

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.

- 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. (Bank Transfer slip or Momo Transaction)
- 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 4GB RAM, minimum storage space 500GB).

PAYMENT:

All payments are made at any Zenith bank branch or via Mobile Money.

ACCOUNT DETAILS

Bank name: Zenith Bank Acc.

Name: Admintelecom Academy

Branch: Kojo Thompson Road – Tudu

Acc. No.: 6010614147

Mobile Money Payments Vendor: MTN

Name: Kwame Larnyoh Admintelecom Academy

Number: 0245304256

When paying, use your name as reference. E.g., John Mensah can be written as JMensah.

After payment is complete, kindly send pictures of transaction via our WhatsApp number 0540

220 330 or 0267 870 879 for verification.

List of courses/programs:

> Full Courses

- 1. Digital microwave transmission
- 2. Fibre optics technology
- 3. Networking
- 4. Certified telecommunication and networking specialist
- 5. Tower climbing safety and rescue
- 6. BTS
- 7. Drive testing
- 8. Project management for fibre optics rollout, etc.
- 9. Site power installation & maintenance
- 10. Microsoft office suite

1. Digital Microwave Transmission

Duration: 3 weeks

Tuition Fee: GHS1500.00

Registration: GHS100.00

Personal Protectives (PPE): GHS300.00

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
- Hosting/Riggering &Links Alignment Procedures
- Routing
- Types of Microwave Hops
- Digital Transmission Techniques
- Direct Mount & Remote Mount features
- Types of Coupler and Combiner types
- Polarity
- Terminal and Nodes
- RBS, BTS Interconnectivity with Digital Microwave
- Standard Practices
- E1 Introduction & Cabling
- Usage of Compass & GPS (for Site location & Azimuth)
- Antenna & Radio Assembly
- Hoisting & Riggering
- Indoor Units Installation & Configuration (Management Software)
- Site Commissioning
- Links Alignment
- Routing & BER Testing
- Troubleshooting Faults Case Study
- Preparation of Cellular site Bill of Quantity (BOQ)
- Preparation of Handing Over Document
- RF Cables, Connectors Preparation & Earthing
- Surge Arrester & Earthing Cable Preparation
- Analysis of Link Budget
- 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

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 & anerobictermination, 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 Telecommunication and Networking Specialist (Module 1)

Duration: 4 months

Tuition Fee: GHS3300.00

Registration: GHS100.00

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
 - 4. Certified Telecommunication and Networking Specialist (Module 2)

Duration: 6 months

Tuition Fee: under review

Registration: GHS100.00

Course outline

- Linux+
- Linux Server Administration
- Windows Server Administration
- CCTV
- Malware Analysis and reverse engineering
- 50 tips and tricks for troubleshooting in networking and telecommunication
- CFOS/D (Fiber Optics)
- Standard Microwave Networks

5. 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

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6. 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 Telecom and 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

7. 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

8. 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 sand 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

<u>Duration</u>: 1 Week (2 hrs/daily)

Tuition Fee: GHS250.00

Course objective

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

Prerequisites

Senior high school certificate

Cable Management and Excel Data base

<u>Duration</u>: 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

GPS and Compass usage

<u>Duration</u>: 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 azemuths for signal propagation

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)

<u>Duration</u>: 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

<u>Duration</u>: 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: 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

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

Cedi.

