BUILD YOUR CABLE KNOWLEDGE WITH TECHNICAL TRAINING

Learn cable technology through SCTE education & training

- Technical Training Courses
- LiveLearning Webinars™
- Professional Certifications
- College Credits Through SCTE

“SCTE offers courses that cover a wide range of cable-specific knowledge that our company needs to keep its employees ahead of the latest technologies. SCTE’s renowned training and certification is a necessary foundation of our workforce development for our technicians and installers. I highly recommend them to any organization looking to grow their business, increase efficiencies and save money through world-class technical training.”

Andrew Parrott, VP Technical Operations, Suddenlink Communications

+ www.scte.org/courses
TECHNOLOGY YOU NEED TO KNOW

Essential Knowledge for Cable Professionals™

SCTE is a global leader for telecommunications training programs that meet the education demands of the ever-changing cable industry. Whether you’re an experienced professional looking to enhance your technical expertise by learning a new technology, a student striving to break into the industry, or an experienced expert who wants to build credentials through certification, SCTE has the essential knowledge you need to advance your career.

PROVEN TECHNICAL KNOWLEDGE FROM LEADERS IN THE FIELD

SCTE TRAINING INSTRUCTORS, SUBJECT MATTER EXPERTS & CONTENT DEVELOPERS

The technical expertise of these nearly 200 subject matter experts is used to develop content for SCTE education and training.

For information on these experts and a complete list of contributors, visit www.scte.org/courses.

TRAINERS: For more information on SCTE corporate training programs and discounted rates, call SCTE at 1-800-542-5040 or e-mail profdev@scte.org.

“SCTE certifications helped to take my job and turn it into a career. Each certification built upon the last and created a platform that has helped me to become what I am today. It is truly a program that should be taken advantage of by any professional attempting to make a career in the Telecommunications field. Challenge yourself by learning through SCTE and see what you can become.”

Nick Williams, BPE, BDS, BTS, Headend Technician, Comcast Cable Communications

TOP 10 REASONS TO CHOOSE SCTE TRAINING

1. SCTE trains telecommunications professionals at all levels, from contractors and installers to senior level engineers, as well as industry segments such as operators, vendors and programmers.

2. SCTE has been the cable industry’s leading training organization for over 40 years.

3. SCTE training courses are built on an unmatched understanding of technology and network infrastructure from an in-house staff with decades of cable experience and a network of working groups consisting of technology experts and thought leaders.

4. SCTE training is recognized as the benchmark for proving cable knowledge and a path for promotion and career advancement.

5. International telecommunications organizations have consistently relied on SCTE training as their foundation for future business growth and development because all SCTE training courses can be customized to fit their specific business requirements.

6. SCTE offers numerous, convenient course delivery methods to fit telecommunication professionals’ schedules and learning styles.

7. SCTE training has helped thousands of professionals earn SCTE certifications—the industry’s premier endorsement for cable knowledge.

8. When compared to other industry training organizations, SCTE courses provide cost-effective solutions that fit any budget.

9. SCTE-Cisco Certification preparation courses are the only Cisco Academy programs that offer cable-specific content.

10. SCTE has established educational partnerships with colleges and universities where select SCTE Training Courses qualify for college credits applicable to certificate and degree programs.

IT PAYS TO BE A MEMBER.

Most of SCTE’s members-only benefits are free and all SCTE courses and webinars are offered at significant discounts for members. Take advantage of the full spectrum of SCTE resources, join or renew your membership at www.scte.org/join.
CAREER ADVANCING EDUCATION

SCTE courses are offered in a variety of formats so you can find the education and training that best fits your learning style. Learn online at your own pace or in a group setting through onsite training. Plus, upon successful completion of all course requirements, you’ll receive a certificate of completion validating your accomplishment, a course evaluation form, and earn Recertification Units (RUs) as credit toward SCTE certification renewal.

Earn College Credits Through SCTE
Many SCTE courses qualify for college credits when registered with an SCTE college partner. Look for the graduation cap symbol below to indicate college credit eligible courses.
+ www.scte.org/degrees

CHOOSE YOUR PREFERRED COURSE DELIVERY METHODS

SCTE training courses are delivered in several flexible formats to make learning easy. Course lengths vary depending on the depth of the course curriculum and are delivered over weekly time periods. Find the topics relevant to your career and education goals, learn the details, and then choose what’s best for your needs using these helpful icons.

Delivery Methods for Groups and Technical Teams
- Onsite Classroom
- Virtual Classroom
- SCTE Classroom
- Boot Camp

Delivery Methods for Individual Professionals
- Self-Paced Online

Additional Course Icons
- SCTE Recertification Units
- College Credit Eligible Course

Group SCTE Courses to Get Maximum Value Out of Your Training Dollars

Look for these icons to help you add value:
- Learn More With Course Packages
- Save Money With Course Bundles

SCTE LiveLearning Webinars™

Stay up-to-date on hot topics and technologies. This series of live, interactive, Web-based seminars is FREE for SCTE members and offered the third Wednesday of every month on issues you deal with daily. Plus, Members can access more than 60 archived webinars.

Topics include:
- Advanced Advertising
- Broadband Premises
- Broadband Telecom Center
- Business Services
- DOCSIS®
- EAS
- Energy
- Fiber Transport
- Home Networking
- HFC Systems
- IP
- OCAP
- PacketCable™
- Service Management
- Video
- VoIP
- Wireless Technology
- and more...
+ www.scte.org/livelearning

Publications & Education Resources

Build your knowledge quickly with resources such as SCTE and industry publications from the SCTE’s online bookstore, the SCTE Primer Series—a series of brief, online presentations that introduce cutting-edge cable technologies, or trainers’ resources that enhance trainers’ curriculum and expertise.

Knowledge & Information Resources

Find the answers to technical questions and topics that you need to excel through resources such as job aides and mobile apps, tech tips and facts, SCTE List—a members-only technical support forum, white papers, SCTE SupplierConnect—a technical cable product and service database, and more.
+ www.scte.org
SCTE TRAINING & CERTIFICATION

Advance your career through SCTE training and professional certifications.

Show Off Your Expertise
SCTE certification is the industry’s premier endorsement for technical professionals. SCTE certifies various levels of expertise across the cable network. SCTE training helps you prepare for SCTE and related industry certifications.

SCTE CERTIFICATION PROGRESSION

- Recommended Paths
- Related Industry Certifications

CompTIA
- A+
- Cloud+
- Network+
- Linux+

Red Hat
- Certified System Administrator
- Certified Wireless Technology Specialist (CWTS)
- Certified Wireless Network Administrator (CWNA)

BCSS
- Residential Customer Premises

BDS
- Commercial Customer Premises

BTS
- Network Operations & Maintenance

BTCS
- Engineering

DVEP
- Certified Wireless Network Professional (CWNP)

DEP
- Certified Wireless Technology Specialist (CWTS)
- Certified Wireless Network Administrator (CWNA)

= 4 Days
= 5 Days
= 10 weeks
= 10 weeks
= 3
Prerequisites: None

These advanced training courses and certifications will take your knowledge to the next level.

SCTE TRAINING & CERTIFICATION

ENGINEERING CERTIFICATION PREP. COURSES

DOCSIS® Engineering Professional
The DOCSIS® Engineering Professional (DEP) course helps broadband professionals better understand the elements and implementations of DOCSIS 1.0 through DOCSIS 3.1 specification. This course teaches operators how to quickly and easily build, deploy, manage and troubleshoot versions of DOCSIS networks.

= 4 Days
= 10 weeks
Prerequisites: None

Digital Video Engineering Professional
The Digital Video Engineering Professional (DVEP) course provides knowledge in the engineering aspects of digital media (which includes video, audio, interactive services, and associated data) systems as deployed in the Cable Telecommunications Industry. This course teaches design, analysis, testing, integration, deployment considerations, and troubleshooting of a variety of digital media systems from the headend to the customer premises.

= 5 Days
= 10 weeks
Prerequisites: None
SCTE Broadband certifications cover the network knowledge you need. From customer premises to the headend, learn how to deploy, manage and troubleshoot services across today’s cable networks.

**Broadband Premises Installation and Service**
The Broadband Premises Installation and Service course covers the knowledge needed to install and troubleshoot triple play services (voice, video, and data) for residential cable telecommunications customers. It includes customer service, troubleshooting, test equipment, measurements and service restoration related to industry-wide standards and practices, as well as instruction in the latest technologies, such as MoCA, IPv6, and digital home technology.

**Business Class Services Specialist**
The Business Class Services Specialist (BCSS) course provides an in-depth discussion of business class services from fundamentals to intermediate knowledge, including how to install and troubleshoot today's cable operator business services for small-to-medium businesses. The business services training will bridge knowledge gaps between the RF and IP services needed to support larger business networks.

**Broadband Distribution Specialist**
The Broadband Distribution Specialist (BDS) course teaches cable outside plant (OSP) and hybrid fiber coax (HFC) professionals signal distribution focusing on radio frequency distribution of signals in the access network. All aspects of the access network from the optical node to the distribution tap are included. Participants will learn the distribution knowledge of system architectures, power supplies, active and passive components; and construction in the access network.

**Broadband Transport Specialist**
The Broadband Transport Specialist (BTS) course focuses on optical signal distribution in the access network and transport networks, while continuing to reach closer to the FTTx deployment strategy in order to meet the customer’s bandwidth needs. All aspects of the fiber network from the optical node to the transport network are included. Participants will learn the knowledge of fiber network troubleshooting, fiber system preventive maintenance, fiber optic components and equipment; and restoration in the access network.

**Broadband TelecomCenter Specialist**
The Broadband TelecomCenter Specialist (BTCS) course provides knowledge in maintenance and troubleshooting of the inside plant facilities to ensure minimal system outages, maximum reliability, and standards compliance for optimal operations. This includes knowledge of Building Management Systems (BMS) control and monitoring, grounding practices, backup powering, advanced entertainment, data and voice networks within the headend.

**BUNDLE ANY SCTE CERTIFICATION PREP COURSE WITH AN EXAM**

Visit [www.scte.org/courses](http://www.scte.org/courses) for complete pricing and package details.
Only SCTE has cable-specific Cisco training. Prepare for Cisco certifications and save money by purchasing a SCTE-Cisco Prep. Course Bundle consisting of several SCTE-Cisco Networking Academy courses.

**CCNA1 – Introduction to Networks (CCENT 1 of 2/CCNA 1 of 4)**
This is the first of four courses that may be used to prepare for the Cisco Certified Entry Networking Technician (CCENT) or Cisco Certified Network Associate (CCNA) exams. CCNA1 introduces SCTE students to fundamental networking concepts and technologies using a hands-on approach. In addition, the course will assist the student in developing the skills necessary to plan and implement small networks across a range of applications. (Course includes orientation and 7 coaching sessions)

- **Duration:** 12 weeks
- **RU:** 3
- **Prerequisites:** None

**CCNA2 – Routing & Switching Essentials (CCENT 2 of 2/CCNA 2 of 4)**
This is the second of four courses that may be used to prepare for the Cisco Certified Entry Networking Technician (CCENT) or Cisco Certified Network Associate (CCNA) exams. CCNA2 describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. (Course includes orientation and 7 coaching sessions)

- **Duration:** 12 weeks
- **RU:** 3
- **Prerequisites:** CCNA1

**CCNA3 – Scaling Networks (CCNA 3 of 4)**
This is the third of four courses that may be used to prepare for the Cisco Certified Network Associate (CCNA) exam. CCNA3 describes the architecture, components, and operations of routers and switches in a larger and more complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network. (Course includes orientation and 7 coaching sessions)

- **Duration:** 12 weeks
- **RU:** 3
- **Prerequisites:** CCNA1 & 2

**CCNA4 – Connecting Networks (CCNA 4 of 4)**
This is the final course that may be used to prepare for the Cisco Certified Network Associate (CCNA) exam. CCNA4 discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement IPSec and virtual private network (VPN) operations in a complex network. (Course includes orientation and 7 coaching sessions)

- **Duration:** 12 weeks
- **RU:** 3
- **Prerequisites:** CCNA1, 2 & 3

**CCNA Security - Implementing Cisco IOS Network Security (IINS)**
CCNA Security introduces the core security concepts and skills needed to install, troubleshoot, and monitor a network to maintain the integrity, confidentiality, and availability of data and devices. Students develop an in-depth, theoretical understanding of network security principles as well as the tools and configurations available and gain the knowledge necessary to pass the Cisco CCNA Security 640-554 IINS exam.

- **Duration:** 12 weeks
- **RU:** 6
- **Prerequisites:** CCENT, CCNA Routing & Switching, or CCIE

**CCDA - Designing for Cisco Internetwork Solutions (DESGN)**
The Designing for Cisco Internetwork Solutions (DESGN) Cisco training course has been developed to enable cable professionals to understand the internetworking requirements, identify solutions, design the network infrastructure and services to ensure the basic functionality of the proposed solutions. This course will provide cable professionals with the necessary skills and knowledge necessary to pass the Cisco Certified Design Associate (CCDA) 640-864 DESGN exam.

- **Duration:** 5 Days
- **RU:** 6
- **Prerequisites:** CCENT
CCNP, CCDP - Implementing Cisco IP Routing (ROUTE) (1 of 3)
The ROUTE course is designed for network engineers with at least one year of professional work experience, who are ready to advance their skills and work independently on complex network solutions. Students will learn to plan, configure and verify the implementation of secure enterprise LAN and WAN routing solutions using a range of routing protocols. Course also covers configuration of solutions to support branch offices and mobile workers.

= 12 weeks  = 5 Days  = 6  Prerequisites: CCNA

CCNP, CCDP - Implementing Cisco IP Switched Networks (SWITCH) (2 of 3)
The SWITCH course is designed for cable network engineers with prior IP switch experience and those who are ready to advance their skills using modern switch techniques. Cable professionals learn to plan, configure and verify the implementation of; secure enterprise VLANs, advanced Spanning Tree Protocols (PVST+ & MST), advanced network services (VoIP, video & wireless) and high availability designs in telecommunication networks.

= 12 weeks  = 5 Days  = 6  Prerequisites: CCNA

CCNP - Troubleshooting and Maintaining Cisco IP Networks (TSHOOT) (CCNP 3 of 3)
TSHOOT is designed for network engineers with at least one year of professional work experience, who are ready to advance their skills and work independently on complex network solutions. Students will learn to (1) plan and perform regular maintenance on complex enterprise routed and switched networks and (2) use technology-based practices and a systematic ITIL-compliant approach to perform network troubleshooting. Extensive labs provide for hands-on learning and reinforce troubleshooting skills.

= 5 Days  = 6  Prerequisites: CCNA

CCDP - Designing Cisco Network Service Architectures (ARCH) (CCDP 3 of 3)
The aim of the course is to enable learners to perform the conceptual, intermediate, and detailed design of a network infrastructure that supports desired network solutions over intelligent network services, in order to achieve effective performance, scalability, and availability. This course enables learners, by applying solid Cisco network solution models and recommended design practices, to provide viable, stable enterprise internetworking solutions. The course presents concepts and examples that are necessary to design converged enterprise networks. Advanced network infrastructure technologies, such as virtual private networks (VPNs) and other security solutions, are also covered.

= 5 Days  = 6  Prerequisites: CCNA

SCTE-Cisco Certification Prep. Course Bundles
Prepare for Cisco certifications and save money by purchasing a bundle consisting of several SCTE-Cisco Networking Academy courses.

ONLINE BUNDLE
SCTE-Cisco CCNA Bundle 1 includes: CCNA1 and CCNA2
SCTE-Cisco CCNA Bundle 2 includes: CCNA3 and CCNA4
SCTE-Cisco Complete CCNA Bundle includes: CCNA1 - CCNA4
NOTE: Individuals with a CCENT certificate should purchase the SCTE-Cisco CCNA2 Bundle. The SCTE-Cisco Complete Bundle includes 4 courses (CCNA1-4) and is equivalent to 280 hours of instruction.

ONSITE BUNDLE
SCTE-Cisco CCNP Bundle includes: ROUTE, SWITCH, and TSHOOT = 15 Days Onsite
SCTE-Cisco CCDP Bundle includes: ROUTE, SWITCH, and ARCH = 15 Days Onsite

Visit www.scte.org/courses for complete details.

CCNA 5-Day Boot Camp (Pre- and post-course activities required)
Based on Cisco-Academy curriculum, this course provides foundational networking knowledge, practical experience, and soft-skill development for entry-level IT and networking functions, and CCENT and CCNA exam preparation. This course covers CCNA1-4 using an on-site blended learning approach and includes required pre-and post-course work, self-study, and onsite instructor.

= 5 Days*  = 6  Prerequisites: None

*40 hours with prior summary review of the reading material and post-course work, which is primarily accessing NETLABS.
Only SCTE has cable-specific CompTIA training.
Learn IT and network technology fundamentals while preparing for CompTIA certifications. Get started in a career in information technology through these SCTE-CompTIA courses.

Cloud Essentials (CompTIA Cloud+)
This course provides the knowledge and skills required to understand standard Cloud terminologies/methodologies, to implement, maintain, and support cloud technologies and infrastructures (e.g., server, network, storage, and virtualization technologies), and to understand aspects of IT security and use of industry best practices related to cloud implementations and the application of virtualization.

- **Duration:** 1 Day
- **RU:** 1
- **Prerequisites:** None

Home Networking Essentials: Wired and Wireless (CompTIA Network+)
This course provides foundational knowledge, success with implementation, understanding of the industry standards, and grasp of core technologies needed to respond to the market. The course brings value to the cable operator by saving on training investments and providing a productive workforce to support Home Network/Premises Networks. The content addresses both the wireless and wired home networks.

- **Duration:** 3 Days
- **RU:** 3
- **Prerequisites:** None

IT Essentials: PC Hardware and Software (CompTIA A+)
This course offers an in-depth understanding of computer hardware and operating systems with an emphasis on practical experience to help participants develop fundamental computer skills. Participants learn the functionality of hardware and software components as well as suggested best practices in maintenance, diagnosis, troubleshooting and safety issues. Through hands-on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems.

- **Duration:** 3 Days
- **RU:** 3
- **Prerequisites:** None

Linux® Level 1 (CompTIA Linux+)
This course provides detailed, fundamental information on the use and system administration of a Linux distribution. The course utilizes hands-on training to effectively use, customize, and to perform file and disk management using command-line utilities. It also covers installation, package management, and disk systems. Beginning Linux system administrators interested in learning essential administration skills for a Linux operating system should take this course.

- **Duration:** 3 Days
- **RU:** 3
- **Prerequisites:** Home Networking Essentials

Linux® Level 2 (CompTIA Linux+)
This course provides detailed, more in-depth information on shell scripting and data management in a Linux environment. The course utilizes hands-on training to effectively configure user interfaces and desktops; perform administrative tasks; and manage essential system services. In addition, the course will cover Linux networking and security fundamentals.

- **Duration:** 3 Days
- **RU:** 3
- **Prerequisites:** Linux Level 1

Red Hat System Administration I (RHCSA)
Red Hat® System Administration I is designed for IT professionals who are new to Linux® and require core Red Hat Enterprise Linux skills. This course focuses on essential administration tasks that will be encountered in the workplace, including installing the operating system, establishing network connectivity, managing physical storage, and performing basic security administration.

- **Duration:** 3 Days
- **RU:** 3
- **Prerequisites:** None
Only SCTE has **cable-specific CWNP wireless training**.
Learn today’s wireless technology and prepare for Certified Wireless Network Professional (CWNP) certifications. Expand your wi-fi knowledge through these SCTE-CWNP prep. courses.

**Wireless Level 1 - Certified Wireless Technology Specialist (CWTS)**
Wireless Level 1 provides a foundation of knowledge for entering into or advancing within the wireless networking industry. From basic RF theory and regulatory requirements to implementation of WLAN devices, this seminar focuses on bringing Wi-Fi technical professionals up-to-speed on the latest in 802.11 technologies in a practical way.

- **Duration**: 2 Days
- **RU**: 3
- **Prerequisites**: None

**Wireless Level 2 - Certified Wireless Network Administrator (CWNA)**
Wireless Level 2 provides the knowledge of RF behavior and describes the features and functions of WLAN components. The course will also focus on the skills required to install, configure and troubleshoot WLAN hardware peripherals and protocols.

- **Duration**: 2 Days
- **RU**: 3
- **Prerequisites**: Wireless Level 1

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**CABLE TECHNOLOGY TRAINING PACKAGES**

SCTE makes building knowledge easy by grouping training courses together based on the technology topics relevant to your job. Find the topics you need to learn and take each course to gain comprehensive knowledge on that topic.

**CABLE BASICS PACKAGE**

Are you new to the cable or a non-technical sales, marketing, or customer service professional? — Learn cable technology and network fundamentals to better connect yourself to the industry.

**Understanding Cable Technology**
Understanding the technologies supporting today’s cable telecommunications architecture is critical to making informed business decisions, thus maximizing an organization’s potential. In addition to learning about the core hybrid fiber-coaxial (HFC) architecture, participants will learn about the technologies used to deliver high-speed data, video, IP telephony, as well as networking at the subscriber’s premises. This course will then explore how to hold it all together with operation and business support systems. In the conclusion learners will get a glimpse of the future.

- **Duration**: 1 Day
- **RU**: 1.5
- **Prerequisites**: None

**Understanding Network Technology**
Understanding Network Technology is the ultimate introductory course designed to provide participants with the fundamentals of networking. This course covers the concepts for LAN and WAN networks, their architecture and network components. In addition to learning the core concepts, participants will learn the purpose of protocols, networking addressing and overview of digital media.

- **Duration**: 1 Day
- **RU**: 1.5
- **Prerequisites**: None

**Understanding IPv6 Technology**
Understanding IPv6 Technology is the ultimate introductory course designed to provide participants with the fundamentals of IPv6 in cable networks. This course explores the support needed and the benefits of transitioning from IPv4 to IPv6. It also provides an overview of IPv6 features and covers the many technologies behind the deployment and implementation of IPv6 from the core of the cable network to the subscriber’s premises.

- **Duration**: 1 Day
- **RU**: 1.5
- **Prerequisites**: None
DIGITAL HOME PACKAGE

SCTE prepares professionals for everything they need to know when it comes today’s digital home technology. Learn core network through these courses on topics such as Ethernet, IP, IT, home networking, wi-fi and more.

Ethernet Transport
This course teaches the basic functionality of Ethernet, as well as the standards, types of equipment, the provisioning process and various network architectures. Having knowledge of Ethernet & GigE will help broadband professionals better understand the components and implementations of Ethernet technology from 10BaseT through 10GigE as well as the benefits of future enhancements. This course teaches how to quickly and easily build, deploy, manage and troubleshoot Ethernet networks.

Prerequisites: None
Duration: 2 Days
Credit Hours: 2

Fundamentals of IP Networking in Cable Networks
This course is designed to provide cable operator personnel the practical knowledge, application and problem solving of Internet Protocol version 4/6 (IPv4/6) addressing in cable networks. Topics include variable length subnet masks (VLSM), subnetting, supernetting and classless interdomain routing (CIDR).

Prerequisites: None
Duration: 2 Days
Credit Hours: 2

Home Networking Essentials: Wired and Wireless (CompTIA Network+)
This course will provide foundational network knowledge, success with implementation, understanding of the industry LAN standards, and grasp of core technologies needed to respond to servicing the home networking. The content will address wired and emphasis on Wi-Fi home networks. Additional topics include network media and signals; IP addressing; TCP/IP protocols, routing and switching; Wi-Fi RF propagation and 802.11 technologies. Finally participants will explore the troubleshooting tools used in the home network.

Prerequisites: None
Duration: 3 Days
Credit Hours: 3

Impact of Going All Digital
This course provides an understanding of analog reclamation, QAM migration, service narrowcasting, encoding of services and digital hookups required for new customer premises equipment. Participants explore ways to improve system performance as they learn about the impact of going all digital with digital troubleshooting of services.

Prerequisites: None
Duration: 2 Days
Credit Hours: 2

IT Essentials: PC Hardware and Software (CompTIA A+)
This course offers an in-depth understanding of computer hardware and operating systems with an emphasis on practical experience to help participants develop fundamental computer skills. Participants learn the functionality of hardware and software components as well as suggested best practices in maintenance, diagnosis, troubleshooting and safety issues. Through hands on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems.

Prerequisites: None
Duration: 3 Days
Credit Hours: 3

Proactive Network Maintenance
This course provides a general understanding of proactivity tools and techniques and how they apply to today’s networks. It details how technologies, such as pre-equalization, can be used to identify, locate and address plant problems. In addition, discover how full RF capture and spectrum analysis in DOCSIS® modern chips can be used to identify plant impairments. In addition, next generation tools, such as techniques to solve for non-linear distortion and benefits of OFDM (Orthogonal Frequency Division Multiplexing) within DOCSIS 3.1, will be reviewed.

Prerequisites: None
Duration: 1 Day
Credit Hours: 1
Fundamentals of IP Networking in Cable Networks
This course is designed to provide cable operator personnel the practical knowledge, application and problem solving of Internet Protocol version 4/6 (IPv4/6) addressing in cable networks. Topics include variable length subnet masks (VLSM), subnetting, supernetting and classless interdomain routing (CIDR).

IPv6 Impact on Cable Networks
This course provides details on the capabilities of IPv6 and DOCSIS® 3.x, as well as the roles they play in the cable network management process, the rollout aspects of IPv6 implementation, DOCSIS 3.x integration, configuration, provisioning and troubleshooting network components, and the impact on cable networks.

Ethernet Transport
This course teaches the basic functionality of Ethernet, as well as the standards, types of equipment, the provisioning process and various network architectures. Having knowledge of Ethernet & GigE will help broadband professionals better understand the components and implementations of Ethernet technology from 10BaseT through 10GigE as well as the benefits of future enhancements. This course teaches how to quickly and easily build, deploy, manage and troubleshoot Ethernet networks.

Data Communications conveniently combines all three of these courses into one online course. It also meets college credits requirements at SCTE college partners—Learn more about this course at www.scte.org/courses.

Digital Basics and DOCSIS® Fundamentals
Discover the models at work in deploying data over telecommunications networks in this course. Learn the principles of digital signals and data transmission, for a better understanding of data transport protocols over local and wide area networks. Learners discuss the benefits of digital vs. analog, calculate analog-to-digital-conversion and examine digital modulation techniques as well as high-speed data over cable networks using DOCSIS cable modems.

DOCSIS Systems
DOCSIS Systems helps broadband professionals better understand the elements and implementations of DOCSIS 1.0 through DOCSIS 3.x as well as the benefits of future DOCSIS specifications. Operators will learn how to quickly and easily build, deploy, manage and troubleshoot versions of DOCSIS networks as well as spectrum, signals and protocols, DOCSIS cable modem self-provisioning, upstream-downstream corrective measures, DOCSIS system design architecture and Cable Modem (CM) configuration, and Cable Modem Termination Systems (CMTS). In addition, participants will discover important operating requirements, security parameters and troubleshooting tips for each version.

Channel Bonding in DOCSIS® 3.x
The course provides details on the capabilities of Channel Bonding within the framework of DOCSIS 3.x and how it will be incorporated into cable networks. There will be detailed presentations addressing US and DS Channel Bonding, traffic engineering, bandwidth management processes, the potential impact of Channel Bonding implementation with respect to network configuration modifications, and service provisioning. The depth of this course will benefit those responsible for integrating DOCSIS 3.x, specifically targeting Channel Bonding functionality.

Interested DOCSIS training online?
SCTE DEP Prep Course & Certification
www.scte.org/courses
HFC OUTSIDE PLANT PACKAGE

Technical professionals working in hybrid fiber coax (HFC) outside plants can learn to prepare, plan, and deploy new service extensions through SCTE’s in-depth knowledge of today’s diverse networks.

Coaxial Cable in the HFC Plant
Learn the concepts of comprehensive technical and basic system design theories as well as practical applications for broadband test equipment. This course covers math and measurements, amplifier systems, powering, coaxial cable, common cable system faults, Cumulative Leakage Index (CLI) tests, system operation and maintenance, spectrum analysis, system signal level meters, and more.

Fundamentals of Optical Fiber Transport
This course teaches the basic functionality of Ethernet, as well as the standards, types of equipment, the provisioning process and various network architectures. Having knowledge of Ethernet & GigE will help broadband professionals better understand the components and implementations of Ethernet technology from 10BaseT through 10GigE as well as the benefits of future enhancements. This course teaches how to quickly and easily build, deploy, manage and troubleshoot Ethernet networks.

Proactive Network Maintenance
This course provides a general understanding of proactivity tools and techniques and how they apply to today’s networks. It details how technologies, such as pre-equalization, can be used to identify, locate and address plant problems. In addition, discover how full RF capture and spectrum analysis in DOCSIS® modem chips can be used to identify plant impairments. In addition, next generation tools, such as techniques to solve for non-linear distortion and benefits of OFDM (Orthogonal Frequency Division Multiplexing) within DOCSIS 3.1, will be reviewed.

Return Path
This course zeroes in on design, set-up, certification and troubleshooting for the reverse system. It is presented in three sections: design and set up, maintenance and troubleshooting, and application, for a more detailed understanding of reverse spectrum characterization, monitoring, testing, and repairing. Attendees learn how to calculate return path losses and determine optimum levels for both distribution and fiber networks.

Interested in taking this training online? 
SCTE BDS or BTS Prep Courses & Certifications

IP PACKAGE

Internet Protocol (IP) is critical for the cable engineers and technicians who support the IP infrastructure for video, voice, and data systems. Learn cable-specific IP routing and switching and advanced IP knowledge you need to succeed with these courses.

Fundamentals of IP Networking in Cable Networks
This course is designed to provide cable operator personnel the practical knowledge, application and problem solving of Internet Protocol version 4/6 (IPv4/6) addressing in cable networks. Topics include variable length subnet masks (VLSM), subnetting, supermetting and classless interdomain routing (CIDR).

IPv6 Impact on Cable Networks
This course provides details on the capabilities of IPv6 and DOCSIS® 3.0, as well as the roles they play in the cable network management process, the rollout aspects of IPv6 implementation, DOCSIS 3.0 integration, configuration, provisioning and troubleshooting network components, and the impact on cable networks.
**VIDEO PACKAGE**

Digital video and the technologies that deliver it are essential components of today's cable systems. Explore Switched Digital Video (SDV) and MPEG video technologies and learn how to encode and transmit them to customers via network architectures.

**Fundamentals of SDV, Digital Video and MPEG Video**
This course is designed to provide a comprehensive overview of Switched Digital Video service and the components that make up the SDV network. Participants gain a solid understanding of the technology, network architectures, and common troubleshooting techniques in a Switched Digital Video network. The course begins with an overview of the technology, then explores the components and architectures that make up a Switched Digital Video network, how it works, how it is integrated within the HFC network and finally takes a look at trouble isolation and resolution, as well as the best practices for troubleshooting Switched Digital Video.

- **Prerequisites:** None

**MPEG Video**
The course provides a thorough background in MPEG technology and digital video encoding formats. It begins with an introduction to MPEG-2 and moves into an in-depth discussion of MPEG compression, the characteristics and purpose of MPEG-2, MPEG-4/AVC and MPEG-HVC. Participants will understand how to troubleshoot MPEG and identify common video artifacts and sources.

- **Prerequisites:** None

**VOICE PACKAGE**

Learn all aspects of VoIP over an HFC broadband network and how to troubleshoot technical problems, as well as deliver service, anytime, anywhere to today’s demanding customers using PacketCable™ 2.0 technologies through IMS and SIP implementation.

**Troubleshooting Voice over Internet Protocol (VoIP)**
This course is designed to introduce participants to the practical aspects of troubleshooting IP voice service as delivered over a broadband HFC network at both the IP Layer and the DOCSIS layer. The goal of the Troubleshooting Voice over Internet Protocol (VoIP) course is to reinforce participants’ existing knowledge of VoIP and develop new knowledge and skills relating to the isolation and resolution of real-world VoIP technical problems.

- **Prerequisites:** None

**Overview of IMS and SIP - PacketCable™ 2.0**
This course is designed as a comprehensive introductory course for the key elements of PacketCable 2.0 and provides an overview of IMS and SIP so the participant will have a solid foundation for planning implementation and deployment. The focus of this program will be the individual servers and functions necessary for complete PacketCable 2.0-based services. PacketCable 2.0 is designed to support the customer's desire for any service, anytime, anywhere. The complexity of the platform must be understood if successful deployments are to be realized.

- **Prerequisites:** None

**Interested in more in-depth video training?**
SCTE DVEP Prep Course & Certification

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LEADERSHIP TRAINING PACKAGE

SCTE prepares technical pros to advance their careers and helps organizations implement technology solutions by training new field operations supervisors and trainers. Look to the future and develop new leaders with SCTE leadership training.

Supervisor 101
Field operations supervisors are typically promoted to supervisor from the field technician ranks because they are good technicians. Often, these supervisors have had little training or experience in supervising and coaching others. In addition, these supervisors find they are challenged when learning to set priorities for their many tasks, managing their time, and maintaining their technical knowledge. SCTE’s Supervisor 101 course addresses these concerns.

Supervisors will gain an understanding of their role as related to business metrics, customer service, and safety. They will refresh their knowledge on basic installation practices and procedures and will be prepared to take the SCTE BPI certification. In addition, they will gain the skills and confidence to provide the necessary coaching to their direct reports. Leadership attributes include goal setting, time management, project management, and adult learning principles. Building coaching and time management skills will be emphasized. Supervisors will have the opportunity to develop better coaching skills by practicing in a safe environment.

Train the Trainer
This unique course teaches telecommunications industry supervisors, lead technicians and trainers how to better facilitate learning in a work or classroom environment. It focuses on developing attendees’ teaching skills, with multiple opportunities for practice and feedback. Train the Trainer participants discover the most effective methods for adult instruction and how to help students apply new knowledge. It features materials from SCTE’s training programs.

SCTE prepares technical pros to advance their careers and helps organizations implement technology solutions by training new field operations supervisors and trainers. Look to the future and develop new leaders with SCTE leadership training.

The SCTE Leadership Institute is designed enhance the careers of current and developing leaders. Through partnerships with highly-regarded institutions and organizations, the SCTE Leadership Institute programs are able to leverage the best and brightest minds and educators both within and outside of the cable telecommunications industry.

ADVANCED TRAINING FOR CABLE LEADERS

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Tuck Executive Education at Dartmouth

The SCTE-Tuck Executive Leadership Program
Conducted in collaboration with the Tuck Executive Education at Dartmouth program, this one-week program will serve to optimize communication skills needed to effectively execute on strategy and to successfully lead peers in the delivery of the networks and associated services. The program will also provide participants with critical thinking and business skills related to strategy development, communications, finance, decision-making, innovation and leadership.

Georgia Tech Executive Education

The SCTE-Georgia Tech Management Development Program
Designed in conjunction with the faculty at the nationally ranked Georgia Tech Scheller College of Business, this program will provide the foundation for high-potential individuals to grow into management positions related to technical and operational aspects of the cable telecommunications industry.

Ask your supervisor if you qualify for SCTE Leadership Institute Programs today.

+ Learn more at www.scte.org/institute
Build Your Technical Workforce With SCTE As Your Training Partner

An important element to the profitability of cable telecommunications organizations is the need for technology training programs. Increasingly, advanced programs are required to meet the constant demands of emerging cable technologies. In the industry’s current competitive environment, organizations must be able to provide education on a wide range of topics while minimizing disruption of the work process.

Workforce Training Solutions

SCTE offers courses covering current technology topics that can be tailored to the needs of your employees. Providing your entire technical training programs through a single source ensures that every employee completes their required programs, and that you have thorough documentation. Let SCTE show you a better way to provide your employee training at a cost that is less than you think.

SCTE Certification Programs

SCTE certification is the cable industry’s premier endorsement for technical professionals. SCTE Certifications are formed from a proven foundation of knowledge, and based on in-depth testing and ongoing professional development maintenance through continuing technical education requirements. SCTE certifies cable professionals in various levels of expertise, and across all levels of the cable network.

Your human resources department will have a proven benchmark for measuring technical knowledge. Honor your employees with recognition and/or advancement opportunities within your company or organization. If you don’t already have a program in place, SCTE can work with you to inform your workforce of the benefits of SCTE certification.

Training Discount Programs

Increase the value of your training dollars and train your entire team at prices you can afford. Fulfilling your education needs is easy with SCTE as a partner. SCTE offers lower rates and bulk discounts to help stretch your budget.

Training Course Bundles

SCTE also bundles cable knowledge to deliver extreme value. Whether your driven to provide employee advancements through certification or looking to focus on implementing new technologies, SCTE bundles provide robust training programs directly to your employees. By combining SCTE education courses and publications with career-building SCTE and industry-related certification programs, these bundles allow your employees to learn technology and prove their technical knowledge.

Onsite Course Bulk Discounts

Gather your technical teams and save by requesting SCTE onsite training at your location of choice. Group pricing is developed specifically to meet your company’s needs. Let SCTE know how many employees you’d like to register for a training course. Once you meet that minimum number, the registration cost for all employees over that amount is discounted significantly—the more you train the better the deal.

We’re Here To Help

For more information on how SCTE corporate training solutions can help ensure the success of your organization’s next training initiative, please contact us today. Call SCTE at 1-800-542-5040 or e-mail profdev@scte.org.

Cable telecommunications networks are only as good as the technical professionals who maintain the intricate technologies within them. Your organization’s workforce is your company’s biggest asset, so invest in technical training to ensure your systems are running at peak performance.
Build Your Cable Knowledge With Technical Training Courses from SCTE

→ Learn more and register at www.scte.org/courses

ENHANCE YOUR CAREER—JOIN SCTE

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