



Applied College

Information Technology Diploma Program

Level 1

Course title	English Language (1)
Course code	ENG 101
Credit hours	3
Medium of instruction	English
Course specification	English Language (1) ENG 101 is taught at the first level of first year for 3 credit hours.

Course title	Computer Maintenance Skills
Course code	TECM 110
Credit hours	3
Medium of instruction	English
Course specification	This course covers topics related to computers including computers components, basics networking, operating systems, virtualization, troubleshooting, and operational procedures. Students will learn how to maintain computers: diagnostics, repair, update and amend the pieces, partitioning and preparing the disks. This course contains labs content that includes technical concepts and terminology of the PC's internal and external components and operating systems.

Course title	Database Management
Course code	PROG 110
Credit hours	3
Medium of instruction	English
Course specification	This course covers principles of database systems, architecture of database management systems, relational model conceptual design and requirement analysis, database design and normalization, query languages, multi-user and distributed database issues; practical use of a DBMS and building of a database application.



Course title	Computer Programming Concepts
Course code	PROG 120
Credit hours	3
Medium of instruction	English
Course specification	This course covers concepts of problem-solving using constructs of logic inherent in computer programming languages. It covers all the essential programming concepts including variables, data types, control statements, functions and arrays. In this course, students will apply problem solving concepts by analyzing problems and constructing, testing, and implementing algorithms using pseudo-code, and procedural programming.

Course title	Operating Systems 1
Course code	TECM 111
Credit hours	3
Medium of instruction	English
Course specification	This course gives an overview of Operating Systems concepts. Topics include Software and Hardware management. During this course students will learn how to install and configure an OS and how to work in command line using Linux OS.

Course title	Basics of Wired Networks
Course code	TECM 120
Credit hours	3
Medium of instruction	English
Course specification	This course introduces networking concepts and technologies, Network architectures, cabling and topology, ethernet basics, network installation, TCP/IP applications and network protocols, advanced networking devices and wireless networking. At the end of this course students are prepared to take the CompTIA Network+ certification examination.



Level 2

Course title	English Language (2)
Course code	ENG 102
Credit hours	3
Medium of instruction	English
Course specification	English Language (2) ENG 102 is taught at the second level of first year for 3 credit hours.

Course title	Information Technology Basics
Course code	TECM 112
Credit hours	3
Medium of instruction	English
Course specification	This course introduces the fundamentals to design the information technology systems using integrated circuits. It presents an exploration of the abstractions, principles, and techniques used in the design of digital and computer systems.

Course title	Networks management and analysis
Course code	TECM 121
Credit hours	3
Medium of instruction	English
Course specification	This course provides students with a comprehensive view of the network management problem, including its concepts, scope, challenges, and techniques. Hence, network analysis and its performance measurements. At the end of this course students are prepared to manage future IT infrastructure.



Course title	Network security support1
Course code	TECM 122
Credit hours	3
Medium of instruction	English
Course specification	This course includes an overview of computer network security topics. Also, methods to secure network connections and the connected hardware. It also examines the diverse sources of dangers that may affect the networks, the resistance methods and securing the network. In particular, the student is trained to deal with hardware securing systems against viruses and its impacts. At the end of this course students are prepared to take the CCNA Network certification examination.

Course title	System Analysis and Design Tools
Course code	PROG 111
Credit hours	3
Medium of instruction	English
Course specification	This course introduces information systems development with today's latest practical and streamline approach. Students learn about emerging technologies and methodologies, including agile methods, cloud computing and mobile applications system analysis and design. At the end of this course, students are prepared to master critical thinking and IT skills needed in today's dynamic, business-related environment.

Course title	Operating systems 2
Course code	TECM 113
Credit hours	3
Medium of instruction	English
Course specification	This course introduces the management of Linux operating system. At the end of this course students are prepared to take the CompTIA Linux+ certification examination



Course title	Computer Network Operating Systems
Course code	TECM 114
Credit hours	3
Medium of instruction	English
Course specification	This course provides the student with the main skills necessary to deal in general with network software of operating system, Linux operation system and windows in particular, the internet protocol, diverse services, securing and troubleshooting operation system.

Exit Point:

Course title	Internship
Course code	TECM 192
Credit hours	6
Medium of instruction	English
Course specification	This course is taught after finishing the first year for students who want to graduate with Associate diploma.

Level 3

Course title	English Language in Computer Science
Course code	PROG 241
Credit hours	3
Medium of instruction	English
Course specification	English Language in Computer Science PROG 241 is taught at the third level of second year for 3 credit hours.



Course title	Technical Support and Customer Service Skills
Course code	TECM 230
Credit hours	3
Medium of instruction	English
Course specification	This course will introduce the business, technical, and interpersonal skills needed to provide customer support. This course is designed to provide individuals interested in a technical customer support career with the knowledge and skills to be successful in that field. Students will gain a better understanding of the various careers in the customer support industry and the knowledge and skill sets needed to enter and advance in those careers.

Course title	Ethical Approaches to Information Technology Management
Course code	TECM 231
Credit hours	3
Medium of instruction	English
Course specification	This course emphasizes an emerging model of information ethics from historical and cross-cultural perspectives and then applies this model to a variety of new and emerging technologies that are inherently social in their construction and use. At the end of this course, students are able to study the technological underpinnings of associated technology systems, experiment with individual and group interaction with technologies, and examine the mechanics of ethical and unethical behaviors.

Course title	Network Servers
Course code	TECM 223
Credit hours	3
Medium of instruction	English
Course specification	This course introduces the basic of network servers. At the end of this course, a student will be able to describe topics ranging from server hardware to server operating systems, networking and security, storage, and cloud-based solutions. Hence, the understanding of server administrators is responsible for remote administration of potentially hundreds of physical and virtualized servers.



Course title	Network security support2
Course code	TECM 224
Credit hours	3
Medium of instruction	English
Course specification	This course covers advanced topics in network security for wired and wireless networks such as; wireless security protocols, Firewalls, forensics, networks protocols and VPN. At the end of this course, students will be prepared to take the CCNA Network certification examination.

Course title	Computer Information Technology Project Management
Course code	TECM 280
Credit hours	3
Medium of instruction	English
Course specification	This course covers key components of project management including project scope management, project time, cost management, quality management, human resource considerations and risk management.

Course title	Website Development and Management
Course code	PROG 231
Credit hours	3
Medium of instruction	English
Course specification	This course allows the student to master the tools needed to develop and manage websites and it introduces web page layout with HTML and CSS, JavaScript for event handling and MySQL to provide access to a custom database.



Level 4

Course title	Graduation Project
Course code	TECM 283
Credit hours	3
Medium of instruction	English
Course specification	This course is the capstone for the information technology program, and it is designed for students who have passed 54 hours. This course allows the student to use their knowledge of IT concepts to complete a comprehensive project including a detailed project plan, documentation, and final presentation.

Course title	Internship
Course code	TECM 293
Credit hours	6
Medium of instruction	English
Course specification	This course is taught at the fourth level for 6 credit hours, and it is designed for students who have passed 54 hours.