

INFORMATION FOR THE PREPARATION AND ASSESSMENT OF THESIS

(DRAFT)

1. General principles

Students are required to write theses on BSc courses, the purpose of which is to show that they can solve a real engineering task with the help of consultants. It is expected that the topic, the content, quality and depth of the work to be performed correspond to the purpose and level of the training.

The topic of the thesis to be prepared at the end of the BSc education should generally be planning, but it is expected that the work goes beyond the homework completed within the framework of individual subjects, part of it should be construction planning or the development of the exploration and solution of some construction-operation problem, possibly well-defined solution of a technical development task or detailed design.

The thesis must demonstrate the ability to apply engineering knowledge to simpler (standard) tasks under the supervision of an MSc-educated supervisor (to prepare plans and to demonstrate feasibility method).

In the formulation of the topic, efforts should be made to include economic and environmental protection aspects in addition to technical issues.

A thesis containing laboratory tests can be prepared, in which case it can either be the preparation of an evaluable number of tests and their analysis, or the measurement results must be compared with other (e.g., calculation) results, and the utilization possibilities of the measurement results must be pointed out.

In the case of a thesis focusing only on construction issues (organization), a project of such a volume must be chosen that the time required to process it, meets the subject requirements, and special attention must be paid to the choice of the optimal schedule and organization, and the risks that arise and their management options must be analysed.

Thesis topic that only contain information gathering and literature processing should be avoided. In exceptional cases, the topic of the thesis may also be of a research nature.

„The University is to keep to the following requirements when assigning and permitting a given thesis project: students need to be able to work out the project under the supervision of a supervisor in the course of one or two semesters with the help of the theoretical knowledge and/or practical application previously acquired on the basis of the curriculum. Moreover, thesis projects are expected to show that candidates have acquired adequate experience in the scientific theoretical development and the practical adoption of the learnt knowledge.” (EER 74§ (4))

A successful thesis is worth 15 credit points, which assumes approximately 400-450 hours of work.

In addition to collecting and processing the information necessary to solve the task, developing the solution(s) and writing the thesis, the number of working hours required also include the information needed to choose a topic, additional learning that may be necessary for the work, work-related discussions and consultations, and the work documentation and

preparation for defense of the thesis as well.

The preparation of the thesis is supported by supervisor (internal consultant) and an external industrial consultant, both of whom must have a MSc) or, in exceptional cases, a BSc degree. It is necessary to make sure that at least one of them has more than 5 years of professional experience.

Students can choose from among the topics (themes) announced by the Department of Structural and Geotechnical Engineering, and they can also bring their own (external) assignments that fit the profile of the training.

The exact topic of the thesis must be established in the consultation process between the student and the consultants. Within the task, the specific work parts to be completed are primarily determined by the supervisor, keeping in mind the training goal and usual expectations.

2. The order of topic selection

„Thesis projects can be given to students who are to be expected not only to obtain the amount of credit points necessary to be allowed to sit for the final exam but to complete other requirements in the course of the semester when their thesis is to be completed (students are required to register all the compulsory subjects).” (EER 75§ (1))

After the preliminary topic selection, the students fill out the document entitled "Data sheet for the authorization of a thesis topic" (Annex 1). It is the student's responsibility to sign two original copies of the approved data sheet agreed with the supervisor (internal consultant) with the external consultant. The "Data sheet" must be signed by the consultants in the exam period before the semester for which the thesis is to be prepared and submitted to the department by 12 noon on January 15 or on June 15 (depending on whether it is fall or spring semester). If this is a public holiday, the submission deadline is the first working day after that. Based on the "Data sheet", the department decides whether to allow the student to officially record the subject "Thesis" on the NEPTUN system with the selected topic and the indicated consultants. If the decision is negative, the student will be notified of this by the start of the course enrollment period for the semester in which the final thesis is to be prepared. The thesis topic can be considered accepted if the data sheet has the signature of the head of the department. One copy of the data sheet will then be kept in the department's archives, and the other copy will be given to the student. In the case of a positive decision, the student can take the "Final thesis" subject in the NEPTUN system, in the usual way, for the course assigned to the name of the student's supervisor. Applications that are not for the supervisor's course are invalid and will be deleted from the system (If the subject is not choosed, the student cannot take the final exam following the given semester).

If the student does not finish his final thesis within one semester, he/she can request that the topic be continued. A maximum of two semesters are available to develop a topic, if the student does not prepare his final thesis within this time, he/she must choose a new topic.

Therefore, the outlined procedure must precede the development of the task. The department cannot accept a finished or half-finished thesis without subject choosing.

3. Support and control of the preparation of the final thesis

In order to ensure the proper quality of the final thesis and to check the student's independent work, the department monitors and checks the process of preparing the final thesis. In this regard, there are the following actions.

At the beginning of the final thesis course, by the 3rd week of the semester, the supervisor prepares an "Final thesis requirements" in 3 copies (Annex 2) in accordance with the data sheet belonging to the topic. In this, the internal consultant records the parts of the task to be performed in a well-defined manner and approves it with the head of department. One copy of each, signed by the internal consultant and the head of the department, is placed in the department's archives and given to the student, while the external consultant receives an official copy.

At the same time, the student starts keeping his (written or digital) consultation sheet, which is a reminder of the events of the work. In the course of the student's continuous work, in accordance with the essential phases of the development, he visits his supervisor and external consultant.

„Students have the following duties in the course of thesis writing:

- a) Agreeing on consultation appointments with their supervisor
- b) Asking the supervisor to register the participation of the student at the appointments on the consultation sheets” (EER 77§ (1) a., b.)

The student visits his or her consultant at least five times during the semester to discuss progress and assign additional sub-tasks. A minimum of three consultations must be held until the 10th week of the term time. The existence of consultations is a condition for obtaining a signature. The supervisor and the external consultant prepares a record of the consultations - in the consultation sheet, or digitally - in which they record the date of the consultation, the tasks completed up to that point, the topic of the consultation, and specify the tasks to be completed until the next consultation. For the last time, the supervisor declares on the consultation sheet whether the thesis can be submitted. A recommended form of the consultation sheet is included in Annex 3. A copy of the consultation sheets (booklet) must be submitted to the department together with the final thesis. The consultation sheet remains the property of the student.

Based on the evaluation of the final thesis, the supervisor decides on admissibility, and if necessary, he can ask for the opinion of the head of department and departmental colleagues. In the case of a positive evaluation, the student receives the signature and a grade for the "Thesis" subject in the NEPTUN system.

The documents required for the preparation of the final thesis (the sample of the internal title page, the consultation sheet, the regulations on the formal requirements of the printed and electronic copy of the final thesis and other possibly necessary information) can be found on the website of the Department of Structural and Geotechnical Engineering.

The condition for participating in the thesis defense is that the student submits the final thesis together with the final report, with the approval of the consultants, in a bound copy at the department, in a completely finished state. Before submitting the final thesis, it must be uploaded electronically to the specified storage location as defined in the university's

Education and exam regulations. The student is responsible for the sameness of printed, submitted and uploaded materials. When uploading the thesis, the "Summary data sheet about the diploma work" form must be attached.

If the thesis subject is taken in the fall semester, the deadline for submitting the thesis is december 15 at 12:00 a.m. (if this day falls on a weekend, it is the first working day after that). If the thesis subject is taken in the spring semester, the deadline for submitting the thesis is May 15th at 12:00 a.m., in the case of a public holiday, the following working day. The thesis must be uploaded to the library interface by midnight the day before the department submission. If the submission deadline is missed, the student can only take the final exam during the final exam period of the following semester.

In case of an unsuccessful thesis course, based on the proposal of the supervisor, the head of the department decides whether the student can continue the work with an unchanged topic description, or whether he/she must request a new thesis topic. To continue, the student must submit the request. The student can work on a topic for a maximum of two semesters, if he/she does not prepare the thesis in this time, a new topic must be started.

Included in the final thesis, as part of it, the student must submit a statement in which he/she declares that the results of his/her final thesis are based on his/her own work. The declaration template is included in Annex 4.

4. Content and form requirements

The thesis usually consists of text and drawing parts. The length of the text part is 50-80 A/4 pages, depending on the topic and the length of the attached annexes, approx. with 30 rows and approx. 60 characters (with 12 pt). This is supplemented by drawing attachments and separately attached calculations. It is advisable to include the most important calculations, figures, illustrations, and tables in the text. Larger drawings should be placed in the pocket on the back cover.

The structure and wording of the thesis should be clear, concise, organized and easy to follow. The thesis should be divided into the following main parts:

- formulation of the topic, its importance, the aim of the thesis, the methods used,
- solving the task, divided into chapters and subsections,
- summary description and evaluation of the work results.

The chapters must be numbered. In addition to the chapter titles, the page number must also be indicated in the table of contents. The annexes must be listed with appropriate identifiers.

A separate list should be made of the literature used, its items must be referenced where used. Other sources of the information used must also be reported (e.g. XY's oral communication, own measurements, etc.). Internet references may only be provided for supplementary sources or in very special, professionally justifiable cases. The formal requirements of the final thesis are contained in a template in Annex 5.

A summary of the completed thesis (1-1 A/4 pages) must be prepared. It should be clear from the summary what the student had to solve, what information, starting data, solutions prepared by others, and samples he/she received.

The thesis must be submitted to the department in one bound copy. On the outer cover, the name of the university, the title of the thesis, the name of the student and the year of submission, while on the spine, the name of the student and the year of submission must be displayed in a clearly visible manner (Annex 6).

After the successful defense, the bound copy of the thesis can be requested from the department administrator.

As a minimum, the printed copies must contain the following elements:

1. Inner title page,
2. Thesis assignment sheet,
3. Declaration on the originality of the thesis,
4. Summary in english,
5. Contents
6. Text section with figures, graphs, pictures, tables, etc.,
7. List of figures (with page numbers)
8. List of tables (with page numbers)
9. Bibliography
10. Attachments

5. Presentation and defence of the thesis

The supervisor - if necessary based on the opinion of departmental colleagues - decides whether the final thesis can be submitted. The submitted final thesis is evaluated by an external – or, in exceptional cases, internal – reviewer, who is a specialist with a university (MSc) – in exceptional cases, a college (BSc) degree and sufficient knowledge.

The supervisor records on the "Assessment sheet" (Annex 7) whether the final thesis can be submitted for evaluation and makes a proposal for the reviewer. This is finalized with the signature of the head of department and the reviewer is invited. Attach the "Evaluation form" and the "Guidelines for the evaluation of theses" (Annex 8) to the request. This can also give students guidelines on what aspects to pay attention to when preparing their final thesis. The reviewer's evaluation is approved by the head of department's signature and added to the evaluation sheet. The departmental evaluation of the final thesis is also recorded here, which is signed by the supervisor, but for this the external consultant is consulted and the opinion of other lecturers can also be sought.

The final thesis must be defended in front of the examination board in the final exam. For this, slides made with PowerPoint (or other presentation software) must be compiled, which explain the following:

- the name of the author and the title of the work,
- other identifiers relating to the place and circumstances of the preparation (university, faculty, department, consultants, date, etc.),
- the purpose of the thesis/plan,
- the main steps of the solution,

- the most important results.

In addition to the introduction of basic information, the presentation must focus on the presentation of one's own work so that the Final Examination Committee can get to know and evaluate it. The final grade of the thesis is determined by the Final Examination Committee, taking into account the previous grades and what was said at the defense. In case of encryption, the thesis is handled according to §7 of the Faculty Final Examination Regulations.

A "Thesis summary" file is opened for each thesis in the department's archives, which contains the following documents:

1. Data sheet for the authorization of a thesis
2. Thesis assignment sheet
3. Consultation sheet
4. Assessment sheet
5. Evaluation form
6. Confidentiality statement (if any)

Győr, October 16, 2023.

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Annexes:

1. Data sheet for the authorization of a thesis topic
2. Final thesis requirements
3. Consultation sheet
4. Declaration on the originality of the thesis
5. Formal requirements of the final thesis (template)
6. Cover template
7. Assessment sheet
8. Evaluation form and Guidelines for the evaluation of theses