## INFORMATION SHEET

#### About

# The Bachelor Thesis and Final Examinations for the Civil Engineering Bsc Programme (as of 2017)

#### **GENERAL INFORMATION**

Curriculum: Civil Engineering BSc

Course: Bachelor Thesis
Course code: MSB486MNAP

Semester: 8

Course credits: 15

Contact hours (weekly): 0/0/2

Evaluation: Signature

Prerequisite: Complex planning 1. (MSB388ANEP)

Course leader: Dr. Pál-Schreiner Judit

Course lecturer: The lecturers of the Departments of Civil Engineering and

**Engineering Studies** 

#### **COURSE DESCRIPTION:**

As a summary of their previous studies, the students shall prepare a plan of a civil engineering structure or facility in such a way that their knowledge gained in load-bearing structures, foundations/earthworks, infrastructure, construction management, construction implementation and construction technology be combined. The course is conducted by internal and external supervisors. By the end of the semester, all students shall be able to plan a small-scale civil engineering structure or facility in a complex manner, prepare the implementation and understand its technological and structural systems. The student shall also be able to present their structure at a high level and a complex understanding of the related disciplines on the defence.

## **AIM OF THE COURSE**

The aim of the course is that the student shall prove their preparedness and knowledge. The bachelor thesis is a planning task matching the qualification. Based on the student's previous studies it can be carried out with the help of the supervisors within one semester. The bachelor thesis is a proof that the student:

- has gained sufficient skills to apply the acquired knowledge in practice and in planning and development work under professional management;
- is able to conduct a literature review related to the topic and summarize the background, the work performed and results professionally.

#### **TEACHING METHODS**

The course is based on continuous communication between the lecturers and the students.

#### Methods:

- 1. continuous consultations according to the announced schedule
- 2. independent work according to the announced schedule
- 3. independent research, data collection, analysis
- 4. independent consultations with external consultants/experts

#### METHODOLOGY AND PREFERENTIAL CRITERIA

In the semester of the thesis, the student shall develop their plan, supported by continuous professional consultations and do independent research. Professional consultations are provided in load-bearing structures, foundations/earth works, infrastructure design, construction management, construction implementation and construction technology by Faculty members. The research work must be carried out independently, however, the supervisors always help to interpret the data.

### THE CONTENTS AND FORMAL REQUIREMENTS OF THE BACHELOR THESIS

## The Contents of the Bachelor Thesis

Written part: the bachelor thesis shall contain about 70-100 pages of printed text. The main topic shall make up 80%, while the two subtopics shall make up 10%-10% of the bachelor thesis.

**Drawings:** Using some drawing software to make the drawings is strongly advised. If the drawings are made by hand, each of them has to be scanned, so that they can be included in the bachelor thesis submitted online. A sample for captioning the drawings can be found in the "Appendices".

## Formal Requirements of the Bachelor Thesis

## Written part

The structure:

- Worksheet
- Title page (including the title of the bachelor thesis, the full name of the author, the name(s)
  of the supervisor(s), date)
- Table of contents (listing all the chapters and subchapters of the bachelor thesis and
  providing the page number where each chapter starts. Following the table of contents, the
  students shall provide a list of the numbered appendices with the page numbers where the
  appendices can be found)
- Acknowledgements/motto (optional)

- Introduction (providing a general introduction why the topic of the bachelor thesis is relevant and a brief outline of it in 1-2 pages)
- Study (providing a theoretical approach strongly related to the topic of the bachelor thesis, presenting examples, literature review if the topic is adequate for that)
- Results and discussion (description, analysis, figures/diagrams): approximate statistical
  calculations (at least two draft plans shall be made using approximate calculations), detailed
  statistical calculations (by giving appropriate justification, the student shall choose one out of
  the two approximate calculations, based on which additional detailed statistical calculations
  can be made), technical specifications)
- Developing the main topic: construction management related the student's own civil engineering structure
- Developing the subtopic: construction technology related to the student's own civil engineering structure
- Findings and results
- Summary (conclusions, suggestions and recommendations)
- Bibliography
- Electronic bibliography
- Standards
- Appendices (serving as a space for materials, eg. tables, work supporting the calculations
  and clarifying the student's research such as drawings made in axis -, and A4 drawings can
  also be included here.

Direct and substantive citations and copied drawings, tables and diagrams shall be introduced with reference to the exact source. It must be clearly identified whether the citation is direct or substantive, eg. in case of literal citation, it shall be in quotation marks. The source shall be indicated in the given context or in the footnote. The lack of source is interpreted as plagiarism and the consequence may be exclusion or denying the signature.

## Recommended margins and font sizes:

- The margin shall be 2,5 cm, but an additional 1-1,5 cm on the left side may be needed for the binding. As the technical procedures may be different, it is advised to ask for preliminary information.
- Font type: Times New Roman, Arial
- Line spacing: continuous, 1,5 line spacing or "exactly 18 pt" for coherent texts and single spacing for texts containing calculations and figures.
- Font size: 12 pt.

## **Drawings:**

The drawings shall be made using some computer software. A recommended sample for captioning the drawings can be found in the 'Appendices'. The drawings shall be folded to standard size.

#### **BACHELOR THESIS SUBMISSION**

#### Deadline: 11 June 2021.

- The bachelor thesis shall be submitted in person to the internal supervisor by no later than the above deadline. It shall be printed and bound in a black folder. The printed bachelor thesis will be given back to the student in the final examinations (exceptions: tendering, presenting it to the Department, etc.).
- The bachelor thesis shall be uploaded to "szakdolgozat.mik.pte.hu" by the above deadline. The uploaded material shall fully correspond to the printed version.
- The following documents shall be submitted with the bachelor thesis:
  - the Supervisor Contact Form, signed by the internal supervisor
  - a Brief Summary of the bachelor thesis, which shall be signed (1 typed page at
    most, containing the correct title of the bachelor thesis, the student's registration
    number, the names of the author and the supervisor(s))
  - the Student Declaration.
  - The front page of the bachelor thesis shall contain the followings:
    - o the number of the bachelor thesis on the top right and
    - o right under it the year when it was written
    - o the subtitle "BACHELOR THESIS" on about the upper third in the middle
    - o the student's name on the down right
    - o The number of the bachelor thesis corresponds to the student's registration number (see in Neptun).
- Drawings shall be folded to A4 (or smaller so that they can be fitted into the file holder on the back of the bachelor thesis) in a way that the titles referring to the drawings shall be indicated on the front page. The drawings shall be put into the holder attached to the back cover.
- The thickness of the back holder shall be provided when binding the bachelor thesis. It
  is strongly advised to print and fold the drawings to A4 first because it gives enough
  information about the thickness required.

The above requirements are obligatory, any deviation can be made with the internal supervisor's permission exclusively!

#### **REVIEW OF THE BACHELOR THESIS**

The bachelor thesis prepared by the student and accepted by the supervisor must be checked by a reviewer. The reviewer will be appointed by the Department of Civil Engineering.

The student shall be informed about the evaluation at least five days before the defence. The reviewer makes a suggestion for the grade of the thesis. The result of the review is only a recommendation to the Final Exam Board, it is not qualified as a grade and will become valid after the defence.

## **EVALUATION OF THE COURSE "BACHELOR THESIS"**

The completion of the semester requirements is verified by the lecturer's signature. In order to obtain a signature, the student shall have a minimum of 4 consultations regarding the main topic and 2-2 consultations regarding the subtopics, fully perform the tasks agreed with their supervisor and have the supervision sheet signed by their supervisor.

#### **SCHEDULE**

## The possible ways of choosing a topic (deadline: 20 February 2021):

- the student suggests the topic and the external supervisor, if possible,
- the student requests for a topic and an external supervisor from the Departments or the senior lecturers of the related professions,
- choosing an external supervisor is advisable
- the chosen title of the bachelor thesis shall be sent to the secretary of the Final Examinations Board (<a href="mailto:dormany.andras@mik.pte.hu">dormany.andras@mik.pte.hu</a>) by 20 February 2021 at the latest.

## Appendices:

Task sheet (to be bound in the bachelor thesis, the first page): The task sheet is filled in by the internal supervisor. The student shall write a bachelor thesis accordingly/as specified in it. If they

fail to do so, the internal supervisor has the right to reject the thesis and also the signature for the course.

**Supervisor Contact Form:** (part of the bachelor thesis, not to be bound, to be submitted separately): the student shall keep the Supervisor Contact Form, each time the student consults with the internal or external supervisor, a brief note shall be written about it. Each log shall bear the date and the handwritten signature of the supervisor.

**Brief Summary**: (part of the bachelor thesis, not to be bound, to be submitted separately): the student shall make a brief summary of the bachelor thesis topic (approx. 1 page).

**Student Declaration**: (part of the bachelor thesis, to be bound): by signing it, the student verifies that the bachelor thesis is their own work and the sources used in the thesis (texts, illustrations, appendices) are properly cited.

#### **CONSULTATIONS**

The student's work is directed by the supervisors:

- 1. Main topic supervisor: The student shall obtain signatures by the supervisor documented on the Supervisor Contact Form during the semester. The signatures can be obtained in the consultations. The supervisor shall verify at least consultations by signing the Supervisor Contact Form in accordance with the following schedule. At least 5 consultations are required.
- 2. Subtopics supervisors: The student shall work together with the representatives of the related professions (technology, management) when designing. At least 3-3 consultations are required. The results of the consultations shall be documented (Supervisor Contact Form) in the bachelor thesis.

	Readiness level	Deadline
1st signature	Topic acceptance	20 February 2021
2 <sup>nd</sup> signature	Headings, contents, calculation steps	26 March 2021
3 <sup>rd</sup> signature	A minimum of 50% readiness	23 April 2021
4 <sup>th</sup> signature	Presenting the finished manuscript	21 May 2021
5 <sup>th</sup> signature	Submission	11 June 2021

#### **FINAL EXAMINATIONS**

The student shall be granted entry to the final examinations after:

- they have obtained the pre-degree certificate and
- they have prepared and submitted the bachelor thesis by the deadline.

#### The student shall be awarded a degree certificate if:

• they have passed their final examinations

Planned date of the final examinations: 21 June 2021-29 June 2021.

## Registration for the final examinations:

- in writing at the Registrar's Office
- Deadline: 23 April 2021.

#### Parts of the final examinations

- defending the bachelor thesis in front of the Final Examination Board
- oral final examinations in front of the Final Examination Board. The oral final examinations
  consist of three topics that are divided into three topic groups: A1 Theoretical Mechanics, A2
  Designing Engineering structures, A3 Implementation, implementation technology. The topics
  are made available for the students at the beginning of the semester. The student draws the
  one topic from each topic group (3 altogether) at the beginning of the final examinations.
- The results of the final examinations (RFE) are calculated as follows:

TA: the credit-weighted average of the grades of all the courses successfully completed by the student during their studies and evaluated by credits and a grade in a five-grade scale D: is the grade given for the bachelor thesis

A1, A2, A3: grades given for the subjects of the final examinations.

$$ZV = \frac{TA + D + \frac{A1 + A2 + A3}{3}}{3}$$

- The final examinations are deemed as successful if the examinee has completed each part with a minimum pass grade.
- A successful final examination cannot be retaken.

## Classification of the degree certificate:

The classification of the degree certificate must be calculated by using the degree certificate result, rounded up to two decimals, as follows:

- a) excellent, if the grade is at least 4.50,
- b) good, if the grade is at least 3.50, but less than 4.50
- c) satisfactory, if the grade is at least 2.50, but less than 3.50,
- d) pass, if the grade is at least 2.00, but less than 2.50.

**ppendices:** recommended sample for captioning the drawings:

PTE MIK, Pécs			Date:
Mérnöki és Smart Techr			
Építőmérnök Tanszék			
Title of the bachelor thesis:			Size:
Title of the drawing:			Number of the
-			drawing:
Made by:	Internal supervisor:	External supervisor:	