



Department of Civil and Geomatics Engineering
School of Engineering, Kathmandu University
In support of University Grant Commission, Nepal



4-DAYS TRAINING ON DESIGN & ANALYSIS OF UNDERGROUND STRUCTURES IN HIMALAYAN REGION OF NEPAL USING ROC-SCIENCE SOFTWARE

Introduction to Underground structures and its scope in Nepal, Site Investigation & Tunnel Construction Techniques, Geological Conditions of Nepal and its challenges in Tunneling, Geological Investigation of Tunnels and Cavern, Drill & Blast Technique of Tunneling, Analytical, Empirical, Semi-empirical Design of Tunnels, Numerical Modeling of Tunnels

One day Field Visit to the tunnel nearby the University (Last day of Training)



Target Groups:

Faculty Members, Graduate Students & Undergraduate Students (focused on final year civil engineering students who are interested in pursuing their final year project on tunnel engineering)



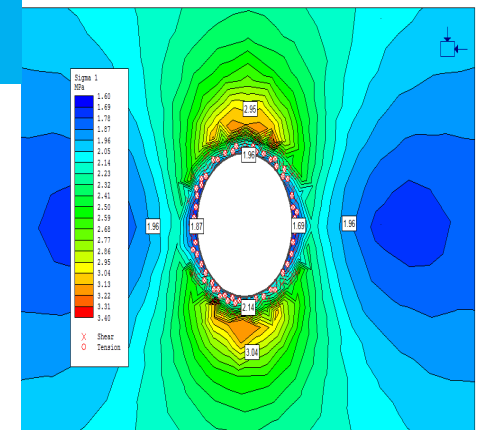
DATE: July 2-5,2017

VENUE: Dept. of Civil & Geomatics Engineering ,Kathmandu University

CONTACT: Er. Nitesh Shrestha (9849172891)

The completed Request for Participation Form should be sent to nitesh.shrestha@ku.edu.np

DEADLINE FOR APPLICATION :By June27,2017



Certificate will be awarded to the participants after completion of training.

Tentative Training Sessions

Day	Time	Session	Topic
One	9:00-9:30	Registration	
	9:31-9:40	Inauguration	Welcome speech by Head of Department of Civil & Geomatics Engineering
	9:41-10:00	Introduction Program	Introduction of trainee and trainer
	10:01-11:00	Session I	Introduction to underground structures and its scope in Nepal
	11:01-11:30	Coffee Break	
	11:31-1:00	Session II	Site Investigation & Tunnel Construction Techniques
	1:01-2:00	Lunch Break	
	2:01-2:30		Discussion
	2:31-3:30	Session III	Geological conditions of Nepal and challenging in tunnelling
3:31-4:00	Coffee Break		
Two	9:00-10:15	Session I	Geological Investigation for tunnels and cavern
	10:16-11:00	Session II	Drill and blast method of Tunelling
	11:01-11:30	Coffee Break	
	11:31-1:00	Session III	Rock Mass classification
	1:01-2:00	Lunch Break	
	2:01-3:00	Session IV	Analytical design of tunnels
	3:01-3:15	Coffee Break	
	3:16-4:00	Session V	Empirical, Semi-empirical design of tunnels
Three	9:00-9:45	Session I	Installation and Introduction of Rocscienc Software
	9:46-10:15	Session II	Stress analysis and distribution
	10:16-11:00		Numerical methods in rock mechanics
	11:01-11:30	Coffee Break	
	11:31-1:00	Session III	Model preparation, Mesh generation and support design analysis of tunnel in 2D
	1:01-2:00	Lunch Break	
	2:01-3:00	Session IV	Post-processing analysis and discussion of tunnel design
	3:01-3:15	Coffee Break	
3:16-4:00	Session V	Introduction to 3D analysis of tunnel design	
Four	9:00-4:00	One day Field Visit to nearby hydropower tunnel around the University	