



# **ITU Centres of Excellence Network for Arab Region**

## **Sudatel Telecommunications Academy (SUDACAD)**

## Face-to-Face Training Course on "Fiber To The Home (FTTH)" Khartoum-Sudan, 06-08 October 2020

## TRAINING OUTLINE

### **COURSE DESCRIPTION**

Title	Fiber To The Home (FTTH)		
Method of delivery	Face-to-Face		
Objectives	This training aims to focus on Optical Access Networks, specifically Fiber to the Home (FTTH) technologies, different key topics related to Optical Access Networks Fiber to the Home (FTTH) and will explains how the monumental growth of the Internet challenged Telecoms Service providers to provide Internet access.		
Dates	06-08 October 2020		
Duration	3 Days		
Registration deadline	28 September 2020		
Training fees	USD 150		
Course code	20WS24942ARB-A		

## **LEARNING OUTCOMES**

It is expected that upon completion of the training session, participants will be able to:

- Understand the passive Optical Network (PON) architecture and its possible implementation.
- Identify the different varieties of PON architectures.

- Determine the differences between broadband Passive Optical Network (BPON), Gigabit Passive Optical Network (GPON) and Ethernet Passive Optical Network (EPON).
- Specify the required components that facilitate FTTx installations.
- Calculate the optical loss budget for a FTTx network.
- Test Fiber to the FTTx or fiber in the loop Networks.

#### **TARGET POPULATION**

This training course targets Optical Fiber Network manufacturers, designers, installers, infrastructure operators, Internet service providers, telecommunications managers, supervisors, technicians, graduates and apprentices plus other personnel whose work is related to FTTH systems or other professionals who require an insight into FTTH technologies.

#### **TUTORS/INSTRUCTORS**

NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Mr. Salaheldeen Khider Khalfalla	salaheldeenma@gmail.com

#### **EVALUATION**

The assessment of the participants shall be based on the attendance and a final test. The final test will be short a questions on the different parts of the course.

## TRAINING SCHEDULE AND CONTENTS / AGENDA

Day 1. Overview				
Date for 1st day	Time; Start time	Topics/Activities		
06/10/2020	08:30 - 09:00	Registration		
	09:00 - 12:00	<ul> <li>Understand the passive Optical Network (PON) architecture and its possible implementation.</li> </ul>		
	12:00 - 13:00	Lunch		
	13:00 - 15:00	<ul> <li>Identify the different varieties of PON architectures.</li> </ul>		

Day 2. Overview				
Date for 2 <sup>nd</sup> day	Time; Start time	Topics/Activities		
07/10/2020	09:00 - 15:00	<ul> <li>Determine the differences between broadband Passive Optical Network (BPON), Gigabit Passive         Optical Network (GPON) and Ethernet Passive Optical Network (EPON).</li> <li>Specify the required components that facilitate FTTx installations.</li> </ul>		

Day 3. Overview				
Date for 3 <sup>rd</sup> day	Time; Start time	Topics/Activities		
08/10/2020	09:00 - 15:00	<ul> <li>Calculate the optical loss budget for a FTTx network.</li> </ul>		
		<ul> <li>Test Fiber to the FTTx or fiber in the loop Networks.</li> </ul>		

#### **METHODOLOGY**

- Pre-test.
- Instructor-Led Class Lectures and power point presentations.
- Reviews and Revisions.
- Case Studies.
- Group exercises & assignments.

### TRAINING COORDINATION

### **Training Coordinator:**

## Eng. Mohaned Abdalla Suleiman

Senior Engineer

Planning & Development Dept., SUDACAD

Mobile: +249 120 120 983 Tel: +249 183 490 999

E-mail: mohanedas@sudatel.sd

### **ITU Coordinator:**

## Eng. Mustafa Al Mahdi

Programme Officer ITU Arab Regional Office Tel: +202 3537 1777

Mobile: +20114 1177573 Fax: +202 3537 1888

Email: mustafa-ahmed.al-mahdi@itu.int

### **REGISTRATION AND PAYMENT**

#### **ITU Academy portal account**

Registration and payment should be made online at the ITU Academy portal.

To be able to register for the course you MUST first create an account in the ITU Academy portal at the following address:

https://academy.itu.int/index.php/user/register

## **Training registration**

When you have an existing account or created a new account, you can register for the course online at the following link: <a href="https://academy.itu.int/index.php/training-courses/full-catalogue/fiber-home-ftth">https://academy.itu.int/index.php/training-courses/full-catalogue</a> to ur training catalogue <a href="https://academy.itu.int/index.php/training-courses/full-catalogue">https://academy.itu.int/index.php/training-courses/full-catalogue</a>

#### **Payment**

## 1. On-line payment

A training fee of USD 150 per participant is applied for this training. Payments should be made via the online system using the link mentioned above for training registration at <a href="https://academy.itu.int/index.php/training-courses/full-catalogue/fiber-home-ftth">https://academy.itu.int/index.php/training-courses/full-catalogue/fiber-home-ftth</a>

#### 2. Payment by bank transfer

Where it is not possible to make payment via the online system, select the option for offline payment to generate an invoice using the same link as above. Download the invoice to make a bank transfer to the ITU bank account shown below. Then send the proof of payment/copy of bank transfer slip and the invoice copy to Hcbmail@itu.int and copy the course coordinator. All bank transaction fees must be borne by the payer.

Failure to submit the above documents may result in the applicant not being registered for the training.

#### 3. Group payment

**Institutional Contacts** are users that represent an organization. Any student can request to be an institutional contact or to belong to any existing organization.

To do this, head to your profile page by clicking on the "My account" button in the user menu. At the bottom of this page you should see two buttons:

- a. If you want to become an institutional contact, click on the "Apply to be an Institutional Contact" button. This will redirect you to a small form that will ask for the organization name. After you fill the name of the organization you want to represent, click on "continue" and a request will be created. An ITU Academy manager will manually review this request and accept or deny it accordingly.
- b. If you want to belong to an existing organization, click on the "Request to belong to an Institutional Contact" button. This will redirect you to a small form that will ask you to select the organization you want to join from an organization list. After you select the correct organization, click on "continue", a request will then be

created. The Institutional Contact that represents that organization will manually accept or deny your request to join the organization.

**ITU BANK ACCOUNT DETAILS:** 

Name and Address of Bank: UBS Switzerland AG

Case postale 2600 CH 1211 Geneva 2

Switzerland

Beneficiary: Union International des Telecommunications

Account number: 240-C8108252.2 (USD)

Swift: UBSWCHZH80A

IBAN CH54 0024 0240 C810 8252 2

Amount: 150 USD

Payment Reference: CoE-ARB 24942 – WBS No. P.40592.1.06

## 4. Other method of payment

If due to national regulations, there are restrictions that do not allow the payment to be made using options 1 & 2 above, please contact the ITU coordinator for further assistance.