

**INFORMATION SHEET  
ABOUT  
THE BACHELOR THESIS AND FINAL EXAMINATIONS FOR THE CIVIL ENGINEERING BSc PROGRAMME  
(EFFECTIVE FROM 6 SEPTEMBER 2021)**

**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. (MSB388MNAP)
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 DIPLOMA WORK**

#### **Written part:**

The structure (sample attached):

- Title page (at the top right hand corner of it (cover) the number of the thesis, right under it the date of completion, in the middle of the upper one-third "BSC THESIS" and at the bottom right-hand corner the student's name shall be indicated. The number of the thesis is the same as the student's registration number (see Neptun)).
- Worksheet/Thesis work plan
- 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)
- Elaborating on the main topic (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)
- Elaborating on the first subtopic: construction management, construction technology, foundations, etc. relevant to the topic "individual construction"
- Elaborating on the second subtopic: construction management, construction technology, foundations, etc. relevant to the topic "individual construction"
- 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.

### Options for choosing the topic (deadline: 4 October 2021)

- the student shall choose a topic and designates the external supervisor;
- or the student shall ask the Department Staff for a topic and preferably an external supervisor.
- It is recommended that an external supervisor be chosen.
- The title of the Bachelor thesis shall be submitted to the Secretary of the Final Examination Board (dormany.andras@mik.pte.hu) no later than 4 October 2021.

### Appendices:

- **Task sheet** (to be bound in the bachelor thesis, the second page): The task sheet is filled in by the internal supervisor (main topic). 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 uploaded as an appendix): 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. **After each consultation the student shall send the signed contact Form to the secretary of the Final Examination Board digitally no later than the given deadline. If the Secretary of the Final Examination Boards fails to receive the Supervisor Contact Form from the student by the deadline designated, he shall warn the student in writing. The student shall have two days to make it up. If the Supervisor Contact Form is not sent after 2 days, the signature will be denied and the course leader will register it in Neptun.**
- **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, appendix): by signing it, the student shall verify 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. **Supervisor (main topic):** 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.

	Readiness level	Deadline
1 <sup>st</sup> signature	Topic acceptance	4 October 2021
2 <sup>nd</sup> signature	Headings, contents, calculation steps	2 November 2021
3 <sup>rd</sup> signature	A minimum of 50% readiness	29 November 2021
4 <sup>th</sup> signature	Presenting the finished manuscript	20 December 2021
5 <sup>th</sup> signature	Submission	7 January 2022

2. **Supervisors (subtopics):** The student shall work together with the representatives of the related professions (technology, management) when designing. At least 3 consultations are required. The results of the consultations shall be documented in the bachelor thesis.

	<b>Readiness level</b>	<b>Deadline</b>
1 <sup>st</sup> signature	Subtopic acceptance	2 November 2021
2 <sup>nd</sup> signature	A minimum of 50% readiness	20 December 2021
3 <sup>rd</sup> signature	Submission	7 January 2022

#### **BACHELOR THESIS SUBMISSION (deadline: 7 January 2022 24:00 CET)**

- The electronic version of the bachelor thesis shall be uploaded to "szakdolgozat.mik.pte.hu" by the given deadline.
- The following documents shall be uploaded as "Appendices" together with the bachelor thesis:
  - the Supervisor Contact Form, signed by the supervisors
  - 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.

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

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

The bachelor thesis shall be reviewed. The reviewer shall be an external expert with an MSc degree, a university professor or researcher. The reviewer will be appointed by the Department of Civil Engineering.

The bachelor thesis review report and the supervisor's evaluation must be made available for the students at least five days before the thesis is defended, so that they can respond to the observations and questions included therein. /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. Course credits (signature) shall be obtained on the basis of the student's performance. 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, perform the tasks agreed with their supervisor to an acceptable extent and have the supervision sheet signed by their supervisor. The supervisor of the main topic shall declare in writing whether the student shall be granted a signature or not. The course leader will register the signature in Neptun after receiving the written declaration.

#### **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 January 2022 - 29 January 2022.**

**Registration for the final examinations:**

- Registering for the final examination via Neptun
- Deadline: **12 December (Sunday) 2021 24:00 CET**

**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:

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

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.

- 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:

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

Appendices: recommended sample for captioning the drawings:

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