

Topics to be covered

- ❖ Selection of alignment: Topographical Surveys, Geophysical and Geological investigations.
- ❖ Planning of tunnels: Layouts, tunnel geometry, selection of locations of Portals, HSE
- ❖ Geology: Face logging, 3-D mapping, Tunnel Seismic Prediction
- ❖ Rock Mechanics
- ❖ Geo-mechanics
- ❖ Tunnel design: Empirical design, Analytical methods, Numerical Analysis.
- ❖ Tunneling methodologies and philosophies
- ❖ Tunnel construction processes
- ❖ Ground improvement
- ❖ Instrumentation and Monitoring
- ❖ Electro-Mechanical Engineering
- ❖ Safety
- ❖ Contract Management.
