FTT-x Fiber To The Home, Kerb, Node…

COURSE DESCRIPTION

This Certified Fiber Optic Specialist in FTT-x (CFOS-H) training program from the Fiber Optic Association (FOA) is designed to introduce participants to the varieties of ways that fiber optics is moving closer or all the way to the subscriber. Participants will learn about all the options for FTT-x, what network architectures look like, what standards exist, and get an overview of how they are installed and tested.

WHO SHOULD ATTEND?

- Technicians involved with designing, installing or operating FTT-x networks
- Designers and installers involved in FTTX projects
- Managers and supervisors involved in FTTX projects
- Anyone new to fiber to the home, curb, etc. (FTTX) or who wants to learn how it works

PREREQUISITES

- Fiber Optic Essentials for Installers, FOA Certified Fiber Optic Technician (CFOT) or a solid understanding of Fiber Optics and recent experience in the fiber field.
- This course is preceeded by an online learning module which will take approximately 5hrs to complete. Participants are advised to start it a week before the training and complete an hour a day.

+61 3 9381 7888
INFO@COVERTEL.COM.AU
114 BAKEHOUSE ROAD, KENSINGTON VIC 3031
AUSTRALIA
PO BOX 553, NORTH MELBOURNE, VIC 3051
AUSTRALIA
WWW.COVERTEL.COM.AU

COURSE OBJECTIVES

Attendees will learn:

- What is FTT-x - Fiber to the home, premises, curb, node, etc.
- How FTT-x developed and is growing worldwide
- Alternatives to FTTH
- Network architectures used in FTT-x, specifications, advantages/disadvantages
- What is a "triple-play" system and how it is implemented
- What are FTT-x standards - BPON, GPON, EPON, RFOG, etc.
- How to plan, design and install a FTT-x project
- How to test FTT-x installations, especially PONs

FORMAT

2 days, interactive classroom based, with online pre-learning, quizzes and hands on exercises. A version of this training can be delivered via zoom online should it be required.

Maximum attendees: 9 per course.

CONTENT

Introduction

- What is FTT-x
- How fiber is used in the worldwide communications system
- Why FTT-x is happening now
- Who is installing FTT-x

Review of Fiber Optics

- What is Fiber
- Fiber Construction and Types
- Cables
- Connectors & Splices
- Active & passive components (splitters, switches etc)

+61 3 9381 7888
INFO@COVERTEL.COM.AU
114 BAKEHOUSE ROAD, KENSINGTON VIC 3031
AUSTRALIA
PO BOX 553, NORTH MELBOURNE, VIC 3051
AUSTRALIA
WWW.COVERTEL.COM.AU

FTT-x Architectures

- What are the varieties of FTT-x
- What are the limitations of networks that don't take fiber all the way to the home
- How many varieties of wireless broadband there are
- What are "active star" networks
- What is a PON and how it is implemented
- What varieties of PON architectures are possible

FTT-x Passive Optical Networks (PON)

- What is a FTTH PON
- What are the differences between BPON, GPON and EPON
- What are RFOG and WDM PONs
- What is a POL and who is using it

Designing FTT-x Networks

- Issues applicable to FTT-x design
- How to get started on the network design
- Sources of more information on fiber optic network design
- How to do a simple exercise in network design
- FTT-x Case study

Planning & Managing FTT-x Networks

- The stages of planning, building and operating a FTTH network
- What a project consists of
- What the planner and manager need to know
- Workforce management
- What makes a successful project

Installing FTT-x Networks

- How the installation of FTT-x networks has evolved
- What are the options available for installation
- What new components have been developed to facilitate FTT-x installations
- What happens at the home or premises
- What is different about multi-dwelling units

+61 3 9381 7888
INFO@COVERTEL.COM.AU
114 BAKEHOUSE ROAD, KENSINGTON VIC 3031
AUSTRALIA
PO BOX 553, NORTH MELBOURNE, VIC 3051
AUSTRALIA
WWW.COVERTEL.COM.AU

Testing FTT-x Networks

- How the PON splitter has changed the way FTT-x networks are tested
- What are the minimum testing requirements
- Why test at different wavelengths and in both directions
- What differences are seen with OTDR testing across a PON splitter
- How to test how well the system is transmitting data

Certified Fiber Optic Specialist – FTT-H exam (CFOS-H)

CFOS-H and CFOT are certifications of The Fiber Optic Association (FOA).

+61 3 9381 7888
INFO@COVERTEL.COM.AU
114 BAKEHOUSE ROAD, KENSINGTON VIC 3031
AUSTRALIA
PO BOX 553, NORTH MELBOURNE, VIC 3051
AUSTRALIA
WWW.COVERTEL.COM.AU