HIGHER NITEC IN RAPID TRANSIT ENGINEERING

CERTIFICATION

Credits required for certification:

Core Modules	:	50
Life Skills Modules	:	9
Elective Modules	:	4
Total	:	63

COURSE STRUCTURE

Module Title	Credits
CORE MODULES	
Rapid Transit Rails & Engineering Fundamentals	7
Rapid Transit Electrical System	7
Rapid Transit Electronic Systems	7
Rapid Transit Operations and Rolling Stock	7
Rapid Transit Signalling Systems	7
Rapid Transit Communications Systems	7
Industry Attachment	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

Core Modules

Rapid Transit Rails and Engineering Fundamentals

On completion of the module, students should be able to perform the maintenance of rail tracks and rail engineering components in accordance with railway industry standards and workplace safety regulations.

Rapid Transit Electrical System

On completion of the module, students should be able to explain the principles, operations, applications and to perform maintenance of electrical circuits, motor control system and rapid transit electrical power distribution system in accordance with the relevant codes of practice and railway industry standards and regulations.

Rapid Transit Electronic Systems

On completion of the module, students should be able to explain the principles, operation, applications and to perform maintenance of electronics components, logic circuits, electro-mechanical devices, operational amplifiers, power rectification, oscillators, pulse width modulation circuits, rotary encoders, sensors and transducers in accordance with the railway industry standards and regulations.

Rapid Transit Operations and Rolling Stock

On completion of the module, students should be able to explain the operation of the rail network in Singapore and perform maintenance of rolling stock equipment in accordance with the railway industry standards and regulations.

Rapid Transit Signalling Systems

On completion of the module, students should be able to explain the principles, operation and to perform maintenance of rapid transit signalling devices, circuits and systems in accordance with railway industry standards and regulations.

Rapid Transit Communications Systems

On completion of the module, students should be able to explain the principles, operation and also perform and/or supervise the maintenance of rapid transit communication devices, circuits and systems in accordance with railway industry standards and regulations.

Industry Attachment

On completion of the module, students should be able to apply the skills and knowledge acquired to take on a range of job scope at the company.

Electives (General) and Life Skills Modules

For details, click here.