



ET 2.0: Telecommunications Technical Curriculum (TTC)

Program 3: Voice Knowledge

Course 4: IP Telephony and Voice over IP

PROGRAM OVERVIEW

The ExperTech 2.0 series is a library of CD-ROM or intranet-based products covering key communications topics. Seminar style presentations provide telecom professionals with easy access to the information they need. Topics are presented by Hill Associates instructors renowned for their technical expertise, industry experience, and outstanding presentation style.

The *Telecommunications Technical Curriculum (TTC)* has a total of five programs, each of which consists of one or more courses. TTC is a modular, yet comprehensive program designed around the needs of those who want the details but cannot attend a more traditional classroom-based, leader-led program.

Program 3: Voice Knowledge is a four course series that deals with concepts and terminology related to the transmission of voice services. In this fourth and final course of the series, *IP Telephony and Voice over IP*, we provide high level coverage of voice over IP and IP telephony concepts and implementations. In this course, you will explore the motivation for the packet switched architecture and compare it to the traditional circuit switched architecture. You will also explore the requirements and components of a VoIP/IPT network and examine three different service models for the delivery of IP telephony.

Program 3, Course 4: IP Telephony and Voice over IP runs 89 minutes, and includes four lessons of audio, interactive elements, review slides, section knowledge checks, and a final exam. The participant can expect to spend about twice this amount of time to complete the course.

This program has three primary objectives:

- Discuss and explain basic networking concepts, and describe them using three different modeling approaches
- Explore well-known protocol examples used in today's networks
- Examine how IEEE standards relate to a modern data network model

Specific topics can be developed, or packaged together to create a unique and customizable curriculum. All of our standard titles are available for preview at our store (www.hill.com/store).

About Hill Associates

At Hill Associates, we excel at creating custom talent development programs. Our experts help identify and assess your needs, and create training and educational programs that exactly meet those needs. Though we specialize in information technology, we've strengthened companies and organizations in a wide range of industries for over 25 years. Let us help you create a world-class talent development program that moves your business forward.

PROGRAM OUTLINE

Lesson 1: Why Voice over IP

- Examine the motivation for moving to voice over IP
- Note the past transitions of the voice network as it has evolved through history
- Compare a traditional circuit switched voice network architecture to a VoIP packet switched architecture

Lesson 2: An Introduction to VoIP and IPT

- Describe and differentiate VoIP and IP telephony
- Examine why the use of a packet switched network is feasible
- Outline what is necessary to achieve successful VoIP deployment
- Examine various standards that apply to the VoIP / IPT environment

Lesson 3: VoIP and IPT Service Models

- Examine three common service models for delivering IP telephony (from an ITSP, from a traditional telephone company, and from a multiple service operator)

Lesson 4: IEEE Standards Models

- Describe how the IEEE 802 standards model relates to the modern data reference model