

# Tunnel Design and Major Infrastructure Projects

*presented by Arup, Milan office*

room “Arrigo Croce”, building C8, ground floor, DICEA

Thursday, 14<sup>th</sup> May 2026

12:30 – 2:30 pm

A seminar for university students focused on large-scale underground infrastructure projects, tunnel engineering, and advanced digital design tools.

## PROGRAM

### Part 1: Arup and Arup's key projects

- Introduction to Arup (10 min)
- Luigi's career path (5 min)
- Michele's career path (5 min)
- Overview of Arup's infrastructure world and key projects (30 min):
  - High Speed 2 (UK),
  - Bay Area Rapid Transit Silicon Valley II (USA),
  - Suburban Rail Loop (Australia)
  - Woodsmith Mine (UK)

Q&A session (10 min)

### Part 2: Tunnel Design

- Digital tools for tunnel lining design (25 min)
- Design example of a steel fibre reinforced segmental lining (25 min)

Q&A session (10 min)

*For university students interested in tunnelling, underground construction, and infrastructure engineering.*

# ARUP

## SPEAKERS



### **Michele Mangione**

Tunnel Lead in Italy and Global Tunnel Skill Leader at Arup. Michele has 25 years of international experience in multidisciplinary design and construction supervision of underground structures, bored and mined tunnels. He has worked on projects worldwide and specializes in tunnel design using cast iron, steel, and reinforced or fibre-reinforced concrete systems.



### **Luigi Forlingieri**

Senior Tunnel Engineer at Arup with experience in structural and geotechnical design and 2D/3D finite element modelling of underground structures. Since 2019, Luigi has worked on major infrastructure projects involving shafts and tunnel linings in different geological conditions.