



CAREER HUNT

**METRO RAIL TRANSPORTATION DESIGN AND
CONSTRUCTION**



Course Objective

- To introduce the core concepts of planning, systems and procedures, structural analysis, and design of underground and elevated metros
- To impart the concepts about the various types of construction methodologies adopted in the metro industry
- To acquire knowledge on design of Underground and elevated metro stations
- To enable the learners to involve in engineering works related to Metro planning and construction
- Course is offered by L & T Edutech



Key Topics



- Transit oriented development
- Planning of Metros
- MEP systems in Metros
- Contracts and Quality
- Elevated stations and viaducts
- Underground stations and tunnels
- Earth retaining systems
- Future trends in transportation
- Analysis and design of stations (STAAD.Pro) and diaphragm walls



Learning Outcomes



On successful completion of the course, the learners will be able to:

- Create the basic layout of elevated and underground metro stations as per laid down codes and regulations
- Interpret design recommendations, Modelling and analysis using STAAD Pro and Codes of Practice for Elevated and Underground Metros
- Design the earth retaining systems for the excavations of underground stations
- Select suitable construction practices for underground and elevated metros
- Comprehend the MEP systems used in metros and latest trends in transportation systems