HIGHER NITEC IN RAPID TRANSIT ENGINEERING (2 YEARS)

CERTIFICATION

Credits required for certification:

Sector Foundation Modules	:	6
Specialisation Modules	:	33
Internship Programmes	:	8
Life Skills Modules	:	9
Cross-Disciplinary Core Modules	:	6
Electives	:	6
Total	:	68

COURSE STRUCTURE

Module Title	Credits
SECTOR FOUNDATION MODULES	
Workplace Safety, Health & Environment	3
Data & Digital Essentials	3
SPECIALISATION MODULES	
Rapid Transit Engineering Fundamentals	3
Rapid Transit Electrical Systems	3
Permanent Way	3
Rolling Stock Systems (Undercarriage)	3
Rolling Stock Systems (Saloon)	3
Signalling Equipment	3
Rapid Transit Workshop Equipment	3
Signalling Systems	3
Rapid Transit Communication Systems (Operational)	3
Rapid Transit Communication Systems (Passenger)	3
Track Electrification Systems	3
INTERNSHIP PROGRAMMES	
Internship Programme	8
ELECTIVES (GENERAL) AND LIFE SKILLS MODULES	
For details, click here	

Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.

MODULE OBJECTIVES

Sector Foundation Modules

Workplace Safety, Health & Environment

On completion of the module, students should be able to apply Workplace Safety and Health (WSH) policies, Environmental Management System procedures and practices in the planning, preparation and execution of work activities to ensure a safe and reliable workplace environment.

Data & Digital Essentials

On completion of the module, students should be able to prepare data for analysis, use online tools for collaborative work and maintain information security when online.

Specialisaton Modules

Rapid Transit Engineering Fundamentals

On completion of the module, students should be able to perform servicing on rapid transit engineering components in accordance with rail industry standards and in compliance to rail safety and regulatory guidelines.

Rapid Transit Electrical Systems

On completion of the module, students should be able to perform maintenance on electrical circuits and motor control systems in accordance with the relevant codes of practice and rail industry standards and regulatory compliance.

Permanent Way

On completion of the module, students should be able to perform maintenance on rail tracks and permanent way components in accordance with rail industry standards and in compliance with rail safety and regulatory guidelines.

Rolling Stock Systems (Undercarriage)

On completion of the module, students should be able to perform maintenance on rolling stock undercarriage systems and equipment in accordance with rail industry standards and in compliance with rail safety and regulatory guidelines.

Rolling Stock Systems (Saloon)

On completion of the module, students should be able to perform maintenance on rolling stock saloon systems and equipment in accordance with rail industry standards and in compliance to rail safety and regulatory guidelines.

Signalling Equipment

On completion of the module, students should be able to perform maintenance on rapid transit trackside signalling equipment in accordance with rail industry standards and in compliance with rail safety and regulatory guidelines.

Rapid Transit Workshop Equipment

On completion of the module, students should be able to operate workshop tools and equipment, interpret different types of fastening and rail safety protocol in accordance with rail industry standards and in compliance to rail safety and regulatory guidelines

Signalling Systems

On completion of the module, students should be able to perform maintenance on rapid transit signalling systems in accordance with rail industry standards and in compliance with rail safety and regulatory guidelines.

Rapid Transit Communication Systems (Operational)

On completion of the module, students should be able to perform maintenance on rapid transit operational communication systems and equipment in accordance with rail industry standards and in compliance with rail safety and regulatory guidelines.

Rapid Transit Communication Systems (Passenger)

On completion of the module, students should be able to perform maintenance on rapid transit passenger communication systems and equipment in accordance with rail industry standards and in compliance with rail safety and regulatory guidelines.

Track Electrification Systems

On completion of the module, students should be able to perform maintenance on rapid transit track electrification systems in accordance with rail industry standards and in compliance with rail safety and regulatory guidelines

Electives (General) and Life Skills Modules

For details, click here.