

## MINIMUM CORE SUBJECT AREAS: GEOTECHNICAL ENGINEERING

AREA	SUBJECTS / DESCRIPTION	RECOMMENDED CONTACT HOURS
<b>For accredited degrees in civil engineering (or equivalent) for HKIE Civil Scheme "A" plus following core subjects (or equivalent):</b>		
<b>60 hours total from the areas below.</b>		
<b>1. Engineering geology and rock mechanics</b>	- study of concept and knowledge in engineering geology and rock mechanics, such as minerals and rocks, structural geology, earthquakes, surface processes, rock mass classification, rock discontinuity, stereonets, rock stresses, and rock strength	
<b>2. Soil mechanics</b>	- study of engineering principles pertinent to the mechanical behavior of soils, such as soil classification, state of stress, shear strength, earth pressure, bearing capacity, stiffness, seepage theories, consolidation, and laboratory testing techniques	
<b>3. Application of geotechnical theory in engineering practice</b>	- study of applied aspects of soil and rock mechanics and geotechnical principles, such as design of retaining walls and excavation support systems, slope stability analysis, foundation engineering, site investigation, ground treatment, natural terrain landslide risk assessment and mitigation, geotechnical modeling, and environmental geotechnology	

Note: A degree that is not accredited in Civil Engineering (or equivalent) would not normally be considered for degree matching with the HKIE Geotechnical Discipline Scheme "A" Training. In an unusual occasion where this is required, consideration will be given to whether the degree contains the core subjects that meet the requirements for degree matching for the HKIE Scheme "A" Training of both the Civil Discipline and Geotechnical Discipline, with account taken of the particular circumstances of the degree on a case by case basis.