

HIGHER NITEC IN TECHNOLOGY – VERTICAL TRANSPORTATION

Course Code: HT2VT / Plan Code: HT2VT

COURSE OBJECTIVE

This course equips students with skills and knowledge to maintain, service, troubleshoot, repair, inspect and test lift, escalator and moving walk in accordance with codes of practice, statutory requirements and engineering specifications.

COURSE STRUCTURE

Cluster Core/Specialisation Modules

| S/N | Module Details | Module Code | Module Objectives |
|---|---|--|--|
| MSC: Lift Mechanical System | | | |
| C1 | Lift Mechanical System I 20 (T) 40 (P) Credits 3 Prerequisite: Nil | VT43001FP Equivalent Code Nil | On completion of the module, students should be able to maintain mechanical equipment and systems in lift machine room, lift landing and lift car. |
| C2 | Lift Mechanical System II 20 (T) 40 (P) Credits 3 Prerequisite: Nil | VT43002FP Equivalent Code Nil | On completion of the module, students should be able to maintain mechanical equipment and systems in lift hoistway and lift pit as well as mechanical systems and components of lift safety equipment. |
| MSC: Lift Power, Control & Electronic System | | | |
| C3 | Lift Power System 20 (T) 40 (P) Credits 3 Prerequisite: Nil | VT43003FP Equivalent Code Nil | On completion of the module, students should be able to maintain lift safety system, emergency battery operated power supply unit, travelling cables and other forms of electrical cablings as well as perform measurement of power quality. |
| C4 | Lift Control System 20 (T) 40 (P) Credits 3 Prerequisite: Nil | VT43004FP Equivalent Code Nil | On completion of the module, students should be able to maintain lift controller, lift control devices, car door operator and braking system. |
| C5 | Lift & Escalator Electronic System 30 (T) 30 (P) Credits 3 Prerequisite: Nil | VT53001FP Equivalent Code Nil | On completion of the module, students should be able to maintain drives, devices, sensors and electronic circuitry of lift and escalator/moving walk systems as well as troubleshoot electronics faults. |
| MSC: Lift & Escalator Inspection & Testing | | | |
| C6 | Lift Inspection & Testing 20 (T) 40 (P) Credits 3 Prerequisite: Nil | VT43005FP Equivalent Code Nil | On completion of the module, students should be able to inspect installation of lift and lift hoistway, as well as perform heat run and commissioning tests on lift system. |
| C7 | Escalator Maintenance, Inspection & Testing 20 (T) 40 (P) Credits 3 Prerequisite: Nil | VT43006FP Equivalent Code Nil | On completion of the module, students should be able to maintain escalator equipment and systems, test escalator safety devices and perform commissioning tests on escalator/moving walk system. |

MSC: Advanced Technology in Vertical Transportation

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|----|---|------------------------|---|
| C8 | Advanced Lift & Escalator Maintenance 30 (T) 30 (P) Credits 3 Prerequisite: Nil | VT53002FP | On completion of the module, students should be able to perform troubleshooting and adjustments of lift and escalator/moving walk components and safety circuits, including assessing its overall condition, as well as prepare lift and escalator/moving walk systems for audit. |
| | | Equivalent Code Nil | |
| C9 | Internet of Elevator 30 (T) 30 (P) Credits 3 Prerequisite: Nil | VT53003FP | On completion of the module, students should be able to perform remote monitoring and evaluate faults using remote intervention. |
| | | Equivalent Code Nil | |

Abbreviations: T - Theory, P - Practical, MSC - Modular Skills Certificate

CREDITS FOR CERTIFICATION

Total of 27 credits from successful completion of 9 Cluster Core/Specialisation modules.

Applicants who do not meet the entry requirements for Cluster Core/Specialisation modules will need to complete 12 credits from 4 Sector Foundation modules before taking Cluster Core/Specialisation modules.

Sector Foundation Modules

| S/N | Module Details | Module Code | Module Objectives |
|-----|--|------------------------|---|
| F1 | Workplace Safety, Health & Environment 15 (T) 45 (P) Credits 3 Prerequisite: Nil | EG33001FP | 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. |
| | | Equivalent Code Nil | |
| F2 | Data & Digital Essentials 21 (T) 39 (P) Credits 3 Prerequisite: Nil | EG33002FP | 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. |
| | | Equivalent Code Nil | |
| F3 | Electrical Fundamentals 30 (T) 30 (P) Credits 3 Prerequisite: Nil | EG33003FP | On completion of the module, students should be able to interpret circuit schematic and board layout, perform DC circuit connection and in-circuit measurement. |
| | | Equivalent Code Nil | |
| F4 | Sustainable Engineering 36 (T) 24 (P) Credits 3 Prerequisite: Nil | EG33005FP | On completion of the module, students should be able to determine key contributors to environmental changes and the challenges involved in implementing sustainable initiatives, and propose effective strategies to promote sustainability and address environmental challenges across various industries. |
| | | Equivalent Code Nil | |

Abbreviations: T - Theory, P - Practical

VENUE

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Note:

- 1) The training schedule of lessons is subject to change.
- 2) Depending on the demand, not all the modules in the *CET Higher Nitec* in Technology courses will be offered in each intake. Where the modules are offered and there is insufficient enrolment, the classes will be cancelled and a full refund will be given to the affected students.