Guidelines and Course Description for the Bachelor Thesis and Final Examination

- *Program:* *Civil Engineering, BSc*
- *Course:* *Bachelor Thesis*
- *Course Code:* *MSB486ANEP*
- *Semester:* *8th*
- *ECTS Credits:* *15*
- *Contact Hours:* *0/0/2*
- *Evaluation Method:* *End-of-semester signature (no grade)*
- *Prerequisite:* *Complex Design I (MSB388ANEP)*
- *Course Leader:* *Dr. Tamás Juhász*

I. COURSE DESCRIPTION

The Bachelor Thesis is the final project of undergraduate studies, requiring students to create structural plans for engineering structures or buildings, using knowledge from applied mechanics, geotechnics, road and railway design, construction management, and technologies. Supervised by designated mentors and advisors, students must successfully defend their thesis, presenting their work and demonstrating expertise in relevant engineering fields.

II. AIMS

The primary objective of the course is to enable students to demonstrate their readiness for professional practice in civil engineering. The Bachelor Thesis is a comprehensive and independent design project that reflects the student's qualifications and is completed under professional supervision.

By completing the thesis, the graduating student demonstrates that they:

- possess the necessary skills to apply acquired knowledge in engineering practice under professional supervision;
- are able to review relevant professional literature and provide a structured and accurate summary of the theoretical background of the selected topic.

III. METHODOLOGY

During the thesis semester, students receive continuous professional supervision while carrying out independent work. Two participating departments provide support in various disciplines, including structural engineering, foundations and earthworks, infrastructure design, construction management, construction methods, and construction technology.

Each student must complete the thesis individually. The thesis must consist of one main topic and two related subtopics, at least one of which must include structural engineering design.

IV. CONTENTS AND FORMAL REQUIREMENTS

Essay and Engineering Calculations

The thesis should be approximately 70–100 A4 pages in length, with around 80% of the content dedicated to the main topic. The document must be prepared using Times New Roman or Arial font, size 12 pt. Margins must be at least 2.5 cm on all sides. Text should be justified and formatted with 1.5 line spacing.

The thesis must be written in an objective, scientific, and professional manner. Content reflecting personal ideology, political views, or religious expressions is not permitted. All citations, including copied drawings, tables, and diagrams, must be properly referenced to their original sources. It must be clearly indicated whether a citation is direct or paraphrased. Direct quotations must be enclosed in quotation marks. Sources should be cited within the text or in footnotes. Failure to provide appropriate references constitutes plagiarism and may result in rejection of the thesis or denial of the approval signature.

Order of Mandatory Content

1. Title page (hardcover)
2. Work Plan / Project Brief
3. Table of Contents
4. Acknowledgments / Motto (optional)
5. Abstract and Introduction
6. Main Topic
    - Literature Review
    - Manual Draft Calculations and Initial Sizing (minimum two alternatives)
    - Comparative Assessment
    - Detailed Calculations of the Optimal Alternative
    - Technical Specifications
7. Subtopic(s)
8. Findings and Results
9. Summary
10. Conclusions, suggestions, and recommendations
11. Bibliography
12. List of Related Standards and Design Codes
13. Appendices
14. Annexes

Engineering Drawings

Computer-aided design (CAD) drawings are mandatory. After printing, all drawings must be folded to A4 size (210 × 297 mm). Recommended title block size is 200 × 50 mm, adjustable according to content. All drawings must follow the official faculty title block forma.

V. CONSULTATIONS AND DUE DATES

Supervisor

The program coordinator appoints the supervisor, who must be an active faculty member of the Department of Civil Engineering. A minimum of five consultations is required during the semester. Each consultation must be recorded in the Thesis Progress Journal and confirmed by the supervisor.

Main Topic Progress Levels and Deadlines

- ***L1*** *Topic acceptance – 20 February*
- ***L2*** *Headings, content outline, calculation steps – 20 March*
- ***L3*** *Minimum 50% completion – 17 April*
- ***L4*** *Presentation of completed manuscript – 11 May*
- ***L5*** *Final completion – 18 May*

Subtopic Supervisor

Subtopic supervisors are selected from the active faculty members of the Department of Engineering Studies or the Department of Civil Engineering. Three progress checks are mandatory.

Subtopic Progress Levels and Deadlines

- ***L1*** *Subtopic acceptance – 20 March*
- ***L2*** *Minimum 50% completion – 17 April*
- ***L3*** *Final completion – 18 May*

VI. SUBMISSION

Thesis Acceptance

Both a printed and an electronic version of the thesis must be submitted to the supervisor. The electronic version must be sent by email. The thesis will be reviewed by the appointed departmental jury to determine eligibility for defense no later than one week the submission deadline. If rejected, the thesis may be revised and resubmitted in the following semester.

Online Thesis Submission Deadline: *3 June 2026*

- Upload the thesis to the Neptun system in digital format.
- Submit a printed hardcover copy to the chief supervisor.
- Upload all required attachments as a single merged PDF in the prescribed order.

VII. COURSE ASSESSMENT

Completion of course requirements is verified by the supervisor based on the student's performance. To complete the course, the student must:

- attend the required consultations,
- complete assigned tasks to a satisfactory standard,
- obtain all required supervisor signatures.

VIII. THESIS ASSESSMENT

The thesis is evaluated by two reviewers, one of whom is the thesis supervisor. Reviewer comments are presented to the Final Examination Committee. The reviewers' suggested grade does not necessarily determine the outcome of the thesis defense.

IX. THESIS DEFENSE AND FINAL EXAMINATION

Students are admitted to the final examination upon obtaining the pre-degree certificate and submitting the thesis in Neptun.

The thesis defense consists of a 12-minute oral presentation followed by discussion. The final examination includes questions from:

- **A1** Theoretical Mechanics
- **A2** Design of Engineering Structures
- **A3** Building Construction and Construction Technologies