# Special geotechnical tests - BMEEOGMDT72

## I. Subject Specification

1. Basic Data

1.1 Title

Special geotechnical tests

1.2 Code

BMEEOGMDT72

1.3 Type

Module with associated contact hours

1.4 Contact hours

| Type | Hours/week / (days) |
|---|---|
| Lab | 2 |

1.5 Evaluation

Exam

1.6 Credits

3

1.7 Coordinator

| | |
|---|---|
| name | Balázs Móczár Ph.D. |
| academic rank | Associate professor |
| email | balazs.moczar@emk.bme.hu |

1.8 Department

Department of Engineering Geology and Geotechnics

1.9 Website

https://epito.bme.hu/BMEEOGMDT72
https://fiek2.mywire.org/course/view.php?id=2532

1.10 Language of instruction

english

**Special geotechnical tests - BMEEOGMDT72**

1.11 Curriculum requirements

Ph.D.

1.12 Prerequisites

1.13 Effective date

1 September 2022

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2. Objectives and learning outcomes

2.1 Objectives

The scope of this course is to familiarise students with the full range of field and laboratory geotechnical investigations, with a particular focus on specialised investigations not covered in the BSc and MSc courses

2.2 Learning outcomes

Upon successful completion of this subject, the student:

A. Knowledge

1. knows about specialised laboratory and field geotechnical investigations

B. Skills

1. is able to prepare geotechnical exploration plans

C. Attitudes

1. ready to learn

D. Autonomy and Responsibility

1. is autonomous

2.3 Methods

Showing laboratory test procedures and in situ geotechnical site investigations

2.4 Course outline

| |
|---|
| All classes are held in one week, immediately after the school, over 5 days. The basic programme for the week (day by day) |
| Monday: Site visit somewhere in the Budapest area. Geophisical subgrade surveying-testing: ground radar (GPR), electromagnetic and geoelectric tomography. Land seismic surveying<br>Tuesday: Site visit somewhere in the Budapest area. Drillings, soundings, compaction tests, sampling methods |

| |
|---|
| Wednesday: Site visit somewhere in the Budapest area. Drillings, soundings, compaction tests, sampling methods<br>Thursday: Special laboratory testing: Triaxial tests, dynamic test, compression and consolidation tests, liquefaction tests<br>Friday: Special laboratory testing: Triaxial tests, dynamic test, compression and consolidation tests, liquefaction tests<br>The exact daily schedule will only be known the week before |

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

a) Online materials:

1. Electronic notes presented on the site and laboratory visits

2.6 Other information

2.7 Consultation

The instructors are available for consultation during their office hours, as advertised on the department website.

Special appointments can be requested via e-mail: moczar.balazs@emk.bme.hu

This Subject Datasheet is valid for:

Inactive courses

## II. Subject requirements

Assessment and evaluation of the learning outcomes

3.1 General rules

There is a written exam.

3.2 Assessment methods

| Evaluation form | Abbreviation | Assessed learning outcomes |
|---|---|---|
| written exam | E | A.1; B.1; C.1; D.1 |

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 |
|---|---|
| E | 100% |
| **Sum** | **100%** |

3.4 Requirements and validity of signature

Participation in 100 % of on-site and laboratory investigations

3.5 Grading system

| Grade | Points (P) |
|---|---|
| excellent (5) | 85<=P |
| good (4) | 70<=P<85% |
| satisfactory (3) | 60<=P<70% |
| passed (2) | 50<=P<60% |
| failed (1) | P<50% |

3.6 Retake and repeat

There is no retake

3.7 Estimated workload

| Activity | Hours/semester |
|---|---|
| participation of site and laboratory visits | 14×2=28 |
| preparation for the exam | 50 |
| **Sum** | **78** |

3.8 Effective date

1 September 2022

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Inactive courses