NITEC IN BUILT ENVIRONMENT (VERTICAL TRANSPORTATION)

Core Modules

Electrical Services

On completion of the module, students should be able to interpret electrical circuit diagrams; install conduits and trunkings; replace light fittings and accessories; rectify faults in electrical circuits; and conduct insulation resistance and continuity tests.

Mechanical Services

On completion of the module, students should be able to repair mechanical parts, service centrifugal pump, motor-drive assembly, air-cooled petrol and liquid-cooled diesel-driven portable generator, as well as replace faulty component of drive mechanism and door fittings.

Residential Air-Conditioning Services

On completion of the module, students should be able to install refrigeration piping, set up basic refrigeration system, install unitary and split-type air conditioners, replace faulty fan coil and condensing unit, and carry out preventive maintenance for residential air-conditioning system, water cooler and dehumidifier.

Piping and Plumbing Services

On completion of the module, students should be able to repair water supply and sanitary piping system, replace piping fittings, sanitary fixtures, rectify faulty water heaters, clear pipe and drain chokes, and inspect water pump and control systems.

Specialisation Modules

Lift and Escalator System and Equipment Maintenance

On completion of the module, students should be able to identify and explain the operation, interpret lift drawings, as well as maintain, service and repair mechanical equipment and components of lift and escalator system in accordance with lift engineering specifications and codes of practice.

Lift and Escalator Power and Control System Maintenance

On completion of the module, students should be able to maintain, service and repair lift controllers, electrical equipment, cables, components, as well as safety switches of lift and escalator systems in accordance with lift engineering specifications and codes of practice, including performing functionality checks of lift control system connection to BMS.

Lift and Escalator System Inspection and Testing

On completion of the module, students should be able to inspect and evaluate the condition of a lift hoistway, oversee the correct installation of lift equipment and components, as well as carry out heat run and commissioning tests on lift systems in accordance with lift engineering specifications and codes of practice. Students should also be able to troubleshoot, adjust and carry out routine and periodic maintenance of lift system and equipment, perform mandatory lift and escalator tests, as well as identify and recommend upgrading and improvement works to clients.

Industry Attachment

On completion of the module, students should be able to acquire and apply a cluster of key technical, social and methodological competencies in the occupation.