HIGHER NITEC IN TECHNOLOGY – IT SYSTEMS & NETWORKS

Course Code: HTISN

COURSE OBJECTIVE
This course provides students with skills and knowledge to set up, maintain and troubleshoot end-user computing devices, network, server and application in a hybrid infrastructure environment; implement wireless LAN, network security, and support IT project development to ensure smooth operations of Infocomm hardware and software in the organisation.

COURSE STRUCTURE

S/N	Module Details	Module Code	Module Objectives
C1	**Computer Maintenance and Operating Systems** 39 hrs (T) 81 hrs (P) Credits: 7 Prerequisite: Nil	IT4041FP Equivalent Codes IT4022PA IT4101FP IT4101FPR	On completion of the module, students should be able to perform installation and configuration of operating system and application software on end user computing devices. In addition, they should be able to install and configure peripherals, perform end user computing devices maintenance and troubleshooting of hardware and software problems.
C2	**Networking Technology** 39 hrs (T) 81 hrs (P) Credits: 7 Prerequisite: Nil	IT4042FP Equivalent Codes IT4024PA IT4102FP IT4102FPR	On completion of the module, students should be able to apply the fundamentals of computer networking in relation to the OSI model. They should also be able to set up and configure wired local area network (LAN) including IP address calculation, switching, routing, routing protocols and virtual local area networks (VLANs).
C3	**System Administration** 39 hrs (T) 81 hrs (P) Credits: 7 Prerequisite: Nil	IT4043FP Equivalent Codes IT5105PA IT4103FP IT4103FPR	On completion of the module, students should be able to install and set up server operating systems and perform system administration tasks such as user management, resource sharing, security management, preventive maintenance, and performance tuning on these systems. Students will then proceed to perform value-added features such as implementing server security and high-availability systems.
C4	**Virtualization** 27 hrs (T) 93 hrs (P) Credits: 6 Prerequisite: Nil	IT4044FP Equivalent Code Nil	On completion of the module, students should be able to set up a hypervisor with virtual machines (VMs) and configure clients' access to these VMs. They should also be able to perform backup and recovery of VMs, monitor resource utilisation on the hypervisor, troubleshoot performance and connectivity issues as well as assisting in securing the virtualised infrastructure. They will be introduced to commercially available cloud services and be able to utilise them.
C5	**Advanced Networking** 27 hrs (T) 93 hrs (P) Credits: 6 Prerequisite: Advised to complete IT4042FP	IT5040FP Equivalent Codes IT5106PA IT5104FP IT5104FPR	On completion of the module, students should be able to configure advanced routing, switching and IP services, set up WAN Links, implement network access control, monitor and administer a network, and troubleshoot network connectivity.

Abbreviations: T - Theory, P - Practical

CREDITS FOR CERTIFICATION
Total of 33 credits from successful completion of 5 modules.

VENUE
ITE College Central, ITE College East, ITE College West

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.