



HASAN KALYONCU UNIVERSITY
Civil Engineering Department
CE 499 Project Proposal Form

Part I. Project Proposer

Name Last name	Instr. Nurullah AKBULUT	E-mail	nurullah.akbulut@hku.edu.tr
----------------	-------------------------	--------	--

Part II. Project Information

Starting Term	2 0 2 0 / 2 0 2 1
Title of the Project	Investigation of Geotechnical Properties of a new built Hospital Construction
Project Description	
<p>In this project, a soil investigation for the site of the new hospital building includes drilling of nine boreholes and taking undisturbed and disturbed samples for laboratory testing have been studied. This project will present and discuss the laboratory test results as well as conclusions and recommendations for the foundation of the buildings. The main purpose of this project will be;</p> <ol style="list-style-type: none">1. To establish the general nature of the strata below a site;2. To establish the vertical or lateral variability of soil conditions;3. To verify the interpretation of geophysical surveys;4. To obtain samples for laboratory testing;5. To allow in situ tests to be carried out; and6. To install instruments such as piezometers, or extensometers.	
Project Justification	
Novelty	
New aspects	In this project, the students will be able to deal with the geotechnical tests which are done in the field and laboratory. The methods and techniques, which are required to connect between the soil properties and calculations will be also studied.
Complexity	
Challenging problem and issues	The main challenge in this project could be addressed as how to make the student able to contact between his theoretical background, according to his previous undergraduate courses, and this practical project. The student should improve his skills to know how to collect all required information from separated resources and how to use it for study and design
Related civil engineering science fields and subfields	Geotechnical Engineering, Soil Mechanics, Engineering Geology, Laboratory Tests,
Tools	ASTM, BS, and ASHTTO standards
Risk involved	
Potential problems and alternative solutions	The availability of computer programs. Alternatively, hand methods will be applied using equations according to geotechnical standards such as ASTM, ASHTTO and BS

Minimum work required	<ul style="list-style-type: none">• Sufficient knowledge and skills related Soil Mechanics and the ASTM Test standards. Therefore, to accept the student in this project he should be passed in introduction to soil mechanics, soil mechanics and foundation engineering.• 1-3 Students can be accepted in this project.
------------------------------	--