

COURSE SYLLABUS AND COURSE REQUIREMENTS 2025/2026. II. SEMESTER

<i>Course title</i>	<i>Case Studies in Geotechnical Engineering</i>
<i>Course Code</i>	MSM140ANEP
<i>Hours/Week: le/pr/lab</i>	2/0/0 (2., 4., 6., 7., 10., 13., 14., week (Thursday 13:15-16:30) A301
<i>Credits</i>	2
<i>Degree Programme</i>	Structural Engineering MSc./ obligatory
<i>Study Mode</i>	full time
<i>Requirements</i>	semester grade with signature
<i>Teaching Period</i>	MSc 2. semester (spring)
<i>Prerequisites</i>	-
<i>Department(s)</i>	Department of Civil Engineering
<i>Course Director</i>	
<i>Teaching Staff</i>	Dr. Vendel JÓZSA, assistant professor
<i>Hours/Week: le/pr/lab</i>	Dr. Vendel JÓZSA <i>tel: 30-395-1807</i> <i>jozsavendel@gmail.com</i>

COURSE DESCRIPTION

This course aims at teaching the basics of geotechnical and soil mechanical problems and covers the following topics: Swelling of clay, foundation on organic soil, weak and compressible soil, failures of geotechnical structures and buildings.

SYLLABUS

1. GOALS AND OBJECTIVES

Students will gain from this course:

*Knowledge of preparation of ground investigation,
Practical knowledge of selecting the locations of investigation points,
Understanding of the interpretation method of geotechnical results..*

2. COURSE CONTENT

Neptun: Instruction/Subjects/Subject Details/Syllabus/Subject content

TOPICS

LECTURE	TOPICS
	2-4. Course description. Orientation. Case studies of building damages I., Home work preparation 6-7. Case studies of building damages II., 10. Geotechnical stabilizations, 13. Geo5, Plaxis 13. week: exam 14. Home work presentations, Second exam (only if required)

3. ASSESSMENT AND EVALUATION

ATTENDANCE

In accordance with the Code of Studies and Examinations of the University of Pécs, Article 45 (2) and Annex 9. (Article 3) a student may be refused a grade or qualification in the given full-time course if the number of class absences exceeds 30% of the contact hours stipulated in the course description.

Method for monitoring attendance

Course resulting in mid-term grade (PTE TVSz 40§(3))**Mid-term assessments, performance evaluation and their ratio in the final grade** (The samples in the table to be deleted.)

Type	Assessment	Ratio in the final grade
exam	50 point	50 %
Home work	50 point	50 %
full:	100 point	100 %

Opportunity and procedure for re-takes (PTE TVSz 47§(4))

The specific regulations for improving grades and resitting tests must be read and applied according to the general Code of Studies and Examinations. E.g.: all tests and assessment tasks can be repeated/improved at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

Grade calculation as a percentage

Course grade	Performance in %
excellent (5)	85 % ...
good (4)	70 % ... 85 %
satisfactory (3)	55 % ... 70 %
pass (2)	40 % ... 55 %
fail (1)	below 40 %

The lower limit given at each grade belongs to that grade.

Re-takes for the end-of-semester signature (PTE TVSz 50§(2))

The specific regulations for grade betterment and re-take must be read and applied according to the general Code of Studies and Examinations. E.g.: all the tests and the records to be submitted can be repeated/improved each at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

4. SPECIFIED LITERATURE

In order of relevance. (In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)

RECOMMENDED LITERATURE AND AVAILABILITY

Bond, A. and Harris A.: Decoding Eurocode 7, London: Taylor & Francis 2008.

Farkas, J., Józsa, V., Szendefy J. (2014): Foundation Engineering, elektronikus angol BSc egyetemi jegyzet, BME, Geotechnikai Tanszék p. 97.

Presentations