

Short Intensive Course Program between SNU and UTokyo

“Special Topics on Geotechnical Earthquake Engineering”

Jan. 6-8, 2020 @ Seoul National University

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Outline: As special topics in the field of geotechnical earthquake engineering, lectures on earthquake-induced geo-hazards including soil liquefaction are given.

Purpose: In recent years, Korea experienced several earthquake events, which caused injuries and damage to structures and their subsoils. In view of this, in order to deepen the knowledge on geotechnical earthquake engineering, it is attempted to share Japanese experiences on earthquake-induced geo-hazards that include soil liquefaction and its countermeasures.

Evaluation: based on examination and attendance

In-advance study: Some of the power point slides to be used in the class and relevant references will be uploaded to a specified site.

Tentative schedule:

Jan.	6	Mon	Introduction	0.5 hour
			Mechanism of liquefaction	1.0 hour
			Liquefaction-induced damage, its countermeasures and re-liquefaction Issues	3.0 hour
Jan.	7	Tue.	Seismic behaviour of earth structures and use of geosynthetics to improve their performance against large earthquake loads	3.0 hour
Jan.	8	Wed.	Evaluation of earth pressures during earthquake and residual displacements after earthquake (original and modified methods)	1.5 hour
			Other issues, including tsunami-induced damage and its countermeasures	1.5 hour