BULETIN FKA

UNIVERSITI TEKNOLOGI MARA
Cawangan Pulau Pinang
Kampus Permatang Pauh

EDISI 2024

PUSAT PENGAJIAN KEJURUTERAAN AWAM
UNIVERSITI TEKNOLOGI MARA
CAWANGAN PULAU PINANG

Technical Talk For Forensic Engineering (CEG562) Critical Slope Risk Engineering At Cameron Highland

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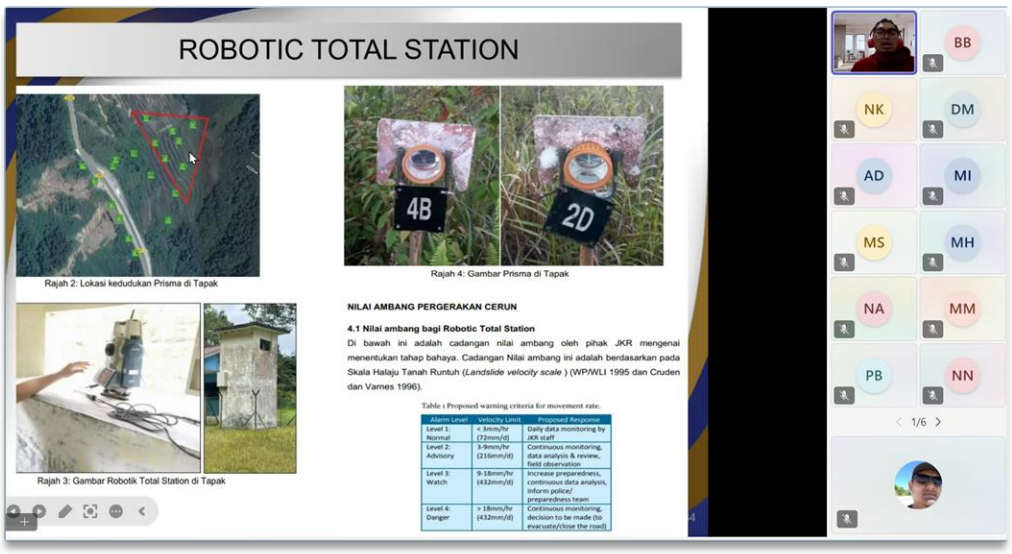

4 December 2024 (Wednesday), 8.00-10.00 p.m. Via Microsoft Teams

A technical talk was held by Forensic Engineering (CEG562) lecturers on 4 December 2024. The invited speaker was Mr Ali Mutahir Ibrahim, Project Engineer for Pintas Utama Sdn. Bhd. The topic for the technical talk is Critical Slope Risk Engineering at Cameron Highland. This interesting topic was chosen because there have been a lot of slope failure events that have occurred, especially at this tourist attraction spot. Besides, this topic is a part of a sub-topic for this course. On top of that, it is the highest slope rehabilitation works conducted in Malaysia. The specific project shared by the speaker is “Projek Pembaikan Cerun Dan Membaik Pulih Jalan di Laluan FT185 Seksyen 44.1, Jalan Simpang Pulai – Blue Valley, Daerah Kinta, Perak”. The main client is Jabatan Kerja Raya (JKR). This slope rehabilitation work consists of horizontal drain & storm drainage works – chute, toe, roadside & cascade + sump, installation soil nailing – high tensile Terra Nail and local nail – 5900 nos & 3280 nos, construction of micropiles 300mm diameter, construction of hybrid reinforced earth structure -Terra Link Armastone System, rockfill & hydro vegetation works – downslope, temporary erosion protection– laying Fibromat, manual seeding, silt fence, slope re-profiling & construction of drainage system & horizontal drain at downslope, inspection and testing works – incoming material and ongoing work process, roadworks – milling and paving, binder and wearing course and EWS (Early Warning System). The slope height is more than 100m. This slope experienced many slope failures before, and the government has spent more than RM240 million to repair this slope since it is the main route to Cameron Highlands. The students were exposed to the challenges faced by this work, such as uncertain weather conditions at this site (high rainfall, dangerous for workers during heavy rainfall), heavy fog (stoppage of works due to poor visibility) and high gradient and loose soil slope with the presents of timbers within the excavation profile. The speaker shared his experience as a project engineer and as a UiTM alumni as well. He advised the students regarding their career path and what they need to furnish before entering the challenging life of an engineer.