

The Division of Geotechnical Engineering (DGE) is one of the four divisions comprising the Department of Civil Engineering of the Aristotle University which founded according to the Greek Law No. 1268/82 coacting the Higher Education of Greece.

Geotechnical Engineering is the branch of engineering science concerned with the design, construction and monitoring of technical projects or the parts of which are founded. These projects or their parts can be on the ground or built into it or use the ground as their building material. Geotechnical engineering is aiming at satisfying the societal requirements for sustainable development and protection of the natural environment.

Indicatively, objects of Geotechnical Engineering are:

- The characterization of the behavior of geomaterials (soil and rock etc)
- The design and construction of foundations, retaining structures, slopes, embankments, large infrastructure projects
- The response to natural disasters, such as earthquakes and landslides
- Addressing problems associated with the protection of the natural environment, the soil and groundwater, exploitation of mineral resources and energy production.

In engineering practice, Geotechnical Engineering includes the following sub-processes: research, analysis and calculation, construction and finally monitor the response of the structure. Each of these processes involves a degree of uncertainty and risk, which can be reliably taken into account only by the combined use of knowledge, judgment - experience and technology.

Along with their contribution to the above subjects and procedures of Geotechnical Engineering Laboratories of the Department cover other scientific disciplines such as Geodesy, Topography, Cartography, Geoinformatics, Geomatics, Land-registration, Photogrammetry and Remote Sensing, who complete the science in civil engineering.

The main task of the DGE is the education at the undergraduate and graduate level of the department, the fundamental and applied research covering all the scientific areas of its laboratories and the dissemination of scientific and technological knowledge, as well as, the results stemming from research to the scientific community and society.

Director of the Division: [Associate Professor Raptakis Dimitrios](#)

Under the auspices of the Division of four (4) laboratories are operating. These laboratories are:

- [Laboratory of Soil Mechanics, Foundation and Geotechnical Earthquake Engineering](#)

Director: [Professor Theodoros Chatzigogos](#)

- [Laboratory of Engineering Geology and Rock mechanics](#)

Director: [Professor Stavros Bandis](#)

- [Laboratory of Geodesy and Geomatics](#)

Director: [Professor Paraskevas Savvaidis](#)

- [Laboratory of Photogrammetry – Remote Sensing](#)

Director: [Assistant Professor Maria Lazaridou](#)
