



Admintelecomacademy

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ATA



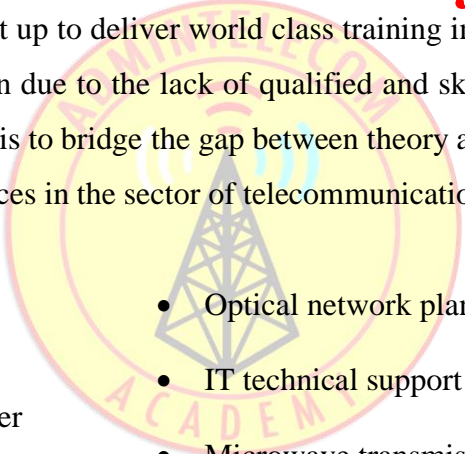
Admintelecom Academy Training Programs

About us

Admintelecom Academy (ATA) is a technical telecommunication training institution built in 2011 with the vision to become a world class centre of excellence for hands-on training in telecommunications and Information Technology (IT) in Africa as whole. Our training concept is based on “Workplace ethics, Standard Installation and Health & Safety” to achieve a well-grounded educational platform for our various clientele we serve through a ratio of 80% practical and 20% theory training style. We believe that development starts with people and therefore provide suitable training programmes to help minimize the ratio between practical and theory.

Why Admintelecom Academy

Admintelecom Academy, was set up to deliver world class training in telecommunication and IT with much emphasis on hands-on due to the lack of qualified and skilled personnel/engineers in the industry. Our main objective is to bridge the gap between theory and practical for an effective deployment of our human resources in the sector of telecommunications and IT.

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- Network Administrator
 - Network Systems Engineer
 - Network Systems Manager
 - Network Service Technician
 - Fiber optics technician
 - Optical network planner
 - IT technical support
 - Microwave transmission technician
 - Cable management technician
 - Cell technician
 - Rigger or installer

Our Training Programmes

We offer a variety of training programmes both for individuals and corporate bodies.

➤ **CLASS SCHEDULE:**

Morning (8:00AM To 12:00PM) – Monday To Friday

Afternoon (1:00PM To 5:00PM) – Monday To Friday

Evening (6:00PM To 9:00PM) Monday To Thursday

& Saturdays (8AM To 12:00PM)

Weekend (8:00AM To 2:00PM)- Saturdays Only

➤ **ENROLLMENT PROCEDURE:**

To enroll, kindly follow the steps below;

Step 1: Choose a course to pursue and session.

Step 2: Contact us to confirm if you meet specifications and reserve a training spot.

Step 3: Make payments to confirm your spot before deadline.

Step 4: Show us proof of payment before deadline. (Bank Transfer slip/ Deposit slip should be submitted to our office at East legon Adjiringanor for processing)

Step 5: Your training spot will be confirmed.

Step 6: Administrator will take you through the rest of the processes.

➤ REQUIREMENT:

A minimum of Senior high school certification or higher (Diploma, HND, Degree, NVTI, MBA, etc.).

You will need a Laptop for your training. (Specs: minimum 8GB RAM, minimum storage space 500GB).

➤ PAYMENT

All payments are made at any Zenith bank branch.

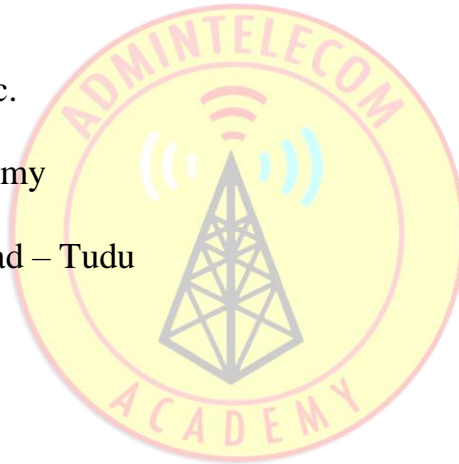
ACCOUNT DETAILS

Bank name: Zenith Bank Acc.

Name: Admintelecom Academy

Branch: Kojo Thompson Road – Tudu

Acc. No.: 6010614147



After payment is complete, kindly submit deposit voucher/ slip to our office for processing.

List of courses/programs:

➤ Full Courses

1. Digital microwave transmission
2. Fibre optics technology
3. Certified fiber optics specialist/ Home
4. Project management applied to fiber optics
5. CompTIA Networking +
6. Certified telecommunication and networking specialist module 1
7. Certified telecommunication and networking specialist module 2
8. Tower climbing safety and rescue
9. BTS Installation and maintenance
10. Drive testing
11. Site power installation & maintenance
12. Microsoft office suite
13. Short courses



1. Digital Microwave Transmission

Duration: 3 weeks

Tuition Fee: GHS1500.00

Registration: GHS100.00

Personal Protectives (PPE): GHS300.00

NB: full payment is required.

Course benefits

1. How to implement Microwave Transmission technology in telecommunication.
2. How to perform a microwave link survey for projects.
3. How to use different software to plan microwave point to point links between sites.
4. How to install microwave links between sites.
 - i. How to select the right tools for microwave link installation
 - ii. How to prepare and interpret link budgets for Microwave Link installations.
 - iii. How to interpret Microwave radio and parabolic antenna properties before installing them on site.
 - iv. How to practically arrange ODUs for different Microwave Link protections.
5. How to install different Indoor Units.
6. How to practically identify types of Microwave Link Protection.
7. How to practically setup machine interface for Indoor Unit Connections.
8. How to practically configure Microwave Links.
9. How to practically align Microwave Links.
10. How to practically create data routes between sites.
11. How to practically commission Microwave Links
 - i. How to practically perform Bits Error Ratio (BER) Test on Microwave Links.
 - ii. How to practically perform Loopback (continuity) Test on Microwave Links.
12. How to practically perform Microwave Link Troubleshooting.

Audience

Telecommunications professionals involved in the installation and maintenance of their Company networks.

Prerequisites

Basic understanding of Telecom

Course outline

Transmission System Overview

Usage of Compass and GPS

Basic Principles of Transmission System

Safety Precautions & Antenna/Radio types assembly

Tools for Installation

Link Budget Studies

Management Software setup/configuration

Protected & Non-Protected Hop Configuration

Hoisting/Rigging & Links Alignment Procedures

Routing

Types of Microwave Hops

Digital Transmission Techniques

Direct Mount & Remote Mount features

Types of Coupler and Combiner types

Terminal and Nodes

RBS, BTS Interconnectivity with Digital Microwave

Standard Installation Practices

E1 Introduction & Cabling

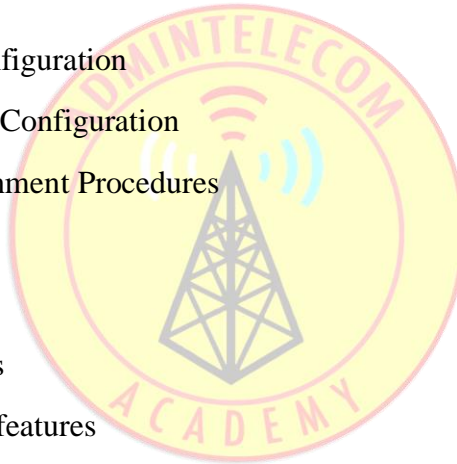
Usage of Compass & GPS (for Site location & Azimuth)

Antenna & Radio Assembly

Hoisting & Rigging

Indoor Units Installation & Configuration (Management Software)

Site Commissioning



Links Alignment

Routing & BER Testing

Troubleshooting - Case Study

Preparation of Cellular site Bill of Quantity (BOQ)

RF Cables, Connectors Preparation & Earthing

Link Budget Analysis

Site Survey - Live Cells Site Tour



2.Fiber Optics Technology

Duration: 2 Weeks

Tuition Fee: GHS1500.00

Registration: GHS100.00

Personal Protectives (PPE): GHS300.00

NB: full payment is required.

Course benefits

1. How to implement fiber optic technology.
2. How to explore fiber structure and use colour coding to identify fiber cores.
3. How to implement fiber optic health and safety on site
4. How to strip fiber cables
5. How to practically identify fiber types & limitations
6. How to interpret fiber cable specifications
7. How to manage fiber optic closures
8. How to fusion splice fiber cores
9. How to minimize fiber optic insertion & return losses
10. Using optical sources to plan fiber datalinks
11. How to identify fiber optic connectors & their specifications
12. How to standardly manage fiber cables in data centre
13. How to test fiber cables using FOA references
14. How to use a visual fault locator (VFL) to test fiber cables stripping interpreting
15. How to use a fiber optic microscope to test fiber connectors
16. How to use an optical light test set (light source & power meter) to test fiber cables
17. How to design Fiber to the Home (FTTH) Networks
18. How to analyse standardly optical link budget for projects
19. How test and commission fiber cables with Optical Time Domain Reflectometer [OTDR]

Audience

Telecommunications professionals involved in the installation and maintenance of their Company networks.

Prerequisites

Basic understanding of Telecom and power.

Course outline

Health & safety

Optical fibre, the hazards, laser radiation

Fibre Optical transmission theory

Basic concepts of light, light transmission through optical fibre, elements in optical links, features & construction, advantages & disadvantages

System attenuation Micro bending, temperature & alignment, Fresnel reflection, numerical aperture, concentricity & eccentricity

Fibre Optic Cable types & specification

Fibre cables for specific applications, cable construction, OM1, OM2, OM3, OS1, specification & management

Optical passive connectors

APC, ultra/super PC, single mode & multimode connectors

Tooling & fibre preparation

Hand tools, microscopes, polishing tools, stripping & cleaning

Fibre connectors & termination

ST, SC & S.F.F connectors, epoxy, pre-filled & anero bic termination, common usage, termination procedures, 'pigtail' splicing

Fibre installation techniques

Cable & hardware, fibre cable joint enclosures

Cable & fibre preparation, various organization trays

Fusion splicing:

Different fusion splicers; 'V' groove, semi & fully automatic Fibre testing & fault-finding

Optical Time Domain Reflectometer(OTDR) Testing, result interpretation, system requirements

Introductory OTDR Testing

Advanced OTDR Testing Course

OTDR Trace Analysis

3. Certified Fiber Optics Specialist/ Home

Duration: 2 Weeks

Tuition Fee: USD220.00

Registration: GHS100.00

Personal Protectives (PPE): GHS300.00

NB: full payment is required.

Audience

Engineers new to fiber to the home, curb, etc. (FTTx) or who wants to learn how it works

Designers and installers involved in FTTx projects

Managers and supervisors involved in FTTx projects

Course benefits

What is FTTx? - Fiber to the "x" - home, premises, curb, node, etc.

FTTx Overview

Exploring Network architectures used in FTTx, specifications, advantages/disadvantages

How to implement FTTx "triple-play" system

Understanding FTTx standards (BPON, GPON, EPON, RFOG, etc.)

How to plan, design and install a FTTx project

How to test FTTx installations, especially PONs

Course Outline

Introduction to FTTx

Introduction to GPON Architecture

Practical introduction to OPGW/ADSS and drop cables

Practical training on home pass

Fiber optics cable splicing on FAT.

Usage of dead ends and I-Bolts, ATB termination and ONT, etc.

4. Project Management Applied To Fiber Optics

Duration: 2 Weeks

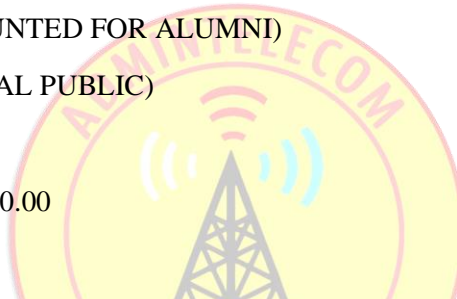
Tuition Fee: GHS1700.00(DISCOUNTED FOR ALUMNI)

Tuition Fee: GHS2200.00(GENERAL PUBLIC)

Registration: GHS100.00

Personal Protectives (PPE): GHS300.00

NB: full payment is required.



Audience

Telecommunication professionals interested in or involved in the management of fiber optics rollout (FTTH, FTTX etc.)

This course will introduce students to fiber optic project management skills from the four main phases namely; project initiation, planning, execution and closing. Every phase of the project lifecycle encompasses a set of integrated processes designed to allow the completion of the work require to complete the phase.

Students will be equipped with knowledge of project standards and guidelines recommended by project practitioners around the globe. The course is structured in such a way to discuss how

standard project management processes apply to various fiber terminations (FTTx) such as FTTH, FTTH/P, GTTN/C of a fiber optic cable plant.

Prerequisites

1. Basic understanding of Telecom and Safety
2. Strong understanding of fiber optics technology

5. Certified Telecommunication and Networking Specialist (Module 1)

Duration: 4 months

Tuition Fee: GHS3300.00

Registration: GHS100.00

Payment plan: Minimum initial payment of GHS2000, remaining paid under 3 months installment after training begins.

Course benefits

- How to test telecom and networking cables using the various telecom test equipment (Site master, SUNSET, OTDR LIGHT SOURCE AND POWER METER, Bit error test equipment cat 6 cable test equipment)
- How to conduct Telecom Technical Site survey.
- How to prepare a bill of quantity for a base station/transmission installation
- How to conduct Internet service provider (ISP) technical site survey
- How to conduct telecom Site Auditing.
- How to hoist antenna on site. (on the tower)
- How to install battery banks, Inverters, AVR, UPS and other electrical equipment on site
- How to conduct Telecom site earth test
- How to manage Telecom transmission site cables in a cable tray.
- How to create a database for cable management.
- How to splice fibre optic cable
- How to test Fibre optic cable (Fibre light source and power meter)
- providing internet connectivity using microwave radio
- Sending packet through microwave link
- Configuration and routing of microwave link

Introduction to Networks

How to implement the OSI Model

How to setup networking topology, prepare connectors and implement wiring standards

How to identify Ethernet Specifications

How to manage network devices

How to use TCP/IP model

How to configure and manage IP Addressing

How to configure Routers on a network

How to create VLANs on Switches

How to setup Wireless Networks

How to configure and authenticate Access Control

How to identify network threats

How to configure Wide Area Networks

How to troubleshoot networks

How to Optimize, Manage and Monitor Networks, ETC.

MODULE ONE (Course Outline)

Wireless Telecommunications

Comp TIA N+

Microwave Transmission (Standard Installation Practices)

Certified Fiber Optics Technician- CFOT

Audience

Telecommunications professionals involved in the installation and maintenance of their Company networks.

Prerequisites

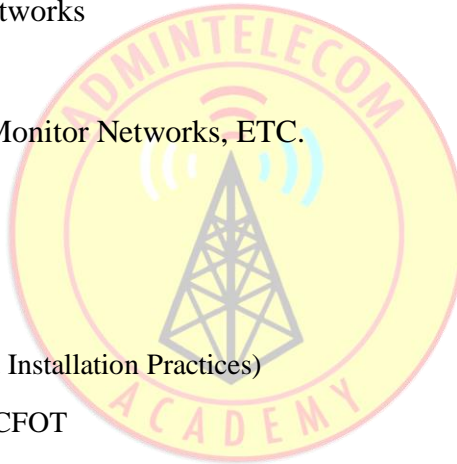
Basic understanding of Networking /Telecom and power.

Course outline

Comp TIA N+

Microwave Transmission (Standard Installation Practises)

Certified Fibre Optics Technician- CFOT



6. Certified Telecommunication and Networking Specialist (Module 2)

Duration: 4 months

Tuition Fee: GHS4000.00

PPE: GHS300.00

Registration: GHS100.00

Payment plan: Minimum initial payment of GHS2500, remaining paid under 5 months installment after training begins.

Course outline

Linux+

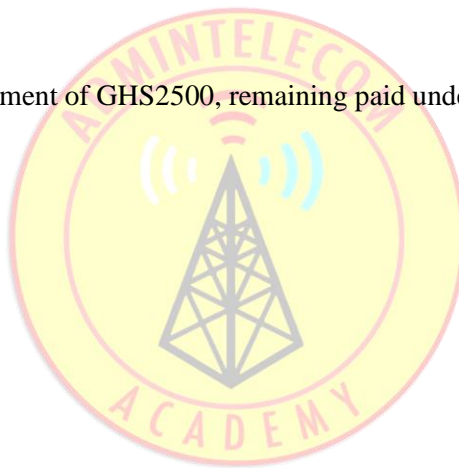
Linux Server Administration

Windows Server Administration

CCTV

CFOS/H (Fiber Optics specialist/home)

Microwave link planning and troubleshooting



Course benefits

You will know how to employ the standardized and finely tuned processes of the Linux operating system in an enterprise environment.

In this course, you will also gain the foundational knowledge and skills to administer and support your Linux OS/Server and learn to control permissions, process data, and use shell scripts to perform administrative tasks.

How to design, install and manage CCTV network

How to plan, design and install FTTH network

How to test FTTH PON

Link planning and troubleshooting techniques

Audience

Telecommunications and IT professionals.

Prerequisites

Basic knowledge in Telecommunication and computer networking.

3. CompTIA Networking +

Duration: 2 months

Tuition Fee: GHS1800.00

Registration: GHS100.00

PPE: GHS300.00

Course benefits

Introduction to Networks

How to implement the OSI Model

How to setup networking topology, prepare connectors and implement wiring standards

How to identify Ethernet Specifications

How to manage network devices

How to use TCP/IP model

How to configure and manage IP Addressing

How to configure Routers on a network

How to create VLANs on Switches

How to setup Wireless Networks

How to configure and authenticate Access Control

How to identify network threats

How to configure Wide Area Networks



How to troubleshoot networks

How to Optimize, Manage and Monitor Networks, ETC.

4. Tower Climbing Safety & Rescue (Work at Height)

Duration: 3 Days

Tuition Fee: GHS1500.00

Registration: GHS100.00

Personal Protectives (PPE): GHS300.00

Course benefits

This course is trained and certified by our partner Safety LMS (Texas). The course will equip you with necessary safety requirements and procedures for Tower climbing and rescue situations.

Audience

Professionals working at height or those supervising them. It is mandatory for those whose day to day work involve accessing heights such as Telecommunication Engineers, Technicians, Riggers, etc.

Prerequisites

Basic understanding of Telecom and Safety.

Course outline

The safety standards

Fall Protection

Climbing Techniques

Accident History

Lessons to avoid disaster

Emergency Situations

Handling the unexpected

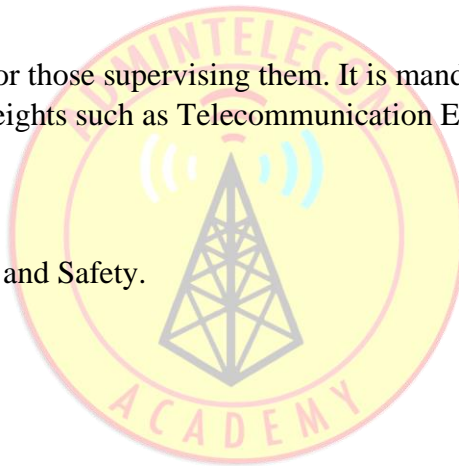
Safety Equipment

Fall Load Demonstrations

Attachments and Anchoring

Lifeline Rigging and Raising Techniques Rescue (Demonstration & Hands-On)

Emergency Safety Procedures and Patient Care



5. Site Power Installation & Maintenance (*Pending*)

Duration: 1 Weeks

Tuition Fee: GHS1500.00

Registration: GHS100.00

Course benefits

This course provides candidates with the knowledge needed to understand and carry out minor and complete domestic and industrial electrical installations and maintenance works.

Audience

Telecommunications professionals involved in the installation and maintenance of their Company networks.

Prerequisite

Basic understanding of electrical power.

Course Outline

Site Power

DC Power Supply

Battery Shelf

Battery Packs

Power Cable Sizes and Application

Site Earthing Measurements

Use of Power Measuring & Testing Equipment installation of Site Grid Generator Interface

Installation of Site Distribution Box (DB)

Installation of Site Surge Arresters

Installation of Site AVR

Installation of Site ATS

Installation of Site Battery Packs

Installation of Site Rectifiers

Health and Safety in Electrical Installation



Case Studies

6. BTS Installation (*pending*)

Duration: 1 Month

Tuition Fee: GHS1700.00

Course benefits

On completion of this course, you will be able to do the following; RBS Installation, Antenna Installation, Cable Laying, Rigging & Hosting of Cables & Antennas, RBS Configuration, Base Station Optimization, Base station Colocation and AC/DC Power Systems installation. etc..

Audience

Telecommunications professionals involved in the installation and maintenance of their Company networks.

Prerequisites

Basic understanding of Telecom

Course Outline

Structure and Overview of GSM

Theory of GPS and Compass

Types of Towers, Organization and safety on site, Nature of work on sites, Identification of materials

Introduction to connectors

Introduction to RF cables

Terms and Definitions of Coaxial cables and VSWR

Power distribution on site

Antenna Theory and Classification

RBS Block structure

Antenna Configuration a Health & Safety & (OMT)

Hosting and Rigging

Site Survey (Optimization/Co-location) and BOQ



Test Editing

Survey/BOQ

Site Master sweep tests & Editing

GPS Usage

Compass Usage

Connector Preparation

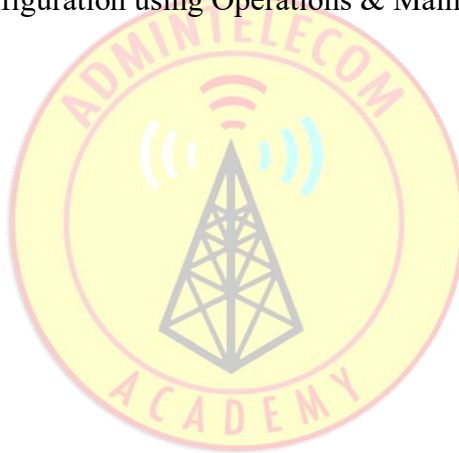
Site Master (ANRITSU) Usage in performing Sweep Tests

(VSWR, DTF etc...)

Earthing and Scotching

Site Survey (Optimization/Co-location) and BOQ

Hoisting and Rigging “ RBS configuration using Operations & Maintenance Terminal (OMT) application software



7. Drive testing (*pending*)

Duration: 1 Month

Tuition Fee: GHS2600.00

Course benefits

The Trainee will learn how to set up and configure hardware and software for the Drive test tool. Commonly used and more advanced features are demonstrated and then practiced through a series of exercises. Circuit-switched and GPRS operation and testing are covered, as well as UMTS testing. A series of example drive-test Log files are used for demonstrations.

Audience:

This course is designed for engineers' optimization or quality analysis teams for network operators, consultancies, and software tool manufacturers who wish to improve their skills with drive-test tools.

Prerequisites

Basic understanding of Telecom

Course Outline

GSM Air Interface Analytical Information

UMTS Air Interface and Test Parameters Operation for GSM

GPRS Testing

Operation for UMTS

GSM/GPRS log file Interpretation

GSM log file interpretation

Interpret displayed data

Report on event and failures

UMTS log file Interpretation

GSM log file interpretation

Introduction to route analysis

Collective log file post-processing

Using a drive-test tool on a live network.



➤ **SHORT COURSES:**

Closure Management and Splicing

Duration: 1 Week (2 hrs/daily)

Tuition Fee: GHS250.00

Course objective

1. To practically install, strip and standardly dress fiber cores in a closure cassette.
2. To practical prepare and standardly splice fiber cores for optical networking.

Optical Testing with OTDR and Power Meter

Duration: 1 Week (2 hrs/daily)

Tuition Fee: GHS300.00

Course objective

1. To technically perform Optical Time Domain Reflectometer and Optical Light source and Power Meter tests, using FOA standards

Prerequisites

Senior high school certificate

BTS Site Survey and MW Link Planning

Duration: 1 Week (2 hrs/daily)

Tuition Fee: GHS300.00

Course objective

1. To practically perform Base Transceiver Station site survey using ITU standards
2. To practically design a link for microwave transmission

Prerequisites

Senior high school certificate

MW Link installation and Configuration

Duration: 1 Week (2 hrs/daily)

Tuition Fee: GHS300.00

Course objective

1. To practically install and configure microwave links using a proposed link budget

Prerequisites

Senior high school certificate

Link Alignment and Commissioning

Duration: 1 Week (2 hrs/daily)

Tuition Fee: GHS250.00

Course objective

1. To practically align installed links to achieve proposed signal level
2. To standardly commission configured links for microwave transmission

Prerequisites

Senior high school certificate

GPS and Compass usage

Duration: 1 Week (2 hrs/daily)

Tuition Fee: GHS250.00

Course objective

1. To practically define and locate site coordinates using a handheld GPS
2. To practically define site and antenna azimuths for signal propagation

Prerequisites

Senior high school certificate

Cable Management and Excel Data base

Duration: 1 Week (2 hrs/daily)

Tuition Fee: GHS250.00

Course objective

1. To practical install network cables and design a database for it

Prerequisites

Senior high school certificate

Setting up a Network (LAN)

Duration: 1 Week (2 hrs/daily)

Tuition Fee: GHS250.00

Course objective

1. To practically install a network for a local area resource sharing

Prerequisites

Senior high school certificate.

Remote Connectivity (WAN)

Duration: 3 Days (2 hrs/daily)

Tuition Fee: GHS250.00

Course objective

1. To practically configure network for a remote resource sharing

Prerequisites

Senior high school certificate

Network Management

Duration: 3 Days (2 hrs/daily)

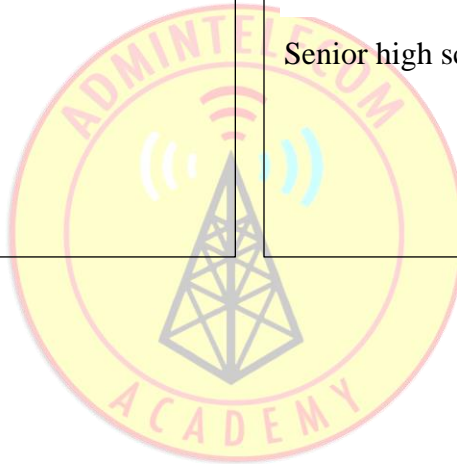
Tuition Fee: GHS250.00

Course objective

To practically setup protocols for network resource management

Prerequisites

Senior high school certificate



➤ **INTERNATIONAL CERTIFICATION**

Certificate: Certified Fiber Optics Technician (CFOT)

Body: Fiber Optics Association (FOA)

Requirement: Comprehensive knowledge and training in fiber optics technology.

Venue for exam: Admintelecom Academy Campus

Date: To be discussed

Cost: USD80.00

NB: Payment can be made in your country's currency but as an equivalent of the cost in USD.

Certificate: Certified Fiber Optics Specialist/ Home (CFOS/H)

Body: Fiber Optics Association (FOA)

Requirement: Comprehensive knowledge and training in fiber optics technology and fiber to the home.

Venue for exam: Admintelecom Academy Campus

Date: To be discussed

Cost: USD80.00

NB: Payment can be made in your country's currency but as an equivalent of the cost in USD.

Certificate: Certified Fiber Optics Specialist/ Home (CFOS/H)

Body: Fiber Optics Association (FOA)

Requirement: Comprehensive knowledge and training in fiber optics technology or fiber optics specialist home.

Venue for exam: Admintelecom Academy Campus

Date: To be discussed

Cost: USD80.00

NB: Payment can be made in your country's currency but as an equivalent of the cost in USD.

Certificate: Authorised/ Certified Climber & Rescuer

Body: SafetyLMS

Requirement: History of working at height, or background in rigging or declaration of necessity for training.

Venue for exam: Admintelecom Academy Campus

Date: To be discussed

Cost: GHS1600.00

PPE: GHS300.00

NB: Payment can be made in your country's currency but as an equivalent of the cost in Ghana Cedi.

