



Earth Retaining Structures and Design – Short Course Program

Day 1	Monday May 16, 2022
08:30 – 10:00	Review of soil mechanics and site investigation Basic soil mechanics concepts used in retaining and shoring design, shear strength, subsurface exploration, geotechnical drilling, sampling and field tests
10:00 – 10:30	Break and Discussion
10:30 – 12:00	Lateral earth pressure Estimation of lateral earth pressures for different soil and drainage systems under at-rest, active and passive conditions
12:00 – 13:00	Lunch Break
13:00 – 14:30	Rigid and cantilevered walls Analysis of gravity & cantilevered walls for sliding, overturning and bearing capacity
14:30 – 15:00	Break and Discussion
15:00 – 16:30	Geosynthetic walls Analysis and design of reinforced walls for sliding, overturning and internal stability
Day 2	Tuesday May 17, 2022
08:30 – 10:00	Deep excavations – sheet piles Types and selection of shoring systems for deep excavations, sheet piles
10:00 – 10:30	Break and Discussion
10:30 – 12:00	Soldier piles and braced cuts Use of soldier piles for deep excavation and braced cuts for narrow excavations
12:00 – 13:00	Lunch
13:00 – 14:30	Anchored walls Anchored tieback walls, anchor design, anchor testing, and anchored wall design
14:30 – 15:00	Break and Discussion
15:00 – 16:30	Design considerations Seepage, piping, neighboring loads considerations for shoring systems
16:30 – 17:00	Adjournment