**Geotechnical Design**

* Course Code: PMTATNM065OA
* Semester: 2
* Number of Credits: 4
* Allotment of Hours per Week (Lect./Prac./Lab): 2/1/0
* Requirement: midterm home work and exam
* Lecturers: Vendel Józsa
* Subject supervisor: Vendel Józsa

Brief Syllabus: This course aims at teaching the basics of geotechnical design and covers the following topics: Basis of structural design, General rules for geotechnical design, Ground investigation and testing, Ground characterization, Design of footings and piles.

This subject intends to provide students with knowledge in the basics of actions and materials, depth of investigation points, identification and classification of soil and rock, sampling, groundwater measurements, laboratory and in-situ tests, derive geotechnical parameters. An additional objective is to prepare students with a basic knowledge for planning piles using cone penetration test.

Course materials:

* 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.

<http://www.gtt.bme.hu/gtt/oktatas/feltoltesek/BMEEOGTAT15/foundation_engineering.pdf>

* Presentations