

# NITEC IN RAPID TRANSIT TECHNOLOGY

## Core Modules

### Rapid Transit Systems & Controls

On completion of the module, students should be able to maintain electro-pneumatic, electro-hydraulic and PLC systems; and explain the special features of trains, railway engineering technologies, rapid transit facilities and rail regulatory compliance measures and workplace safety regulations.

### Rapid Transit Electrical Practices

On completion of the module, students should be able to maintain and troubleshoot electrical circuits and equipment, motor control circuits and train electrical systems.

### Rapid Transit Electronics Practices

On completion of the module, students should be able to maintain and troubleshoot analogue and digital electronics equipment as well as electromechanical control systems.

### Rapid Transit Mechanical Practices

On completion of the module, students should be able to perform mechanical fabrication and maintain mechanical assemblies for rail operations.

### Rapid Transit Light Rail Systems

On completion of the module, students should be able to maintain, troubleshoot, service and repair light rail propulsion, battery, bogie and undercarriage systems and equipment.

### Rapid Transit Rolling Stock

On completion of the module, students should be able to maintain train air-conditioning, ventilation, brakes, bogie and cabin equipment and door control systems.

### Rapid Transit Permanent Way

On completion of the module, students should be able to maintain permanent way parts and tracks as well as third rail and current collection systems for trains.

### 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.