

Course Description

VDSL/VDSL2 is the most powerful member of the xDSL family, capable to provide up to 100 Mbps on a single telephone wire. It provides unmatched flexibility in rate, reach and symmetry to satisfy the increasing demand for high-speed services such as corporate communications, fast internet access and high quality digital audio and video delivery.

This course will provide a Hands-On understanding to the VDSL/VDSL2 technology and its applications.

It will give cover the VDSL/VDSL2 system, describing channel conditions, system architecture, and VDSL/VDSL2 performance in terms of rate-reach-symmetry objectives and the basic principles of VDSL/VDSL2, explaining why VDSL/VDSL2 is not just an upgrade of ADSL in terms of higher transmission speed, and summarizing the features in the current VDSL standard that allow customization and on-the-fly configuration of the modems.

In particular, it will study a general block diagram of a DMT based VDSL/VDSL2 modems, describing some of the signal processing techniques that enable this high performance operation and flexibility.

Finally, it will describe some of the applications for VDSL/VDSL2 such as ATM over DSL and Ethernet over DSL.

Students Will Learn

- **A Definition for VDSL (What?)**
- **Penetration of VDSL/VDSL2 (Who?)**
- **VDSL/VDSL2 for Triple-Play (Why?)**
- **Anatomy of a VDSL/VDSL2 System (How?)**
- **The VDSL/VDSL2 Standard (How?)**
- **Deployment of VDSL/VDSL2 (How?)**
- **Some VDSL/VDSL2-based Applications (Where?)**
- **Testing and Troubleshooting VDSL/VDSL2 (How?)**
- **The VDSL/VDSL2 Future**
- **and More...**

Target Audience

OSP Technicians, CO Technicians, ILEC Installation, Repair and Maintenance Technicians, CLEC/ASI ADSL Installation Technicians, CLEC/ASI Network Technicians, DSL Technical Support Technicians, DSL Group Managers Sales & Marketing Support Managers and anyone requiring Hands-On skills for supporting, installation and/or maintenance of xDSL services (VDSL/VDSL).

Prerequisites

Basic electrical / telephony concepts. A working knowledge of DSL would be helpful.

Delivery Method

Instructor led with numerous Hands-On labs and exercises.

Equipment Requirements

(This apply's to our hands-on courses only)

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

Course Length

2 Days