Pre-Recorded Online Course

Tokyo Metro Academy

2025 P12	Electrical Facilities 1 Basic Course	Power Supply Maintenance

Substation

Contact Lines

Power transmission and distribution

KEY POINT

By learning the maintenance details of electric power supply equipment in urban railways, you will be able to use them as a reference when considering the formulation and review of the maintenance contents.

OVERVIEW

Tokyo Metro maintains 62 substations, three types of contact lines, and transmission and distribution lines in terms of power supply, which is one of the elements necessary for safe and stable operations of trains.

We will introduce the facility overview, maintenance contents, and efforts to improve safety of power supply facilities for substations, contact lines, and transmission and distribution lines in urban railways.

LECTURE CONTENTS

1) Overview of power supply facilities

- Overview of power supply facilities in urban railways

2) Maintenance basics

- Types, cycles, and organizational structure of periodic inspections

3) Maintenance details of substation, contact lines, power transmission, and distribution lines

- Maintenance details of substations, contact lines (overhead catenary system, overhead rigid conductor system, third rail system/ DC 1,500V, 600V), and power transmission and distribution (AC 22kV, 6.6kV, 3.3kV)

4) Initiatives of safety improvements

- Data recording analysis/monitoring
- Review of inspection and maintenance contents based on accidents, and breakdowns.

KEY DETAILS

Application Period	May 19, 2025 – Mar 31, 2026
Viewable Period	1 month
Targets	Basic Course: for those who have less than 3 years experience in the railway industry
Language	English
Location	Online (Vimeo)
Course Duration	1 hour 37 minutes
Course Fee	10,000 JPY (per 1 course) Note: Applications within Japan are subject to the tax separately.
Payment Method	PayPal
Certificate	Attendance Certificate (digital) will be issued.

More Info and application

https://sites.google.com/tokyometroacademy.com/index
You can apply regardless of your field.