

ACITU: Computer Appreciation & Internet Utility

Course code: 10101
Duration: 4 Weeks
Certificate: AfriHUB Certified IT User
Global Certification: Microsoft Office Specialist (MOS)

Description:

In this course, students will learn PC fundamentals, the new features of Word 2007, Excel 2007 and PowerPoint 2007. Students will also learn how to do research on the internet using tools like Internet Explorer, Google Chrome, Mozilla and Wikipedia.

Prerequisites:

- None

Target Audience:

Beginners (no experience) and secondary school leavers

Course Outline

- **Introduction to IT**
 - Computer Hardware / Peripherals
 - Storage Components
 - Types of Storage
 - Operating Systems and Application Software
- **Fundamentals of Keyboarding**
 - Using the Keyboard Effectively
 - Testing Your Skills: Keyboarding
- **Common Software Applications**
 - **Using the Office 2007 Environment**
 - The Office 2007 Environment
 - Navigating in Task Panes
 - Using Smart Tags
 - Applying a Template from the Online Office Template Gallery
 - Using the New Features of Word
 - Viewing a Document in Reading Layout View
 - Translating Words in Your Document
 - Translating Via the Web
 - Applying a Watermark
 - **Downloading Information (Internet Explorer)**
 - **Getting started**
 - Topic A: Database concepts
 - Good Downloading vs. Bad Downloading
 - Files, Music, Games, etc.
- **Using the New Features of Excel**
 - Creating Borders by Drawing
 - Watching a Formula
 - Evaluating a Formula
 - Managing Links
 - Republishing to the Web
 - Playing Back Worksheet Data
- **Using the New Features of PowerPoint**
 - Creating a Diagram
 - Adding a Motion Path
 - Creating Multiple Masters
 - Sending a Presentation for Review
 - Comparing and Merging Presentations
 - Creating Slide Show Annotations
 - Packaging a Presentation
- **Using Instant Messaging**
 - Features of IM (Chatting, Conferencing, etc.)
 - Features of Messenger Providers
- **Database Development using Microsoft Access 2007**
 - Topic B: Exploring the Access environment

- Topic C: Getting help
- **Databases and tables**
 - Topic A: Planning and designing databases
 - Topic B: Exploring tables
 - Topic C: Creating tables
- **Fields and records**
 - Topic A: Changing the design of a table
 - Topic B: Finding and editing records
 - Topic C: Organizing records
- **Data entry rules**
 - Topic A: Setting field properties
 - Topic B: Working with input masks
 - Topic C: Setting validation rules
- **Basic queries**
 - Topic A: Creating and using queries
 - Topic B: Modifying query results and queries
 - Topic C: Performing operations in queries
- **Using forms**
 - Topic A: Creating forms
 - Topic B: Using Design view
 - Topic C: Sorting and filtering records
- **Working with reports**
 - Topic A: Reports
 - Topic B: Modifying and printing reports

ACITU: Computer Power User

Course code: 10102
Duration: 8 Weeks
Certificate: AfriHUB Certified IT User
Global Certification: Microsoft Office Specialist (MOS)

Description:

This course is designed for candidates who already have the basic knowledge of the PC and application packages like Microsoft Word 2007, Excel 2007 and PowerPoint 2007.

Prerequisites:

- Computer Appreciation or equivalent knowledge

Target Audience:

- Users with at least 1 year experience using a personal computer
- University graduates

Course Outline:

- **Overview of ICT**
 - Introduction to IT
 - Computer Hardware / Peripherals
 - Storage Components
 - Types of Storage
 - Operating Systems and Application Software
- **Operating Systems (Windows, Linux)**
 - Fundamentals of Windows Operating System
 - Fundamentals of Linux Operating System
- **Advanced Spreadsheet (Excel 2007)**
 - Working with Data in Lists
 - Filtering and Querying Data
 - Using Lookup and Database Functions
 - Working with PivotTables
 - Making Projections About Data
 - Analyzing Data
 - Auditing Worksheets
 - Protecting Worksheets and Workbooks
 - Working with Macros
 - Working with Templates
 - Importing and Exporting Information
 - Using Outlines
 - Using Excel in a Workgroup
- **Advanced word processing (Word 2007)**
 - Working with Custom Views and Report Manager
 - Using Data Maps
 - Mail merging
 - Objects and backgrounds
 - Forms
 - Macros
 - Customizing toolbar and keyboard
 - Long documents
 - XML Features
- **Advanced Presentation (PowerPoint 2007)**
 - Working with Multimedia
 - Working with Masters, Backgrounds, and Color Schemes
 - Sharing Information
 - Creating Enhanced Slide Shows
- **Research Using the Internet**
 - What is the Internet
 - Connecting to the Internet
 - Using the Internet: Applications
 - Using the Internet: Navigating the Web
 - Using the Internet: Searching the Web

- Using the Internet: Other Internet Applications
- Search Engines
- Keyword and Boolean Searches
- Good Downloading vs. Bad Downloading
- Files, Music, Games, etc.
- **Database Development using Microsoft Access 2007**
 - Querying with SQL
 - Advanced Queries
 - Macros
 - Advanced Macros
 - Importing, exporting and linking
 - Managing Database
 - Integrating Internet
- **Web design fundamentals (HTML)**
 - HTML Structure
 - Graphics
 - Lists
 - Tables
 - Links
 - Formatting
- **Design Concepts (Visio 2007)**
 - The Visio environment
 - Drawing Tools
 - Basic Diagrams
 - Formatting drawings
 - Working with pages
 - Networking and brainstorming diagrams

ACITU: Universal Mandatory IT Training (UMITT)

Course code: 10103
Duration: 4 Weeks
Certificate: AfriHUB Certified IT User
Global Certification: Microsoft Office Specialist (MOS)

Description:

This course is designed for undergraduates in the university. In this course, students will learn PC fundamentals, the new features of Word 2007, Excel 2007 and PowerPoint 2007. Students will also learn how to do research on the internet using tools like Internet Explorer, Google Chrome, Mozilla and Wikipedia.

Prerequisites

- Candidates must be students of the institution where AfriHUB operates

Target Audience:

- Students of tertiary institutions

Course Outline

- Introduction to IT
- Computer Hardware / Peripherals
- Storage Components
- Types of Storage
- Operating Systems and Application Software
- Fundamentals of Keyboarding
- Using the Keyboard Effectively
- Testing Your Skills: Keyboarding
- Common Software Applications Using the Office 2007 Environment
- The Office 2007 Environment
- Navigating in Task Panes
- Using Smart Tags
- Applying a Template from the Online Office Template Gallery
- Using the New Features of Word
- Viewing a Document in Reading Layout View
- Translating Words in Your Document
- Translating Via the Web
- Applying a Watermark
- Downloading Information (Internet Explorer)
- Good Downloading vs. Bad Downloading
- Files, Music, Games, etc. using the New Features of Excel
- Creating Borders by Drawing
- Watching a Formula
- Evaluating a Formula
- Managing Links
- Republishing to the Web
- Playing Back Worksheet Data
- Using the New Features of PowerPoint
- Creating a Diagram
- Adding a Motion Path
- Creating Multiple Masters
- Sending a Presentation for Review
- Comparing and Merging Presentations
- Creating Slide Show Annotations
- Packaging a Presentation
- Using Instant Messaging
- Features of IM (Chatting, Conferencing, etc.)
- Features of Messenger Providers

ACITU: Digital Train the Trainer Opportunity (DiTTO)

Course code: 10104
Duration: 1 Week
Certificate: AfriHUB Certified IT User
Global Certification: Microsoft Office Specialist (MOS)

Description:

This course is designed for undergraduates in the university. In this course, students will learn PC fundamentals, the new features of Word 2007, Excel 2007 and PowerPoint 2007. Students will also learn how to do research on the internet using tools like Internet Explorer, Google Chrome, Mozilla and Wikipedia.

Prerequisites:

- Candidate must be a staff of the institution where AfriHUB operates

Target Audience:

- Academic and non-academic staff of tertiary institutions

Course Content:

Day 1

IT Essentials

- Introduction to IT
- Computer Hardware / Peripherals
- Storage Components
- Types of Storage
- Operating Systems and Application Software
- Common Software Applications

Using the Keyboard (QWERTY)

- Fundamentals of Keyboarding
- Using the Keyboard Effectively
- Testing Your Skills: Keyboarding

Using the Mouse

- Fundamentals of Using a Mouse
- Using the Mouse Effectively
- Testing Your Skills: Mouse

Day 2

Starting Windows XP

- Starting the Computer and Windows
- Windows Desktop
- Desktop Icons
- Getting Assistance

Working with Windows XP

- Basic Window Features
- The Start Menu and Taskbar

Instant Messaging

- Using Instant Messaging
- Features of IM (Chatting, Conferencing, etc.)
- Features of Messenger Providers

Emailing

- Using Email
- Sending and Receiving Emails
- Features of Online Email Providers
- Internet Emailing

Day 3

The Internet and the WWW

- What is the Internet
- Connecting to the Internet
- Using the Internet: Applications
- Using the Internet: Navigating the Web
- Using the Internet: Searching the Web
- Using the Internet: Other Internet Applications

Searching for Information (Internet Explorer)

- Search Engines
- Keyword and Boolean Searches

Downloading Information (Internet Explorer)

- Good Downloading vs. Bad Downloading
- Files, Music, Games, etc.

Exploring Files and Folders (Windows XP)

- About Files, Folders, and Disks
- Navigating Folders and Files in Windows
- Managing File and Folder

Day 5

What is MS Excel? (Excel 2007)

- What is a Spreadsheet?
- The Standard and Formatting Toolbars
- Creating a New Workbook

Creating and Editing Spreadsheets (Excel 2007)

- Entering and Editing Data
- Moving and Copying Data

What is MS PowerPoint? (PowerPoint 2007)

- Getting Started with MS PowerPoint
- Creating a Presentation from a Blank Slide
- Creating a Presentation from a Template

Creating and Editing Presentations

(PPT)(C965)

- Understanding Objects
- Working with Pictures and Drawings
- Running a Slide Show

Day 4

Getting Started (Word 2007)

- The Office Application Window
- What is Word?
- The Standard and Formatting Toolbars

Creating and Editing Documents (Word 2007)

- Creating a New Document
- Editing Text
- Templates and Wizards

Moving and Copying Text (Word 2007)

- Moving Text
- Copying Text
- Dragging and Dropping Text

Saving and Printing Documents (Word 2007)

- Naming, Saving, and Folders
- Page Setup
- Printing Documents

Using MS Word Help (Word 2007)

- MS Word Help
- MS Word Office Assistant
- Office Online Help

ACOC: AfriHUB Certificate of Completion- CaTalk

Course code: 10105
Duration: 1 Week
Certificate: AfriHUB Certificate of Completion

Description:

An effective job search has many components. In basic terms, you identify the market you want to access, then plan and execute an effective campaign to find a job market. CaTalk is designed to help students assess their values, desires and needs for application to their job search.

Pre-requisites:

- None

Target Audience:

- Graduates, Undergraduates, Job seekers, Career changers, etc

Course Content:

- Developing a career
 - Career Path
 - Setting Goals
 - Achieving your goals
- Developing a job strategy
 - Developing your job search strategy
 - Career fairs
 - Newspapers/Magazines
 - Internet
- Networking
 - What is networking?
 - Why network
 - Myths
 - Networking etiquette
 - Where to network
 - Putting your network into practice
 - Thank you letters
- Tools for a successful job search
 - What is a resume?
 - Types of resume
 - Elements of an effective resume
 - What is a cover letter
 - Writing strong cover letters
 - Important checklist
 - Main element of a good cover letter
 - Sample cover letters
- Job interviewing technique
 - Why job interview
 - Dressing for success
 - Transforming interview into business discussions
 - Thinking your way to interview success
 - Taking charge of the interview
 - Preparation is key
 - What to bring to every job interview
 - Boosting your credibility during interview
 - Interview techniques
- Salary Information
 - Salary evaluation and negotiation
 - Keys to negotiating salaries
 - General tips for negotiating salaries
- Post Interview
 - Thank you letters
 - Following up
 - Second interview
 - Follow up do's and don'ts
- You and your first job: winning at work
 - Living with a balance
 - Celebrating your boss
 - Pursuing work compatible with your abilities
 - Learning everything possible about your job

ACSE*: AfriHUB Certified Systems Engineer

Course code: 20101
Duration: 7 Months
Certificate: AfriHUB Certified IT Professional
Global Certification: Microsoft Certified Systems Engineer

Description:

The AfriHUB Certified IT Professional (ACITP): Systems Engineer credential shows clients and employers that you can design, implement, and administer infrastructures for business solutions based on Microsoft Windows Server 2003 and other Windows server platforms. Implementation responsibilities include installing, configuring, and troubleshooting network systems. This course also covers Active Directory, which helps organizations simplify IT management, strengthen security, extend interoperability of systems and software, and ultimately reduce costs.

Pre-requisite

An MCSE candidate should have one to two years of experience in designing, installing, configuring, and troubleshooting network systems.

To earn the MCSE on Windows Server 2003 certification, you must pass seven exams (in any order):

- Four exams on networking systems
- One exam on client operating systems
- One exam on design
- One elective exam

Note:

Many of the exams in this certification track are retired. If a required exam is retired and you have not yet passed that exam, you cannot complete the certification track. You must fulfill all listed requirements to earn the certification. If you passed a required exam before it retired, it can be applied toward certification. The credential will not expire.

Course Modules:

1. Installing, Configuring, and Administering Windows XP Professional
2. Managing and Maintaining a Windows Server 2003 Environment
3. Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure
4. Planning and Maintaining a Windows Server 2003 Network Infrastructure
5. Planning, Implementing, and Maintaining a Windows Server 2003 Active Directory Infrastructure
6. Designing a Windows Server 2003 Active Directory and Network Infrastructure
7. Implementing and Managing Microsoft Exchange Server 2003

ACSA: AfriHUB Certified Systems Administrator

Course code: 20102
Duration: 5 Months
Certificate: ACSA: AfriHUB Certified Systems Administrator
Global Certification: MCSA: Microsoft Certified Systems Administrator

Description:

AfriHUB Certified Systems Administrator (ACSA) credential validates your ability to manage and troubleshoot network environments in the Windows operating system. It reflects a unique set of skills required to succeed in a variety of job roles, such as systems administrator, network administrator, information systems administrator, network operations analyst, network technician, and technical support specialist.

Pre-requisite:

An ACSA candidate should have 12 months of experience in designing, installing, configuring, and troubleshooting network systems.

To earn the ACITP: Systems Administrator certificate on Windows Server 2003 certification, you must pass five exams (in any order):

- Two exams on networking systems
- One exam on client operating systems
- One elective exam

Note:

Many of the exams in this certification track are retired. If a required exam is retired and you have not yet passed that exam, you cannot complete the certification track. You must fulfill all listed requirements to earn the certification. If you passed a required exam before it retired, it can be applied toward certification. The credential will not expire.

Course Modules:

1. Installing, Configuring, and Administering Windows XP Professional
2. Managing and Maintaining a Windows Server 2003 Environment
3. Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure
4. Planning and Maintaining a Windows Server 2003 Network Infrastructure
5. Implementing and Managing Microsoft Exchange Server 2003

ACDBA: AfriHUB Certified Database Administrator

Course code: 20103
Duration: 3 Months
Certificate: AfriHUB Certified IT Professional
Global Certification: MCITP: Database Administrator

Description:

The AfriHUB Certified IT Professional (ACITP) credential validates that an individual has the comprehensive set of skills necessary to perform a particular job role, such as database administrator or enterprise messaging administrator. ACITP certifications build on the technical proficiency measured in the Microsoft Certified Technology Specialist (MCTS) certifications, therefore you will earn one or more MCTS certifications on your way to earning an ACITP credential.

Pre-requisite:

Candidates should have one to two years of experience using SQL Server 2008 or two to three years of experience using a previous version of SQL Server. Candidates for this course are IT professionals who have jobs in which database administration is their main area of responsibility, or they work in environments in which databases are central to their job roles.

These job roles include the following:

- IT generalists who work in environments in which SQL Server 2008 is part of an overall solution
- IT professionals who manage systems that run SQL Server 2008
- IT professionals who work with third-party applications that are built on SQL Server 2008
- Developers who build applications that use SQL Server 2008

Target Audience:

This course is intended for current professional database administrators who have three or more years of on-the-job experience administering SQL Server database solutions in an enterprise environment.

Course Content:

1. Microsoft SQL Server 2005 – Implementation and Maintenance
 - Installing, configuring, and maintaining SQL Server
 - Monitoring and troubleshooting SQL Server Performance
 - Using SQL Server wizards, such as the Copy Database Wizard
 - Creating and managing databases, and verifying database integrity using DBCC CHECKDB
 - Writing scripts (code) in the appropriate language
 - Creating triggers to update multiple tables and enforce specific database rules
2. Designing a Database Server Infrastructure by Using Microsoft SQL Server 2005
 - Analyzing Capacity Needs
 - Designing a Strategy for Data Archiving
 - Designing a Strategy for Database Server Consolidation
 - Designing a Strategy for Data Distribution
 - Designing a Database Server Infrastructure

- Designing a Strategy for Data Recovery
 - Establishing Database Conventions and Standards
3. Optimizing and Maintaining a Database Administration Solution by Using Microsoft SQL Server 2005
- Building and Monitoring Solution for SQL Server Performance Issues
 - Troubleshooting Database and Database Server Performance Issues
 - Optimizing the Query Performance Environment
 - Troubleshooting SQL Server Connectivity Issues
 - Troubleshooting SQL Server Data Issues
 - Troubleshooting SQL Server Concurrency Issues

ACITU: AfriHUB Certified IT User

Course code: 20104
Duration: 4 Weeks
Certificate: ACITU: AfriHUB Certified IT User
Global Certification: AutoDesk Certified Associate, MOS

Description:

This 4 week, instructor-led course provides students with the knowledge and skills necessary to design both 2D and 3D objects using AutoCAD 2009 and Microsoft Visio

Pre-requisites:

Before attending this course, students must:

- Have taken a course in Computer Appreciation
- Have been using any of the Operating Systems (i.e. Windows, Linux for at least 3 Months)

Target Audience:

- Senior IT Professionals: These individuals have one or more years of networking experience, and are ready to go on to an architect role.
- Architects
- Engineers
- Consultants

Course Content:

- Understanding the AutoCAD 2009 workspace.
- Creating geometric objects.
- Changing geometric objects.
- Viewing, Selecting and Using Precision Drawing tools.
- Setting and Changing Object Properties.
- Working with text and symbols.
- Drawing with dimension.
- Drawing Layout.
- Drawings Plot.
- Layers
- Drawing scales
- Dimensioning
- Themes and styles
- Templates
- Special drawing operations
- Shaping behaviour and events
- Customizing stencils
- Block, tree, and onion diagrams
- Flowcharts
- Organization charts
- Project management diagrams
- Web site maps
- Integrating Visio with other programs
- Integrating with Microsoft Word
- Integrating with PowerPoint
- Integrating with Microsoft Outlook
- Working with Web-enabling features
- Documenting software systems
- Database model diagrams

ACPCT: PC Technician

Course code: 30101
Duration: 2 Months
Certificate: AfriHUB Certified IT Professional
Global Certification: CompTIA A+

Description:

We designed ACPCT for the student who has a basic knowledge and experience with PCs and wants to pursue a career as a computer service technician. Students will obtain the skills and knowledge necessary to install, build, upgrade, repair, configure, troubleshoot, and performing preventative maintenance on personal computer hardware and operating systems.

Target Audience:

- Computer users - intense, enthusiasts
- Newcomers who want to develop a career in IT and tech support

Pre-requisite:

- Computer Appreciation or equivalent knowledge

Outline:

- Unit 1: Getting started with PC hardware support
 - Topic A: Computer components Overview
 - Topic B: Hardware, software, and firmware
 - Topic C: Troubleshooting Models
 - Topic D: Troubleshooting the Motherboard
- Unit 2: Operating systems
 - Topic A: Operating system fundamentals
 - Topic B: Managing Directory and file
- Unit 3: Electricity and power supplies
 - Topic A: Electrical safety
 - Topic B: Power supplies
 - Topic C: Troubleshooting Power Supply
- Unit 4: CPUs and motherboards
 - Topic A: Central processing Units (CPUs)
 - Topic B: Packaging, slots, and cooling techniques
 - Topic C: Motherboards and system cases
- Unit 5: Basic Input/output System
 - Topic A: BIOS and CMOS
 - Topic B: The POST process
 - Topic C: Troubleshooting the BIOS and POST
- Unit 6: Memory systems
 - Topic A: Memory
 - Topic B: Memory packaging
 - Topic C: Troubleshooting Memory
- Unit 7: Bus structures
 - Topic A: Buses
 - Topic B: Interacting with Host System
 - Topic C: The PCI bus
 - Topic D: Video buses
- Unit 8: Expansion cards
 - Topic A: Drive adapters
 - Topic B: Video cards
 - Topic C: Sound cards

- Topic D: Internal modems
 - Topic E: Troubleshooting Expansion card
- Unit 9: Ports, connectors, and cables
 - Topic A: Serial and parallel ports, cables, and connectors
 - Topic B: Keyboards, mice, and pointing devices
 - Topic C: USB ports, cables, and connectors
 - Topic D: FireWire ports, cables, and connectors
 - Topic E: Infrared and Bluetooth wireless ports
 - Topic F: Multimedia ports, cables, and connectors
 - Topic G: Troubleshooting Port, cable, and Connector
- Unit 10: Data storage devices
 - Topic A: Hard drives
 - Topic B: Optical drives
 - Topic C: Removable storage devices
 - Topic D: Troubleshooting Storage device
- Unit 11: Video and multimedia input/ output devices
 - Topic A: Cathode ray terminals
 - Topic B: LCDs and other video technologies
 - Topic C: Sound input and output devices
 - Topic D: Scanners and cameras
- Unit 12: Printers
 - Topic A: Dot matrix printers
 - Topic B: Inkjet and related printer technologies
 - Topic C: Laser printers
 - Topic D: Other types of printers
- Unit 13: Portable computers and devices
 - Topic A: Notebook computers
 - Topic B: Handheld computers
 - Unit 14: Monitoring and management
 - Topic A: System monitoring
 - Topic B: System management
- Unit 15: Troubleshooting Operating Systems
 - Topic A: The Windows boot process
 - Topic B: Troubleshooting System
- Unit 16: Connecting computers
 - Topic A: Networking concepts
 - Topic B: Wired network connections
 - Topic C: Wireless network Connections
 - Topic D: Network architectures
- Unit 17: Networking computers
 - Topic A: Network Communications
 - Topic B: Addressing
 - Topic C: Connecting Internet
 - Topic D: Installing Network
 - Topic E: Troubleshooting Network
- Unit 18: Security
 - Topic A: Operating system security
 - Topic B: Security hardware
 - Topic C: The human aspects of security
- Unit 19: Installing and Upgrading Windows
 - Topic A: Installing
 - Topic B: Upgrading
- Unit 20: Safety
 - Topic A: Safety and hazards
 - Topic B: Safe work practices
 - Topic C: Disposing of computer equipment
- Unit 21: Troubleshooting and maintaining a PC
 - Topic A: Professionalism and customer satisfaction
 - Topic B: Tools and software
 - Topic C: Preventative hardware maintenance
- Appendix A: Certification exam objectives map

ACITP: Database Administrator I

Course code: 40101
Duration: 2 Months
Certificate: ACITP: AfriHUB Certified IT Professional
Global Certification: Oracle Certified Associate (OCA 11g)

Description:

This course is your first step towards success as an Oracle professional, designed to give you a firm foundation in basic database administration. In this class, you'll learn how to install and maintain an Oracle database. You will gain a conceptual understanding of the Oracle database architecture and how its components work and interact with one another. You will also learn how to create an operational database and properly manage the various structures in an effective and efficient manner including performance monitoring, database security, user management, and backup/recovery techniques.

Pre-requisite:

- Fundamentals of database administration
- ACITU: Computer Power User or equivalent knowledge

Target Audience:

- Database Administrators
- Database Designers
- Project Managers
- Sales Consultants
- Support Engineers
- Technical Consultants

Course Outline:

Introduction to Oracle Database 11g Administration

Your responsibilities as an Oracle 11g DBA

- Configuring the instance and database
- Maintaining security
- Balancing user requirements and resources
- Ensuring database availability

The Oracle 11g architecture

- Processing transactions with the server
- Identifying types of Oracle 11g processes and memory structures
- Determining database file structure
- Archiving redo log information
- Sizing the Result Cache for optimizing repeated queries

Building an Oracle 11g Database

Creating the database

- Setting the initialization parameters
- Simplifying memory allocation with memory

targets

- Establishing network connectivity
- Converting from text-based to server parameter files
- Configuring control files and redo log files

Starting and stopping the database

- Mounting and opening the database with SQL*Plus
- Authenticating connections having SYSDBA privilege
- Closing the database and shutting down the instance

Automating Database Management

The Oracle Enterprise Manager architecture

- Navigating the graphical interface
- Comparing command-line and graphical techniques

Administering with Database Control

- Equipping Database Control to manage additional databases

- Setting thresholds and generating alerts
- Verifying changes in the data dictionary
- Performing privilege management

Performing Flashback Operations

Managing space for rollback and read consistency

- Configuring UNDO tablespaces
- Monitoring expansion of rollback segments
- Swapping to an alternative UNDO tablespaces

Resetting data to recent points in time with flashback

- Tracking changes to data values with row history
- Obtaining transaction history with Flashback Transaction
- Performing efficient recovery of data with Flashback Table
- Retrieving dropped tables and dependent objects from the recycle bin

Securing the Database

Establishing user accounts

- Authenticating users with sophisticated password checking
- Allocating space quotas for user schemas
- Limiting resource usage through profiles

Enforcing security

- Granting and revoking system and object privileges
- Simplifying privilege management with roles
- Preventing changes to read-only tables

Controlling Database Storage

Defining logical and physical structures

- Creating, altering, and dropping tablespaces
- Handling sort data efficiently with temporary tablespaces
- Comparing traditionally managed and Oracle-managed files

Configuring storage patterns for database objects

- Structuring data and index segments
- Sizing database objects by defining extents and block occupancy
- Eliminating row migration with PCTFREE and Data Pump
- Compressing table data to conserve storage
- Shrinking tables and indexes online to regain space

Partitioning to Support Administration and Availability

Creating table partitions and sub partitions

- Selecting partitioning methods: range, list, hash, interval
- Partitioning tables based on virtual columns
- Setting up automatic partition allocation
- Referencing the partitioning method in child tables
- Administering partitions with merge, split, add and drop

Maintaining index partitions

- Maximizing performance with local and global indexes
- Monitoring index partition usage
- Rebuilding unusable indexes

ACITP: Database Administrator II

Course code: 40102
Duration: 2 Months
Certificate: ACITP: AfriHUB Certified IT Professional
Global Certification: Oracle Certified Associate (OCP 11g)

Description:

Oracle 11g is the latest version of Oracle's database management system offering over 500 new features. Don't wait until the software is installed to learn how to use it, get the training you need now. If you're a DBA, Oracle developer, or Oracle programmer, you owe it to yourself to explore these new features and find out how they will impact your career on database management.

Target Audience:

- Database Administrators
- Database Designer
- Project Manager
- Sales Consultants
- Support Engineer
- Technical Consultant

Pre-requisite:

- ACITP: Database Administrator I
- Oracle Database 11g Comprehensive Introduction or equivalent knowledge.

Course Outline:

- Database architectures and asm
- Configuring for recoverability
- Using the rman recovery catalog
- Configuring backup specifications
- Using rman to create backups
- Performing user-manage backup and recovery
- Using rman to perform recovery
- Using rman to duplicate a database
- Performing tablespace point-time recovery
- Monitoring and tuning rman
- Using flashback technology
- Additional flashback operations
- Diagnosing the database
- Managing memory
- Managing database performance
- Space management
- Managing resources
- Automating tasks with the scheduler
- Administering the scheduler
- Globalization

ACSE: AfriHUB Certified SQL Expert

Course code: 40103
Duration: 1 Months
Certificate: ACSE: AfriHUB Certified SQL Expert
Global Certification: Oracle Database SQL expert

Description:

This course offers students an introduction to Oracle Database 10g database technology. In this class students learn the concepts of relational databases and the powerful SQL programming language. This course provides the essential SQL skills that allow developers to write queries against single and multiple tables, manipulate data in tables, create database objects, and query meta data.

Target Audience:

- Application Developers
- Business Intelligence Developer
- Database Administrators
- End Users
- Forms Developer
- PL/SQL Developer
- Portal Developer

Pre-requisite:

- Familiarity with Data Processing Concepts and Techniques
- Ability to use a graphical user interface (GUI)

Course Outline:

- **Introduction**
 - List the Oracle Database 10g Main Features
 - An Overview of: components, internet platform, apps server and developer suite
 - Describe Relational and Object Relational Database Designs
 - Review the System Development Life Cycle
 - Define the term Data Models
 - Describe different means of Sorting Data
 - Show how Multiple Tables can be related
 - Describe how SQL Communicates to the Database
- **Writing SQL SELECT Statements**
 - Define projection, selection, and join terminology
 - Review the basic SQL SELECT statement syntax
 - Select all columns using a wildcard notation from a table
 - State simple rules and guidelines for writing SQL statements
 - Write a query containing the arithmetic operators
 - Create a character expression with the concatenation operator
 - Using the iSQL*Plus Environment
 - SQL statements versus iSQL*Plus commands
- **Restricting and Sorting Data**
 - Limit rows using a selection
 - Using the WHERE clause to retrieve specific rows
 - Using the comparison conditions in the WHERE clause
 - Use the LIKE condition to compare literal values
 - List the logical conditions AND, OR, NOT
 - Describe the rules of precedence for the conditions
 - Sort rows with the ORDER BY clause

- Use ampersand substitution in iSQL*Plus to restrict and sort output at run time
- **Using Single-Row Functions to Customize Output**
 - Show the differences between single row and multiple row SQL functions
 - Categorize the character functions into case manipulation and character manipulation types
 - Use the character manipulation functions in the SELECT and WHERE clauses
 - Explain and use the DATE and numeric functions
 - Use the SYSDATE function to retrieve the current date in the default format
 - Introduce the DUAL table as a means to view function results
 - List the rules for applying the arithmetic operators on dates
 - Use the arithmetic operators with dates in the SELECT clause
- **Reporting Aggregated Data Using the Group Functions**
 - Describe and categorize the group functions
 - Use the group functions
 - Utilize the DISTINCT keyword with the group functions
 - Describe how nulls are handled with the group functions
 - Create groups of data with the GROUP BY clause
 - Group data by more than one column
 - Avoid illegal queries with the group functions
 - Exclude groups of data with the HAVING clause
- **Displaying Data from Multiple Tables**
 - Identify Types of Joins
 - Retrieve Records with Natural Joins
 - Use Table Aliases to write shorter code and explicitly identify columns from multiple tables
 - Create a Join with the USING clause to identify specific columns between tables
 - Use the ON clause to specify arbitrary conditions or specify columns to Join
 - Create a Three-way join with the ON clause to retrieve information from 3 tables
 - List the Types of Outer Joins LEFT, RIGHT, and FULL
 - Generating a Cartesian Product
- **Using Sub queries to Solve Queries**
 - List the syntax for sub queries in a SELECT statements WHERE clause
 - List the guidelines for using sub queries
 - Describe the types of sub queries
 - Execute single row sub queries and use the group functions in a sub query
 - Identify illegal statements with sub queries
 - Execute multiple row sub queries
 - Analyze how the ANY and ALL operators work in multiple row sub queries
- **Using the SET Operators**
 - Use the UNION operator to return all rows from multiple tables and eliminate any duplicate rows
 - Use the UNION ALL operator to return all rows from multiple tables
 - Describe the INTERSECT operator
 - Use the INTERSECT operator
 - Explain the MINUS operator
 - Use the MINUS operator
 - List the SET operator guidelines
 - Order results when using the UNION operator
- **Manipulating Data**
 - Write INSERT statements to add rows to a table
 - Copy rows from another table
 - Create UPDATE statements to change data in a table
 - Generate DELETE statements to remove rows from a table
 - Use a script to manipulate data
 - Save and discard changes to a table through transaction processing
 - Show how read consistency works
 - Describe the TRUNCATE statement
- **Using DDL Statements to Create and Manage Tables**

- List the main database objects and describe the naming rules for database objects
- Introduce the schema concept
- Display the basic syntax for creating a table and show the DEFAULT option
- Explain the different types of constraints
- **Creating Other Schema Objects**
 - Categorize simple and complex views and compare them
 - Create a view
 - Retrieve data from a view
 - Explain a read-only view
 - List the rules for performing DML on complex views
 - Create a sequence
 - List the basic rules for when to create and not create an index
 - Create a synonym
- **Managing Objects with Data Dictionary Views**
 - Describe the structure of each of the dictionary views
 - List the purpose of each of the dictionary views
 - Write queries that retrieve information from the dictionary views on the schema objects
 - Use the COMMENT command to document objects
- **Controlling User Access**
 - Controlling User Access
 - System versus Objects Privileges
 - Using Roles to define user groups
 - Changing Your Password
 - Granting Object Privileges
 - Confirming Privileges Granted
 - Revoking Object Privileges
 - Using Database Links
- **Manage Schema Objects**
 - Using the ALTER TABLE statement
 - Adding a Column
 - Modifying a Column
 - Dropping a Column, Set Column UNUSED
 - Adding, Enabling and Disabling Constraints
 - Creating Function-Based Indexes
 - Performing FLASHBACK operations
 - External Tables
- Show resulting exceptions when constraints are violated with DML statements
- Create a table with a sub query
- Describe the ALTER TABLE functionality
- Remove a table with the DROP statement and Rename a table
- **Manipulating Large Data Sets**
 - Using the MERGE Statement
 - Performing DML with Sub queries
 - Performing DML with a RETURNING Clause
 - Overview of Multi-table INSERT Statements
 - Tracking Changes in DML
- **Generating Reports by Grouping Related Data**
 - Overview of GROUP BY Clause
 - Overview of Having Clause
 - Aggregating data with ROLLUP and CUBE Operators
 - Determine subtotal groups using GROUPING Functions
 - Compute multiple groupings with GROUPING SETS
 - Define levels of aggregation with Composite Columns
 - Create combinations with Concatenated Groupings
- **Managing Data in Different Time Zones**
 - Time Zones
 - Using date and time functions
 - Identifying TIMESTAMP Data Types
 - Differentiating between DATE and TIMESTAMP
 - Performing Conversion Operations
- **Searching Data Using Advanced Sub queries**
 - Sub query Overview
 - Using a Sub query
 - Comparing several columns using Multiple-Column Sub queries
 - Defining a Data source Using a Sub query in the FROM Clause
 - Returning one Value using Scalar Sub query Expressions
 - Performing ROW by-row processing with Correlated Sub queries
 - Reusing query blocks using the WITH Clause

- **Hierarchical Retrieval**
 - Sample Data from the EMPLOYEES Table
 - The Tree Structure of Employee data
 - Hierarchical Queries
 - Ranking Rows with LEVEL
 - Formatting Hierarchical Reports Using LEVEL and LPAD
- Pruning Branches with the WHERE and CONNECT BY clauses
- **Regular Expression Support**
 - Regular Expression Support Overview
 - Describing simple and complex patterns for searching and manipulating data

ACPM: AfriHUB Certified Project Mgt Professional

Course code: 50101
Duration: 3 Weekends
Certificate: AfriHUB Certified IT Professional
Global Certification: Project Management Professional (PMP)

Course Description:

Your ability as a project manager to demonstrate best practices in project management—both on the job and through professional certification—is becoming the standard to compete in today's fast-paced and highly technical workplace. This course expands upon the basic concepts of project management you discovered in the ACITU: Associate Project Manager course and covers in-depth the essential elements of managing a successful project. Focusing on the generally accepted practices of project management recognized by the Project Management Institute, Inc. (PMI), this course offers a job-related approach to successful project management across application areas and industries.

Target Audience:

This course is designed for experienced project managers who desire to increase their project management skills and apply a standards-based approach to project management, and apply for Project Management Institute, Inc. (PMI) Project Management Professional (PMP) Certification.

Pre-requisites:

To ensure your success, we recommend you first take the following courses or have equivalent knowledge:

- Project Management Fundamentals
- Project 2000, 2002, or 2007: Level 1
- Project 2000, 2002, or 2007: Level 2
- Word 2000, 2002, or 2007: Level 1
- Word 2000, 2002, or 2007: Level 2
- Word 2000, 2002, or 2007: Level 3

Outline:

- **Initiating a Project**
 - Topic 1A: Applying Project Management Processes
 - Topic 1B: Creating a Project Charter
 - Topic 1C: Developing a Preliminary Project Scope Statement
- **Planning Project Work**
 - Topic 2A: Developing Project Management Plan
 - Topic 2B: Creating a Scope Management Plan
 - Topic 2C: Creating a Scope Statement
 - Topic 2D: Developing a Work Breakdown Structure (WBS)
- **Developing Project Schedules, Cost Estimates, and Budgets**
 - Topic 3A: Creating an Activity List
 - Topic 3B: Creating a Project Network Diagram
 - Topic 3C: Estimating Activity Resources
 - Topic 3D: Estimating Activity Durations
 - Topic 3E: Identifying the Critical Path
 - Topic 3F: Developing a Project Schedule
 - Topic 3G: Estimating Project Costs
 - Topic 3H: Establishing a Cost Baseline
- **Planning Project Quality, Staffing, and Communications**
 - Topic 4A: Creating a Quality Management Plan
 - Topic 4B: Document Roles, Responsibilities, and Reporting Relationships
 - Topic 4C: Acquiring Project Team

- Topic 4D: Creating a Communications Management Plan
- **Analyzing Risks and Planning Risk Response**
 - Topic 5A: Creating a Risk Management Plan
 - Topic 5B: Identifying Project Risks and Triggers
 - Topic 5C: Performing Qualitative Risk Analysis
 - Topic 5D: Performing Quantitative Risk Analysis
 - Topic 5E: Developing a Risk Response Plan
- **Planning Project Procurement**
 - Topic 6A: Preparing a Contract Statement of Work
 - Topic 6B: Preparing a Procurement Document
- **Executing Project Work**
 - Topic 7A: Directing and Managing Project Execution
 - Topic 7B: Performing Quality Assurance
 - Topic 7C: Developing Project Team
 - Topic 7D: Information Distribution
 - Topic 7E: Requesting Seller Responses
 - Topic 7F: Selecting Sellers
- **Monitoring and Controlling Project Work**
 - Topic 8A: Monitoring and Controlling Project Work
 - Topic 8B: Managing Changes to Performance Baselines
 - Topic 8C: Reviewing Deliverables and Work Results
 - Topic 8D: Controlling Project Scope
- **Monitoring and Controlling Project Schedule and Costs**
 - Topic 9A: Controlling the Project Schedule
 - Topic 9B: Controlling Project Costs
- **Monitoring and Controlling Project Quality, Staffing, and Communications**
 - Topic 10A: Performing Quality Control
 - Topic 10B: Managing Project Team
 - Topic 10C: Reporting Project Performance
 - Topic 10D: Managing Stakeholders
- **Monitoring and Controlling Project Risk and Contracts**
 - Topic 11A: Monitoring and Controlling Project Risk
 - Topic 11B: Administering a Contract
- **Closing the Project**
 - Topic 12A: Closing a Project
 - Topic 12B: Closing a Contract
- **Appendix A: PMP Certification Mapping**
- **Appendix B: Certification Lightning Round**
- **Supplemental Lesson: PMP Certification Practice Test**
 - Topic 1A: Practice Test
- **Appendix C: Scheduling Management Plan Example**

ACAPM: AfriHUB Certified Associate in Project Mgt

Course code: 50102
Duration: 2 Weekends
Certificate: AfriHUB Certified IT User
Global Certification: Certified Associate in Project Management (CAPM)

Description:

An AfriHUB Certified Associate in Project Management ACAPM is a project management practitioner who has demonstrated fundamental project management knowledge and experience by supporting projects using project management tools, techniques, and methodologies.

Target Audience:

- Project team members and team leaders.
- New and prospective project managers.
- Fresh graduates interested in project management as a career choice.

Course Outline:

- **Getting Started**
 - Training Overview
 - Project Management as a Career Choice
- **Project Management Framework**
 - Module1: Definition of the Project Management Discipline
 - Module2: Project Life Cycle and Organization
- **The Standard for Project Management of a Project**
 - Module3: Project Management Processes
- **Project Management Knowledge Areas**
 - Module4: Project Integration Management
 - Module5: Project Scope Management
 - Module6: Project Time Management
 - Module7: Project Cost Management
 - Module8: Project Quality Management
 - Module9: Project Human Resources Management
 - Module10: Project Communications Management
 - Module11: Project Risk Management
 - Module12: Project Procurement Management
- **MS Project 2007 Session**
- **RECAP**

ACNA: AfriHUB Certified Network Administrator

Course code: 76010
Duration: 6 Months
Certificate: AfriHUB Certified IT Professional
Global Certification: Cisco Certified Network Associate

Description:

ACNA validates the ability to install, configure, operate, and troubleshoot medium-size route and switched networks, including implementation and verification of connections to remote sites in a WAN. ACNA curriculum includes basic mitigation of security threats, introduction to wireless networking concepts and terminology, and performance-based skills. This new curriculum also includes (but is not limited to) the use of these protocols: IP, Enhanced Interior Gateway Routing Protocol (EIGRP), Serial Line Interface Protocol Frame Relay, Routing Information Protocol Version 2 (RIPv2), VLANs, Ethernet, access control lists (ACLs).

Pre-requisites:

No pre-requisite.

Target Audience:

This program is aimed at students who are seeking a career in Network engineering.

Course Content:

- 1. CCNA 1 – Networking for Home and Small Businesses**
 - Personal Computer
 - Operating Systems
 - Connecting to the network
 - Connecting to the internet through an ISP
 - Network Addressing
 - Network Services
 - Wireless Technologies
 - Basic security
 - Troubleshooting your Network
- 2. CCNA 2 – Working at a small –to-medium business or ISP**
 - The internet and its uses
 - Helpdesk
 - Planning a network upgrade
 - Planning the addressing structure
 - Configuring network devices
 - Routing
 - ISP services
 - ISP Responsibility
 - Troubleshooting
- 3. CCNA 3 – Routing and Switching in the Enterprise**
 - Networking in the enterprise
- 4. CCNA 4 – Designing and Supporting Computer Networks**
 - Exploring the enterprise network infrastructure
 - Switching in an enterprise network
 - Addressing in an enterprise network
 - Routing with a distance vector protocol
 - Routing with a link - state protocol
 - Implementing enterprise WAN links
 - Filtering traffic using access control lists
 - Troubleshooting an enterprise network
 - Introducing network design concepts
 - Gathering network requirement
 - Characterizing the existing network
 - Identifying application impacts on Network design

- Creating the Network Design
- Using IP addressing in the Network Design
- Prototyping the campus Network
- Prototyping the WAN
- Preparing the proposal

ACNP: AfriHUB Certified Network Professional

Course code: 60102
Duration: 6 Months
Certificate: AfriHUB Certified Network Professional (ACNP)
Global Certification: Cisco Certified Network Professional (CCNP)

Description:

The AfriHUB ACNP curriculum includes four modules, which align with the four exams required for CCNP certification. The ACNP curriculum builds on Cisco CCNA® courses with more complex network configurations, diagnosis, and troubleshooting. The curriculum is intended for those interested in continuing their post-CCNA preparation to become network administrators, Level 2 support engineers, Level 2 systems engineers, network technicians, or deployment engineers. This course is designed for candidates who intends to develop skills that will enable them implement scalable networks, build campus networks using multilayer switching technologies, create and deploy a global intranet, and troubleshoot an environment using Cisco routers and switches for multiprotocol client hosts and services.

Pre-requisites:

Cisco Certified Network Associate (CCNA) certification is required for students to enroll in the Cisco Certified Network Professional (CCNP) curriculum.

Target Audience:

- CCNA's that want to progress for reasons such as: net worth, recognition, promotion, etc.
- Level 1 network support in a medium to large enterprise
- Central Operations staff who want to further develop technical expertise

Course Content:

- **Building Scalable Internetworks:**
 - Explaining routing in the enterprise network
 - Implementing and verifying multicast forwarding using PIM
 - Implementing IPv6 in an enterprise network
 - Implementing and verifying EIGRP operations
 - Building a scalable multi-area network with OSPF
 - Describing Cisco network architecture alignment with connectivity requirements
 - Describing MPLS conceptual model data and control planes
 - Describing and configure a site-to-site IPsec VPN
 - Describing and configuring Cisco device hardening strategies to mitigate network attacks
- **Implementing Secured Converged Wide-Area Networks:**
 - Implementing secure broadband connections for teleworkers
- **Building Multilayer Switched Networks:**
 - Defining VLANs to segment network traffic
 - Explaining Cisco hierarchy network model for campus networks

- Implementing Spanning Tree Protocol and implement and verify InterVLAN routing
- Designing and implementing security features
- Implementing high-availability technologies and techniques
- Describing and configuring wireless LAN access and switch to support voice
- **Optimizing Converged Networks**
 - Describing the converged network requirements within Cisco conceptual network models, with a focus on wireless security
 - Describing basic principles of VoIP network bandwidth requirements,
 - Voip packet encapsulation, and Voip implementation
 - Explaining the need for QoS and the methods to implement QoS
 - Explaining the key IP QoS mechanisms used to implement the DiffServ Qos model
 - Configuring Cisco AutoQoS model
 - Describing and configuring wireless security and basic wireless management

ACVP: AfriHUB Certified Voice Professional

Course code: 60103
Duration: 4 Weeks
Certificate: AfriHUB Certified IT Professional
Global Certification: Cisco Certified Network Associate

Description:

This course focuses on using Cisco CallManager/Communications Manager and other IP telephony components that are connected in LANs and WANs. This course incorporates Unified Messaging to produce competent administrators of the Call Manager and Unity product, up to and including Call Manager Release 5.0. Upon completion of this training course, delegates will be able to configure the various Cisco IP telephony devices, perform system setup and customization; add, delete, and modify subscribers; and monitor and maintain the Cisco Unity system. As such, it lays a successful foundation for participation in the engineering-level course because a learner must understand the product features and how to use them before being able to install, configure, maintain, and troubleshoot the features.

Pre-requisites:

A working knowledge of the Microsoft Exchange 2000 or the IBM Lotus Domino messaging environment

Target Audience:

This course will be beneficial to individuals who are responsible for the planning, design, implementation and administration of Cisco Unity systems and administration of Cisco Call Manager in an IP telephony, corporate messaging systems environment.

Course Content:

Cisco Unified Messaging Overview

- Introducing Cisco Unity
- Understanding Unified Messaging Integrations
- Understanding Cisco Unity Standard System Features
- Understanding Cisco Unity Standard User Features
- Understanding Cisco Unity Optional Features

Introducing Cisco IP Phones

- Cisco IP Phone Overview
- IP Phone Startup Process
- Cisco CallManager Functions

Connecting End-User Devices

- Connecting an IP Phone
- Buttons and Hardware
- Getting Help on a IP Phone
- Device Information
- Modifying DHCP Settings
- Configuring IP Settings
- Configuring VLAN Settings
- Configuring TFTP Options
- Configuring Ports
- Call Statistics Screen
- Vital Statistics
- End-User Training Aids

Configuring Cisco Unified Call Manager to Support

- Using Partitions and Calling Search Spaces

- Using Translation Patterns

Navigating Cisco Call Manager

- Navigation
- Multilevel Administration Access
- Cisco Call Manager Administration Menus
- Manual IP Phone and Directory Number Configuration
- Configuring IP Phone Auto registration
- Adding Users and Customizing User Options
- Selecting User Logon and Device
- Call Forward
- Speed Dials
- Cisco IP Phone Services Subscription
- Personal Address Book and Fast Dials
- Message Waiting Lamp Policy
- Personalizing Device and Web Page Locale

Configuring User Features

- Core IP Phone Features Enhanced IP Phone Features
- Working with Softkey Templates
- Call Park, Call Pickup, and Cisco Call Back
- Barge and Privacy
- Cisco IP Phone Services
- Cisco CallManager Extension Mobility
- Client Matter Codes and Forced Authorization Codes
- Using BAT

Introducing the Bulk Administration Tool

Remote Monitoring, and Troubleshooting

- Monitoring the Cisco IP Phone Remotely

- Troubleshooting the Cisco IP Phone
- Cisco Unity Connection Overview

Introducing Cisco Unity Connection

- Positioning Cisco Unity Connection
- Understanding Cisco Unity Connection Integrations
- Understanding Unity Connection Standard Features
- Understanding Cisco Unity Connection Optional Features
- Cisco Unified Messaging General Setup

Using Cisco Unity

- Using the Cisco Unity Administrator Setting Up Cisco Unity
- Cisco Unified Messaging Subscriber Configuration

Configuring Global Subscriber Settings

- Configuring Subscriber Accounts and Settings
- Using Call Handlers and Interview Handlers
- Cisco Unified Messaging System Monitoring and Maintenance

Monitoring a Cisco Unified Messaging System

- Maintaining a Cisco Unified Messaging System
- Managing Unified Messaging System Reporting

ACWP: AfriHUB Certified Web Professional

Course code: 70101
Duration: 3 Months
Certificate: AfriHUB Certified Web Professional
Global Certification: Microsoft Certified Systems Engineer

Course Description:

The AfriHUB Certified Web Professional (ACWP) is designed after CIW (Certified Internet Web Professional) program which is the world's fastest growing vendor-neutral Internet certification for the knowledge economy. More than a certification or a curriculum publisher, ACWP is a Web technology standard adopted by academic institutions, governments, and businesses worldwide. ACWP includes applications and competencies, but the core curriculum focuses on the foundational standards that sustain the infrastructure of IT, i.e., Web design, security, administration, networking, databases and enterprises.

Pre-requisite:

Delegates should be familiar with the Internet.

Target Audience:

ACWP certification is ideal for all professionals who use the Internet. This prerequisite certification is also required for all levels of specialization in the CIW program.

Outline:

Introduction To Networking

- Network Categories
- Network Topologies
- Network Operating Systems

The Internet

- How The Internet Works
- Connecting to the Internet
- Internet Protocols
- Domain Name System (DNS)

LANs & WANs

- IEEE LAN Standards
- WAN Standards
- Transmission Media
- Transmission Types

The OSI Reference Model

- The Reference Model
- Frames & Packets
- Networking Protocols & The OSI Model
- Mapping the OSI/RM
- Choosing & Combining Protocols

The TCP/IP Protocol Suite

- Requests for Comments
- Internet Architecture
- Routing
- Port Numbers
- Internet Addressing

- Subnet Masks
- Normal TCP/IP Desktop Configurations
- Diagnostic Tools for Internet Troubleshooting

Internetworking Servers

- Server Implementation
- Content Servers
- Performance Servers
- Database Servers
- Mirrored Servers
- Popular Server Products

Web Servers & Databases

- Databases
- Introduction to Database Gateways for Web Servers
- Common Gateway Interface (CGI)
- Server Application Programming Interfaces (SAPIs)
- Server Side Scripting Technologies
 - Javascript
 - ASP
 - PHP
 - HTML
 - Java & Java Servlets
 - JSP
 - ColdFusion
- Database Connectivity
 - ODBC
 - JDBC

Using the World Wide Web

- Evolution of the World Wide Web
- Web Browser Software
- Using Browsers to Access Web Pages
- Customizing your Browser
- Images & Web Browsers
- Wireless Web Protocols

Web Search Engines

- Search Engines
- Directories
- Ranking Systems
- Getting a Website Listed
- Search Indexes
- Search Techniques
- Search Tools

Using E-Mail and Other Clients

- Electronic Mail
- Other Internet Clients
 - FTP
 - Newsgroups
 - Telnet

Media & Active Content

- Objects & Active Content
- Types of Browser Plug-Ins
- Additional Media File Formats
- Image File Formats

Internet Security

- What is Security?
- The Cracker Process
- Types of Attacks
- Defending Your Network
- Firewalls
- Defending Your Computer
- Defending Your Transmitted Data

E-Commerce Fundamentals

- Electronic Commerce (E-Commerce)
- Copyrights, Licensing & Trademarks
- Project Management

Basic HTML

- What is HTML?
- HTML Coding
- HTML Horizontal Rules & Graphical Elements
- HTML Hyperlinks

Advanced HTML

- HTML Tables
- HTML Forms
- HTML Image Techniques
- HTML Frames
- Graphical User Interface HTML Editors
- HTML Extensions
 - Cascading Style Sheets (CSS)
 - Javascript

- Dynamic HTML (DHTML)
- Document Object Model (DOM)
- Extensible HTML (XHTML)
- Extensible Markup Language (XML)

Java Runtime Environment

- The Java Virtual Machine
- The Java 2 Software Development Kit
- Java Comments

Data Types, Variables and Operators

- Data Types
- Declaring Variables
- Variable Scope
- Casting
- Operators
- Automatic Casting

Control Statements

- Code Blocks
- Conditional Statements
- Iteration Statements (Loops)

Methods

- Java Methods
- Return Statement
- Calling a Method
- Parameters
- Pass by Value
- Overloading

Arrays

- What Is an Array?
- Initializing an Array
- Objects
- Using an Array
- Passing an Array to a Method
- Garbage Collection
- Command Line Parameters

Classes and Objects

- Object-Oriented Programming
- What Is a Class?
- What Is an Object?
- Instance and Class Members
- Abstraction
- Object References

Inheritance

- What Is Inheritance?
- Overriding Methods
- Overriding Methods and Variables

Constructors

- What Is a Constructor?
- Using Constructors
- The Keyword this
- Constructor Process
- Constructors and Callbacks

- Strings and StringBuffer

Interfaces and Abstract Classes

- What Is an Interface?
- Polymorphism
- What Is an Abstract Class?

Packages and Access Modifiers

- Introduction to Packages and Access Modifiers
- Packages
- Access Modifiers
- Java 2 Application Programming Interface
- Encapsulation

Swing Components

- What Is the AWT?
- What Is Swing?
- Swing Containers
- JavaBeans

Layout Managers

- What Is a Layout Manager?
- FlowLayout
- GridLayout
- BorderLayout
- BoxLayout
- Combining Layouts

Graphics

- Graphics Class
- Color Class
- Font Class

The Delegation Model

- What Is an Event?
- JDK 1.0 Event Handling
- SDK 1.2 Event Handling

Inner Classes

- What Is an Inner Class?
- Inner Classes for Event Handling

Applets

- Programming Applets

- Applets and Web Browsers
- Converting an Application into an Applet
- Converting an Applet into an Application

Exceptions

- What Is an Exception?
- Handling Exceptions
- Creating User-Defined Exceptions
- Exception Handling Tips
- Exceptions and Inheritance

Creating Threads and Thread Methods

- What Are Threads?
- How Operating Systems Handle Multitasking
- Types of Threads in Java
- Creating Threads
- Thread Methods

Synchronization

- What Is Thread Synchronization?
- Thread Racing
- Synchronized and the Object Monitor
- Thread Race Condition
- Sophisticated Thread Synchronization
- Stopping, Suspending and Resuming Threads
- Deadlocks

Streams and Serialization

- What Is a Stream?
- InputStream, OutputStream, Reader and Writer
- Files
- Stream Classes of java.io.*
- Serialization
- Graduating Task: Building a simple word processor

Networking

- What Is Networking?
- Connecting Computers across the Internet
- Networking Classes of java.net.*
- The Java Client/Server Model
- Building the EchoServer
- Multithreading Your Client/Server Example
- Final Project: Building a client/server chat system

ACMP: AfriHUB Certified Messaging Professional

Course code: 80101
Duration: 4 Weeks
Certificate: AfriHUB Certified Messaging Professional
Global Certification: IBM Lotus Domino Systems Administration

Description:

This course is a hands-on training on IBM products. Through instructor lecture and student-centered activities and exercises, students learn how to use several IBM applications.

Pre-requisites:

- Basic computer experience with an understanding of common terms and tasks relating to systems administration
- Basic understanding of computer operating systems

Target Audience:

The target audience for this course is system administrators new to Lotus Domino who need to acquire a foundational knowledge and working experience with the Lotus Domino administration tools.

Course Content:

Examining the Lotus Domino and Lotus Notes Architecture, including:

- Recognizing the role of the Domino system administrator
- Understanding the key elements of a Domino environment
 - What are Lotus Domino and Lotus Notes?
 - What is a Domino database?
 - What is a composite application?
 - What is a directory?
 - What is a Domino Named Network?
 - What is a certifier ID?
 - What is a Notes ID?
 - What is a server ID?
 - What are certificates (Notes & X.509)
 - What is an organization?
 - What is an organizational unit?
- Designing a hierarchical naming scheme
- Deciding on an authentication mechanism and anonymous access
- Defining groups
- Securing a database using the Access Control List
- Securing a server using the Server Access list
- Securing a workstation using the Execution Control List

Performing Basic Administration Tasks, including:

- Starting the Lotus Domino Administrator client
- Using on-line help
- Navigating the Lotus Domino Administrator client
- Setting administration preferences

Examining Lotus Domino Security Mechanisms, including:

- Recognizing the elements used for Domino security:
 - What is a domain?

Examining Mail Routing in Lotus Domino, including:

- Understanding how Lotus Domino routes mail:
 - What are the components for mail routing?
 - What routing protocols does Lotus Domino support?

- How does mail route within a Domino Named Network?
- How does mail route between Domino Named Networks?
- Designing a mail routing topology

Examining Lotus Domino Replication, including:

- Understanding Lotus Domino replication
- Replication terms
- Replication logic - source and target servers; source and target documents
- Replica databases
- Initiating replication
- Recognizing factors that affect replication

Extending Lotus Domino Environment, including:

- Identifying what other functions a Domino server can perform
- Recognizing how clusters increase server availability
- Understanding how Domino partitions work
- Identifying what Internet protocols Lotus Domino supports
- Integrating other IBM products, such as IBM Lotus Sametime, IBM DB2, IBM WebSphere Application Server, and IBM WebSphere Portal

ACITU: Statistical Data Analyst

Course code: 80102
Duration: 4 Weeks
Certificate: AfriHUB Certified IT User
Global Certification: SPSS

Description:

This course is an introduction to the widely used statistical package SPSS. SPSS further steps covers more advanced features of the package.

Prerequisites:

- Participants should be familiar with PC usage. No prior knowledge of SPSS is required

Target Audience:

Doctors, lawyers, accountants, dentists, health professionals, researchers, academics, service staff, and students, who want to understand and create statistical information that appears in research publications.

Course Outline:

Upon successful completion of this course, students will learn the following:

- The purpose of statistics
- Statistical notations and symbols
- Overview of SPSS
- Working with sample SPSS files
- Setting up an SPSS data file
- Performing descriptive statistics
- Navigating and manipulating SPSS output files
- Recording existing variables, using compute to create new variables and generating simple graphs.
- Computing and transformation techniques for data.
- Use of SPSS syntax like date variables and the use of logical selection.
- Solving problems of processing chii-square and T-tests.

National Innovation Diploma (NID): Software Engineering

Course code: 90101
Duration: 2 Years
Certificate: National Diploma (NBTE Approved)

Description:

ACITP: Software engineering focuses on technical aspect of computer software; the programme is designed to produce skilled software technicians who should be able to solve a wide range of problem by the systematic development and evaluation of large, high quality software systems.

Pre-requisites:

- Five (5) credit level passes in GCE 'O' level or Senior Secondary Certificate (SSCE) at not more than two sittings.
- The five subjects must include Mathematics, Physics, Chemistry, English language and any other subject

Target Audience:

Secondary School leavers, undergraduates, graduates, professionals, career changers, etc

Course Content:

Year 1(semester 1)

- Computer systems
- Introduction to programming
- Basic digital systems
- Internet and world wide web
- Computer application package I
- File organization and management
- Logic and linear algebra
- Introduction to statistics
- English language and communication I

Year 1(semester 2)

- Data structure and algorithm
- Pc upgrade and maintenance
- Computer system troubleshooting
- Computer and society
- Basic hardware maintenance
- System analysis and design
- Student industrial attachment
- Calculus
- English language and communication II

Year 2(semester 1)

- Programming concept
- Computer programming using VB.NET
- System programming concept
- Computer application package II
- Structured query language I
- Relational database management systems
- Entrepreneurship development

Year 2(semester 2)

- Scientific programming language using JAVA
- Management information system
- Structured query language
- Relational database management systems
- Software project management project

National Innovation Diploma (NID): Network and Systems Security

Course code: 90102
Duration: 2 Years
Certificate: National Diploma (NBTE Approved)

Description:

Network and system security is designed to produce technically competent manpower to meet the national requirements in the areas of designing, installation, maintenance and management of local, wide area and wireless network environment, a product of Network and system security should be able to :

- Diagnose and correct faults on different networks
- Implement network security and handle backup and recovery
- Install, configure and trouble shoot all types of network hardware devices
- Setup and upgrade a computer network
- Start a small and medium scale enterprise that would provide solution to organizations networks
- Manage and administer computer network for optimum utilization
- Update the performance and baseline of a network using network monitoring tools

Pre-requisites:

- Five (5) credit level passes in 'O' level, GCE or Senior Secondary Certificate (SSCE) at not more than two sittings.
- The five subjects must include Mathematics, Physics, Chemistry, English language and any other subject

Target Audience:

Secondary School leavers, undergraduates, graduates, professionals, career changers, etc

Course content:

Year 1(semester 1)

- Communication skills I
- Mathematics
- Basic computing skills
- Computer application package

- Introduction to networking
- Network operating systems

Year 2(semester 1)

- Entrepreneurship
- Technical report writing
- Introduction to WAN Technologies
- Network security power and network management

Year 1(semester 2)

- Communication skills II
- Mathematics
- Citizenship education
- Network design topology and network protocols
- Network cabling
- Introduction to networking devices

Year 2(semester 2)

- Web server fundamentals
- Fundamentals of wireless LANs
- Project management
- Final year project

IDCS: International Diploma in Computer Studies

Course code: 71001
Duration: 1 year
Certificate: International Diploma in Computer Studies
Global certificate: Equivalent to year 1 of a 3 year UK honours degree | HE Level C (Certificate), National Qualifications Framework (NQF) Level: 4

Description:

This course is aimed at students seeking undergraduate entry onto an International IT Degree Pathway, the diploma blends the best in technical, communication and business skills to create well rounded IT professionals.

Prerequisites:

- 5 O' Level credits or its equivalent

Career Opportunities:

Web Developer, IT Support, eBusiness, IT professional, and others

Course Outline:

- Computer Technology
- Systems Development
- Business Organization
 - Business Communication
- Computer Programming
 - Programming Methods
 - Java
 - VB.Net
- Computer Technical Support
 - A+ (PC Support Technician)
 - Networking
- Internet and Multimedia
 - e-Commerce
 - Developing a Website

IADCS: International Advanced Diploma in Computer Studies

Course code: 90104
Duration: 1 year
Certificate: International Diploma in Computer Studies
Global certificate: Equivalent to year 2 of a 3 year UK honours degree | HE Level C (Certificate), National Qualifications Framework (NQF) Level: 4

Description:

If you already have previous IT experience, the International Advanced Diploma has a strong professional element, focusing on analytical and business skills.

Pre-requisites:

Holders of an NCC Education International Diploma in Computer Studies or Holders of any local or international qualification deemed to be a similar level to International Diploma in Computer Studies. These shall be agreed in advance with NCC Education and For candidates whose first language is not English: TOEFL® score of at least 550 or IELTS 5.5 or their equivalent. LCCI IQ 370 combined score in Reading and Listening (Writing 2, level 4)

Course Outline:

1st Semester

- Systems Analysis and Design*
- Enterprise Networking*
- Advanced Java Programming
- Internet Systems Administration
- Business Management
- Advanced Web Design

2nd Semester

- Database Design and Development*
- Practical Projects*
- Internet Security
- Advanced Visual Basic Programming
- Managing Business Project
- Computer Forensics

BSc (Hons) Degree in Computing & Information Systems

Course code:	90105
Duration:	1 year 960 Hours
Certificate:	Bachelors Honors Degree. Awarded by University of Wales, UK
Global certificate:	Equivalent to year 2 of a 3 year UK honours degree HE Level C (Certificate), National Qualifications Framework (NQF) Level: 4

Description:

The main purpose of this programme is to provide an education that will equip graduates with the knowledge, technical and interpersonal skills necessary for taking part in the design, implementation and management of modern computer systems and to produce professionally-minded computer practitioners able to meet the responsibilities and challenges demanded by the computing industry.

Pre-requisites:

Graduates of the NCC Educational International Advanced Diploma in Computer Studies

(IADCS) who have achieved a mark of at least 50% in their first attempt at half the credits of the IADCS and have passed the remaining modules or any other qualification accepted by the University of Wales.

Special features:

- The programme is a natural progression for graduates of the NCC Education International Advanced Diploma in Computer Studies (IADCS).
- This programme is delivered online by experienced academics using NCC Education's Virtual Learning Environment, Campus.

Course Modules

- Advanced Database Management Systems
- Corporate Communications Systems Management
- Information Systems Project
- Management Support Systems
- Object Oriented Analysis and Design
- Software Engineering Management
- Software Engineering Methods