

Seminar Objective: comprehensive education and training of Tunnel Engineers focusing on the present state-of-the-art Software-controlled Methods in virtually all fields of Tunnel Engineering and Construction.

Tentative Programme

Day 1

Session 1 : Overview and General Aspects

09.00 – 09.45 : Opening ITACET Foundation & Organising Committee
09.45 – 10.15 : Computer Mathematics and Artificial Intelligence
10.15 – 10.45 : Coffee break
10.45 – 11.30 : Mathematical Basics for Software Application
11.30 – 12.00 : Numerical Computation in Future Tunnelling
12.00 – 12.30 : Tunnelling with Eurocode Application
12.30 – 14.00 : Lunch

Session 2 : Use of Software in Tunnel Engineering

14.00 – 14.30 : Deformation Behaviour and Trend Lines
14.30 – 15.30 : Lining Computation
15.30 – 16.00 : Coffee break
16.00 – 16.45 : Alignment and Overbreak Survey
16.45 – 17.30 : Risk Management & Safety Survey
17.30 – 18.00 : Monitoring & Interpretation

Day 2

Session 3 : Use of Software in Tunnel Construction

09.00 – 09.20 : Geotechnical Survey as Basis for Engineering
09.20 – 09.40 : Profiling Survey
09.40 – 10.00 : Monitoring
10.00 – 10.30 : Automation of Tunnel Equipment
10.30 – 11.00 : Coffee break
11.00 – 11.45 : Case Study 1: Conventional Tunnelling
11.45 – 12.30 : Case Study 2: TBM Tunnelling
12.30 – 14.00 : Lunch

Session 4 : Workshops

14.00 – 14.40 : FE Analysis 2 and 3 Dimensional Simulation
14.45 – 15.25 : Survey of Risk and Safety
15.30 – 16.10 : Groundwater Simulation & Dewatering
16.15 – 16.55 : Monitoring
17.30 – 18.00 : Summary and Closing