

HIGHER NITEC IN TECHNOLOGY – BUSINESS INFORMATION SYSTEMS

Course Code: HT2BI / Plan Code: HT2BI

COURSE OBJECTIVE

This course equips students with skills and knowledge in ICT fields so as to enable them to support business information systems on end-user computing devices, network, server and application in a hybrid infrastructure environment. He/She also assists in the support of database management system and enterprise solution to ensure smooth operations of all Infocomm hardware and software in the organisation.

COURSE STRUCTURE

Core/Specialisation Modules

S/N	Module Details	Module Code	Module Objectives
MSC: Enterprise Network Technology			
C1	Networking Technology 25 (T) 35 (P) Credits 3 Prerequisite: Nil	SN43002FP	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 configure and set up wired and wireless local area network (LAN) including network segmentation. Students will also be able to perform network documentation and monitor network performance.
		Equivalent Code IT4045FP	
C2	Enterprise Networking 25 (T) 35 (P) Credits 3 <i>Advisory: Network Technology module or equivalence</i>	SN43003FP	On completion of the module, students should be able to configure and set up a switched and routed network with Virtual LANs (VLANs) as well as set up a wide area network (WAN), implement access control lists and troubleshoot common network issues and problems.
		Equivalent Code IT4045FP	
MSC: Infrastructure Administration			
C3	System Administration 24 (T) 36 (P) Credits 3 Prerequisite: Nil	SN43004FP	On completion of the module, students should be able to set up server operating systems and perform system administration tasks such as user management, resource management and performance monitoring. Students should also be able to configure file server services and implement basic system security.
		Equivalent Code IT4043FP	
C4	System Hardening & Infrastructure Services 24 (T) 36 (P) Credits 3 Prerequisite: Nil	SN43005FP	On completion of the module, students should be able to perform server security hardening and manage infrastructure services. Students should also be able to automate server administration and implement high-availability systems.
		Equivalent Code IT4043FP	
MSC: Virtualisation & Cloud Administration			
C5	Virtualisation Fundamentals 20 (T) 40 (P) Credits 3 Prerequisite: Nil	SN43006FP	On completion of the module, students should be able to set up virtualisation server and environment. They should also be able to perform backup and recovery of VMs for fault tolerance. They should be able to perform basic troubleshooting with hypervisor and VMs.
		Equivalent Code IT4044FP	

C6	Cloud System Administration 18 (T) 42 (P) Credits 3 <i>Advisory: Virtualisation Fundamentals module or equivalence</i>	SN43007FP	On completion of the module, students should be able to administer cloud / virtualisation platform and its associated services, monitor resource utilisation on the hypervisor, troubleshoot performance and connectivity issues as well as secure the cloud / virtualised infrastructure. They will also be introduced to commercially available cloud services, including containers and be able to utilise them.
		Equivalent Code IT4044FP	
MSC Database & Application Development			
C7	Database Essentials 21 (T) 39 (P) Credits 3 Prerequisite: Nil	BI53001FP	On completion of this module, students should be able to perform data manipulation and manage database server, as well as create databases and extract information for business report generation.
		Equivalent Code IT5042FP	
C8	Application Development 21 (T) 39 (P) Credits 3 Prerequisite: Nil	BI53002FP	On completion of this module, students should be able to create secured software application that connect to database.
		Equivalent Code IT5042FP	
MSC: Business Enterprise Systems			
C9	Enterprise Systems Administration 21 (T) 39 (P) Credits 3 Prerequisite: Nil	BI53003FP	On completion of the module, students should be able to install and configure Enterprise Resource Planning systems. In addition, they should be able to administer user accounts and customise user interfaces.
		Equivalent Code IT5043FP	
C10	Enterprise Systems Process 21 (T) 39 (P) Credits 3 Prerequisite: Nil	BI53004FP	On completion of the module, students should be able to set up and configure data migration for Enterprise Resource Planning systems. In addition, they should be able to set up and implement security policies, business processes, as well as support in business reporting function.
		Equivalent Code IT5043FP	

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

CREDITS FOR CERTIFICATION

Total of 30 credits from successful completion of 10 Core/Specialisation modules.

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

Foundation Modules

S/N	Module Details	Module Code	Module Objectives
F1	Networking Fundamentals 21 (T) 39 (P) Credits 3 Prerequisite: Nil	SN33001FP	On completion of the module, students should be able to set up, configure, set up and troubleshoot wired and wireless network system for small office environment. They should be able to provide network support and configure devices such as switches and wireless access points.
		Equivalent Code Nil	

F2	Operating System Essentials 30 (T) 30 (P) Credits 3 Prerequisite: Nil	SN33002FP	On completion of the module, students should be able to install and configure operating system (OS) and application software on end user computing devices. In addition, they should also be able to perform OS maintenance and troubleshooting.
		Equivalent Code Nil	
F3	Fundamentals of Data 10 (T) 50 (P) Credits 3 Prerequisite: Nil	DE33001FP	On completion of the module, students should be able to import data from external sources, perform basic data manipulation and present simple visualisation of the data.
		Equivalent Code Nil	
F4	Cybersecurity Fundamentals 30 (T) 30 (P) Credits 3 Prerequisite: Nil	SN33003FP	On completion of the module, students should be able to apply the knowledge and essentials skills in all security domains in the cyber world - information security, systems security, network security, mobile security, physical security, ethics and laws, related technologies, defence and mitigation techniques use in protecting.
		Equivalent Code Nil	

Abbreviations: T - Theory, P - Practical

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.