



McCall-Thomas Engineering Company, Inc.

McT Learning Center

1Q-2Q 2012 TELECOMMUNICATIONS CLASSES

Date/Time	Class	Description	Cost
On-Site at Your Location Call to Schedule ~ Per Day Basis~	Tools for the Occam Technician Instructor: Occam Certified Installer 	This on-site, hands-on class is intended for technicians that work on the Occam equipment on a daily basis. It will provide the technician with a set of tools and tips that can be used to troubleshoot and work with active cards to minimize outages. The class is intended as an add-on to official Occam/Calix classes and is not meant as a replacement. The technician is expected to be familiar with the Occam chassis, cards, ring topology. The client will need to have open slots available in a BLC 6000 series chassis (12 slot, 6 slot, or individual one slot chassis) and spare cards. Typically, one slot and one card is required for two people.	Call
TBA Tuesday-Thursday 8:30-4:00	CALIX B6 Hands-on Fundamentals Instructor: Calix Engineers Minimum class size = 8 Total Students	<i>Register on-line at www.calix.com</i> <i>This class should be scheduled 2Q or 3Q. Please check Calix website for additional info.</i>	\$ 1,275
Feb 9 Thursday 9:00-4:00	2012 NESC Update Instructor: McCall-Thomas Engineering PE Minimum class size = 4 6 PDH Credits *Group Pricing at your Location!	This one-day course reviews and highlights changes that were recently made to each of the four sections of the NESC. These changes become effective on February 1, 2012 and must be complied with after that date. The changes need to be integrated into existing work practices and will impact how engineers, supervisors, stakers, linemen, safety personnel and others must do their jobs. The course includes an update on the latest Arc Flash Hazard requirements. For a complete course outline see www.mccall-thomas.com/classes.html	\$ 359 <i>Includes lunch</i>
March 1 Thursday 9:00-4:00	Intro to Basic Electricity for the Telephone Tech Instructor: Ray Drause, PE Minimum class size = 6 Total Students 6.0 PDH Credits *Group Pricing at your Location!	This class provides a foundation of understanding of the basic electrical principles underlying telephone communications. The student will learn how the properties of voltage, current and resistance interrelate, as explained by Ohm's Law. The class explains how meters and test sets can be used to trouble shoot telephone cables and identify problems that cause service difficulties. Integrated into the training are discussions of safety practices that are important to the protection of personnel and equipment. Include textbook "Electricity". For a complete course outline see www.mccall-thomas.com/classes.html	\$ 389 <i>Includes lunch</i>
March 27 Tuesday 9:00-4:00	ADSL2+ / IPTV For the Telephone Technician Instructor: Ray Drause, PE Minimum class size = 6 Total Students 6.0 PDH Credits *Group Pricing at your Location!	The telephone technician plays a critical role in the deployment and operation of services that use ADSL2+ technology. The successful operation of VoIP, IPTV, High Speed Internet and related services is wholly dependent upon the optimum operation of the transport technology delivering those services. This class focuses on the practical aspects of ADSL2+ installation, turn up and trouble shooting. There is a special emphasis on interpretation of test set measurements and trouble identification - how to determine whether service problems are being caused by the cable, modem, Head End, etc. Every technician who supports this technology - whether they be a Central Office, Cable Repair or Installation Technician - will benefit from the pragmatic understanding of ADSL2+ deployment that they gain from this class.	\$ 389 <i>Includes lunch</i>
March 28 Wednesday 8:30-1:00	ONT/NID/RSU Grounding Instructor: Ray Drause, PE Minimum class size = 6 Students 4.0 PDH Credits *Group Pricing at your Location!	This class has been designed to provide detailed instructions of where, why and how to ground Optical Network Terminals, Network Interface Devices & Remote Service Units. Since conditions in the field are often different than what is presented in a classroom, there will be a special emphasis on "Making the right choice when the textbook solution does not seem to fit." For a complete course outline see www.mccall-thomas.com/classes.html	\$ 329 <i>Includes lunch</i>
April 3 Tuesday 9:00-3:00	Central Office Grounding Instructor: Ray Drause, PE Minimum class size = 6 Total Students 5.0 PDH Credits *Group Pricing at your Location!	Little in telephony is as fundamentally critical and widely misunderstood as the effective grounding of the central office. In this course you will learn why CO grounding is important and the practical details of how it should be implemented. In addition to Single Point Grounding, the course will review common grounding and power related "time bombs" that, if left uncorrected, can result in catastrophic equipment damage. The course also looks beyond the central office. An overview of critical bonding and grounding practices needed for trouble-free delivery of IPTV and other high speed services over DSL us also provided. www.mccall-thomas.com/classes.html	\$ 329 <i>Includes lunch</i>
2Q or 3Q Date to be Announced	Joint Use & Pole Attachments Instructor: McCall-Thomas Engineering PE Minimum class size = 6 Total Students 6 PDH Credits *Group Pricing at your Location!	Joint-Use pole attachments of telephone, communications, CATV and DOT facilities are common place in today's electric utility industry. This course takes the confusion out of the NESC and simplifies proper procedures and guidelines for joint-use pole attachments. McCall-Thomas Engineering's professional engineering staff will address the NESC requirements with the use of simplified illustrations and tables that can be used as everyday tools when dealing with make-ready, approvals, and inspections of JU facilities. For a complete course outline see www.mccall-thomas.com/classes.html	\$ 369 <i>Includes lunch</i>

Schedule any of these classes ON-SITE at your location...

On-site training is one of the best ways to facilitate your organization's learning and developmental skills and goals. Call us today and we can tailor the desired training to meet your needs!

Some of the benefits of on-site training are:

- ⇒ Our instructor will work with you to customize the training to meet your unique needs
- ⇒ Schedule when and where you want it
- ⇒ Group Rate Pricing at below individual seat pricing
- ⇒ Save money on travel, expenses, lodging, meals, etc.
- ⇒ Ability to train more employees

We will be glad to provide group rate pricing to you if you would like to have our instructor come to your location and train your personnel.

We can train 1/2 one day and 1/2 the following day or for a half day class, we can train 1/2 in the morning and 1/2 in the afternoon.

We're flexible....give us a call and let us know how many you might like to train and we will give you a price.

Let's get started...there has never been an easier and more trusted way to train your personnel.

66 Years of Excellence in Engineering and Technology

McCall-Thomas Engineering Company, Inc.

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Check out our website for a list of all classes and services!

Questions ? or to enroll contact:

Pam Kemmerlin, Marketing/Learning Center Coordinator
803-534-1040 x 1128
Go to our [website](http://www.mccall-thomas.com) and enroll online or email pkemmerlin@mcteng.com
Above listed classes taught on location in Orangeburg, SC
On-location classes available upon request.