that informs the reader what the paragraph is about. Setting up a paragraph with the "PEEL"-Strategy has proven to be useful.
- Only add one new piece of information per sentence.
- Make sure that every sentence within a paragraph is connected to the last sentence before it, and the next sentence after it.
- For a starter pack on research-related questions, here's some Advice for New Researchers

There are multiple courses, youtube-videos and self-study courses out there on how to best write clearly. Here are a few resources to get you started:

- Scribbr Knowledge Base for Academic Writing, Research, and Citations
- Free Moodle Self-Study Course on Starting Bachelor/Master Thesis (approx. 75 minutes)
- Scientific Writing at ETH

Communication with supervisor
Have your communication style and frequency with your supervisor very clear from the start. Make sure that you know when the relevant presentations and submissions are scheduled. It is your responsibility that the project is on track. Arrange meetings as you find necessary to assess the progress of the project. An ideal student prepares questions, and even an agenda, for their supervisor prior to the meeting.

At the important milestone meetings, it is good practice to track the decisions made in the meeting using meeting minutes and distribute to all participants after the meeting.

Grade evaluation
The evaluation of the student work is in the hands of each individual Chair. The grade for a student work is based on the documents you hand in as well as the academic rigor of your results.

The grade is calculated based on, but not limited to, the following factors:

- Evaluation of work process (eg. Engagement and initiative of student(s))
- Evaluation of submitted documents (eg. Report structure and language and citation correctness, poster appearance and structure, presentation appearance and defence)
- Evaluation of content (eg. The use of appropriate methods and recognition of their limitations, the clarity and interpretation of the results)
- Overall evaluation of the work by the direct supervisor

ETH Zürich
Institute for Construction and Infrastructure Management
HIL F27.1
Stefano-Franscini-Platz 5
8093 Zürich

www.ibi.ethz.ch