Preparatory Course for Bachelor Thesis Project - BMEEODHA-PT

I. Subject Specification

1. Basic Data

1.1 Title

Preparatory Course for Bachelor Thesis Project

1.2 Code

BMEEODHA-PT

1.3 Type

Module without associated contact hours

1.4 Contact hours

Type	Hours/week / (days)
Consultation	1

1.5 Evaluation

Midterm grade

1.6 Credits

9

1.7 Coordinator

name	Dr. Vigh L. Gergely
academic rank	Associate professor
email	vigh.laszlo.gergely@emk.bme.hu

1.8 Department

Dean's Office

1.9 Website

https://epito.bme.hu/BMEEODHA-PT
https://fiek2.mywire.org/course/view.php?id=2609

1.10 Language of instruction

english

1.11 Curriculum requirements

Compulsory in the Civil Engineering (BSc) programme

1.12 Prerequisites

Strong prerequisites:

- Structural Design Projectwork (BMEEOHSA-PP)

1.13 Effective date

5 February 2020

2. Objectives and learning outcomes

2.1 Objectives

The cursus aims to give a background for the student to successfully complete the requirement of the Bachelor Thesis project by obtaining the basic knowledge on the subject of the Bachelor Thesis project to prepare studies and preliminary design plans. The topic of the Preparatory Course for Bachelor Thesis project is given by the Diplomawork assignment covering the topics of both the Preparatory Course for Bachelor Thesis project and the Bachelor Thesis project. The topic is from within the domain of structural engineering in accordance with the outcome requirements, it has to be assigned by giving the possibility to continue it in the Bachelor Thesis project course.

2.2 Learning outcomes

Upon successful completion of this subject, the student:

A. Knowledge

1. knows the general rules, relations and methods of mathematics and natural sciences used in the domain of civil engineering,
2. knows the basic theories, relations and their terminology used by the structural engineer's domain,
3. acquires a deeper knowledge within the theme of the chosen Bachelor Thesis project,
4. knows and understands the informatics, the communication technology and the basic laws related to civil and more precisely the structural engineering.

B. Skills

1. uses with good results the different resources of information related to the project,
2. makes a bibliographic search and reviews the adequate literatures related to the project,
3. able to reproduce the geometrical arrangement of a building from the basic design data,
4. able to set the main sizes of the structure,
5. able to find the appropriate numerical models associated with preliminary design,
6. able to use preliminary calculation methods to check the main structural dimensions.

C. Attitudes

1. cooperates with his/her tutor(s) during the preparation of the project,
2. constantly improves his/her knowledge and is open to the new techniques of information acquirements,
3. makes effort to perform exact and error-free calculations,
4. makes effort to understand the structural behavior of building structures and to acquire their design procedures,
5. makes effort to apply cost-effective and sustainable structural solutions.

D. Autonomy and Responsibility

1. works independently and responsibly on the project,
2. individually capable of using numerical modelling software and CAD programmes,
3. uses systematized thinking approach.

2.3 Methods

The work is directed by the tutor and the help of other consultants is available. The Preparatory Course for Bachelor Thesis project is mainly an independent work made at home directed by the consultations.
The work in during Preparatory Course for Bachelor Thesis project and the Bachelor Thesis project is guided by the same tutor, in special cases can be guided by two different tutor acknowledged by the Coordinator.

2.4 Course outline

In the Preparatory Course for Bachelor Thesis project student prepare a study and preliminary drawings based on preliminary calculation, to be prepared for the for Bachelor Thesis project. The study should give alternative solutions for the Bachelor Thesis project. The Diplomawork assignment defines the requirements and topics for both the Preparatory Course for Bachelor Thesis project and the Bachelor Thesis project to be completed. The requirements and schedule of the Preparatory Course for Bachelor Thesis project is assigned by the Coordinator and the Department responsible for the course in accordance with the Code of Studies.
The results of the Preparatory Course for Bachelor Thesis project is introduced on a Seminar organized by the Department responsible for the course. The date of the seminar id the 6th week of the semester.
The above programme is tentative and subject to changes due to calendar variations and other reasons specific to the actual semester. Consult the effective detailed course schedule of the course on the subject website.

2.5 Study materials

Literature related to the topic is to be used, especially those referenced by the tutor.

2.6 Other information

The Preparatory Course for Bachelor Thesis project is a milestone for completing the studies. To verify the quality of the project the Coordinator may require contribution from a supervisor of the responsible department. The credits of the Bachelor Thesis project (BME EODHA-BS) cannot be obtained prior to the completing the Preparatory Course for Bachelor Thesis project. The prerequisites of the Preparatory Course for Bachelor Thesis project and the Bachelor Thesis project is identical, the two subjects can be completed parallel in the same semester.
In the case of completing the Preparatory Course for Bachelor Thesis project in prior semester on different topic, the Coordinator may specify extra tasks in the Diplomawork assignment to be completed in the Bachelor Thesis project based on the already completed competencies.

2.7 Consultation

The instructors are available for consultation during their office hours, as advertised on the department website. Special appointments can be requested.

Preparatory Course for Bachelor Thesis Project - BMEEODHA-PT

This Subject Datasheet is valid for:

2023/2024 semester I

II. Subject requirements

Assessment and evaluation of the learning outcomes

3.1 General rules

The Diplomawork assignment defines the requirements and topics for both the Preparatory Course for Bachelor Thesis project and the Bachelor Thesis project to be completed.
The progress and the development requirements is stated in a consultation dairy kept by the student.

3.2 Assessment methods

The Preparatory Course for Bachelor Thesis project is the result of a home work directed by the tutor, and driven by consultations. The grade of this cursus represents mainly the activity of the student during the semester.

Evaluation form	Abbreviation	Assessed learning outcomes
attendance and activity	A	A.1-A.4; B.1-B.6; C.1-C.5; D.1-D.3
presenting the results (study, preliminary calculations and drawings)	B	A.1-A.4; B.4-B.6

The dates of deadlines of assignments/homework can be found in the detailed course schedule on the subject's website.

3.3 Evaluation system

Abbreviation	Score
attendance and activity	60%
study	20%
preliminary calculations and drawings	20%
Total achievable during the semester	100%
Sum	**100%**

3.4 Requirements and validity of signature

Signature can not be obtained.

3.5 Grading system

According to the Code of Studies 138 § 5. the grade evaluated by the tutor and the supervisor based on the achievements of the student during the semester in accordance to the requirements of the cursus and the regulations of the faculty. To successfully complete the Preparatory Course for Bachelor Thesis project does not require to complete the Bachelor Thesis project in the same semester.

3.6 Retake and repeat

1. Late submission is allowed for the Preparatory Course for Bachelor Thesis project, but an extra charge must be paid. The deadline for late submission is given in the detailed schedule (extra midterm seminar is not later than the 8th week of the semester).
2. In case the result of the Preparatory Course for Bachelor Thesis project does not meet the requirement of the subject, however at least the 80% of the required tasks are completed for the deadline of the late submission, the project is allowed to submit at the end of the semester, but an extra charge must be paid.

The result of the final submission is evaluated by the department consultant. In this case the Bachelor Thesis project is not allowed to submit in the same semester.

3. The attendance and the activity, due to its personal form, cannot be repeated, nor redeemed.

3.7 Estimated workload

Activity	**Hours/semester**
participation at the consultations	12
individual preparation for the project	88
individual acquirement of a referenced written lecture note	170
Sum	**270**

3.8 Effective date

5 February 2020

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2023/2024 semester I