

# Geotechnical Instrumentation for Engineers



## INTRODUCTION

A good geotechnical monitoring instrumentation system with proper protection, recording and data analysis could avoid catastrophic site incident. These instrumentations play an important role in the safety monitoring especially during the construction stage. The recorded data are also useful for design verification. Therefore, it is of foremost importance that engineers should be equipped with the knowledge on the different functions of geotechnical instrumentations, their installation method and how the readings are taken so that they could better plan and design the system to get their desired data. This course will cover this essential knowledge and also the skill to interpret the readings obtained, the good practices in installation of the instruments and the statutory requirements.

## CONTENTS

- Introduction to geotechnical instrumentations
- Purpose, installation and monitoring of geotechnical instruments
- Web-based tunneling and excavation monitoring system
- Good practices in instrument installation, monitoring and protection
- Planning and designing instrumentation monitoring programmes
- Statutory requirements on instrumentation & monitoring
- Monitoring data, interpretation of instruments readings, review levels & action plan

## LECTURER



**MR LIAU KENG CHUNG** is an Assistant General Manager of Tritech Engineering and Testing (Singapore) Pte Ltd, a leading company for geotechnical instrumentation and investigation works in Singapore. He has 10 years of experience in project management of geotechnical instrumentation, building instrumentation and surveying. He is currently involved in big projects such as MRT Circle Line Stage 5, Downtown Line Stage 2 & 3 and Thomson-East Coast Line. Besides conventional instrumentations,

Mr Liao is also familiar with remote surveying and the latest technologies in the geotechnical investigation and monitoring field.

## TARGET AUDIENCE

- Practicing engineers
- Supervisors such as REs
- Geotechnical specialist
- Others who wish to gain knowledge on geotechnical instrumentation

## DETAILS

22nd Run: To b advised  
 Duration: 4 evenings (12 hours)  
 Time: 6.30pm to 9.30pm  
 Venue: BCA Academy  
 Fee (incl of GST): S\$800.00  
*Refreshments will be provided.*

*In keeping with our green and sustainable practices, course notes will be available in e-format.*

## AWARD

Certificate of Attendance (COA) will be awarded to participants who meet the attendance requirement.

## CPD POINTS

PEB: Pending



To register, please log into our Online StoreFront (OSF) at <https://eservices.bcaa.edu.sg/registration/#/login> or scan QRcode and search for course code **73064**