# **Teracom Training Institute**

The best in telecom training and certification - since 1992



# TCO CTA Certification: Certified Telecommunications Analyst

Differentiate yourself from the rest of the crowd when applying for a job or angling for a promotion, with solid knowledge of telecom and network technology – and TCO CTA Certification to prove it.

Ξ

The prestigious TCO Certified Telecommunications Analyst CTA Certification is the most comprehensive telecommunications certification available, demonstrating to employers that the holder has broad and deep telecom, datacom and network knowledge.

TCO CTA Certification is a very strong indication of the strength of your knowledge of telecommunications: the whole story, and the big picture in all of these areas:

- Fundamentals of Telephony and Voice over IP
- Telecom Equipment
- The Telecommunications Industry
- Digital
- Transmission Systems and Fiber Optics

- Wireless Telecommunications
- Introduction to Datacom and Networking
- Data Coding, Frames and Packets
- Modems: Representing Bits on Radio and Copper
- The Network "Cloud" and Service Implementation
- LANs, VLANs, Wireless and Optical Ethernet
- The OSI Layers and Protocol Stacks
- IP Networks, Routers and Addresses
- MPLS and Carrier Networks
- The Internet
- IP Security

This knowledge allows the CTA to perform analysis, write reports, make recommendations... be a Telecom Analyst and a Subject Matter Expert, which typically pay more than programmer positions.

It is accompanied by – a Teracom exclusive – a personalized Letter of Reference you can attach to your résumé explaining the very serious knowledge skills you have and inviting the reader to contact us.

# **Prepare for a Job**

This certification is an ideal way to prepare for a job in the telecommunications business. CTA certification is proof of your solid understanding of telecom, datacom and networking fundamentals, jargon, buzzwords and mainstream technologies and solutions.

Benefits of certification for individuals

# Train a New Hire

Teracom training coupled with TCO certification is a highly cost-effective, rapid and consistent way to train new team members.

Benefits of certification for employers

# **Getting your CTA Certification**

There are six choices for getting your CTA Certification:

- Online Courses
- Instructor-Led Seminars
- CTA Study Guide Textbook
- CTA Study Guide eBook

• Use your existing knowledge

# **Online Courses**

The CTA Certification Package is sixteen online multimedia courses, rich with graphics and video, corresponding to the sixteen modules of the CTA Exam. You get unlimited repeats of the courses and exams, which means guaranteed to pass and refresh your knowledge anytime in any area covered in the sixteen courses.

# Instructor-Led Seminars

Live, in-person instructor-led training is the best you can get. Learn more and interact with other people. All of the topics in all modules of the CTA Exam are covered in Telecom BOOT CAMP, a week-long seminar starting with our famous instructor-led core training Course 101 Broadband, Telecom, Datacom and Networking for Non-Engineers, followed by Course 130 Voice over IP, SIP, Security, 5G and IoT. The CTA Exam is included with Telecom BOOT CAMP.

# CTA Study Guide Textbook

Many people appreciate a printed book for their training. The CTA Study Guide is the 400-page printed textbook titled Telecom 101. Telecom 101 covers all topics in the CTA Exam. It can be purchased as a companion reference textbook to go with CTA Certification Package online courses, or used on its own to study for the CTA Exam.

# CTA Study Guide eBook

The Telecom 101 CTA Study Guide is also available as an eBook on the Amazon Kindle app, Google Play and iTunes/iBooks.

# Use your existing knowledge

If you already know all of topics covered by the CTA Certification, you are not required to purchase training material; you may register for the Exam only.

# Upgrade your résumé with this credential today!

Once you've taken the training - online courses, instructor-led seminar, or read the book, CTA Certification is obtained by writing the CTA Certification Exam, which is in 16 modules, each having 10 multiple-choice questions. 70% score is required to pass. There are unlimited repeats and no time limits.

# Quality you can trust

Join thousands of satisfied customers including the FBI Training Academy, US Marine Corps Communications School, US Army, Navy, Air Force and Coast Guard, the NSA and CIA, IRS, FAA, DND, CRA, CRTC, RCMP, banks, power companies, police forces, manufacturers, government, local and regional telcos, broadband carriers, individuals, telecom planners and administrators, finance, tax and accounting personnel and many more from hundreds of companies. Teracom's GSA Contract GS-02F-0053X for supplying this training to the United States Government is your assurance of approved quality and value.



# List of CTA Modules

The choices for coursework to prepare for the exam are described above.

- 1. Fundamentals of Telephony and Voice over IP
- 2. Telecom Equipment
- 3. The Telecommunications Industry
- 4. Digital
- 5. Transmission Systems and Fiber Optics
- 6. Wireless Telecommunications
- 7. Introduction to Datacom and Networking
- 8. Data Coding, Frames and Packets
- 9. Modems: Representing Bits on Radio and Copper
- 10. The Network "Cloud" and Service Implementation
- 11. LANs, VLANs, Wireless and Optical Ethernet
- 12. The OSI Layers and Protocol Stacks
- 13. IP Networks, Routers and Addresses
- 14. MPLS and Carrier Networks
- 15. The Internet
- 16. IP Security

# What You Get With CTA Certification

### 1. The certification exam

The certification exam is a closed-book multiple choice exam completed online in the myTeracom Learning Management System. Guaranteed Exam Pass Insurance is included, allowing you to repeat exam modules if necessary - which means guaranteed to pass if you're willing to do the learning.

Plus, on achieving a passing grade:

### 2. Your certificate, suitable for framing

A full-color TCO Certificate suitable for framing is automatically awarded by the Learning Management System on completion of the required exams.

It can be immediately printed on any color printer and framed by student as desired, with no shipping charges. It can also be attached to the electronic version of the student's CV.

An original hard copy of your Certificate, signed, sealed and framed can be ordered separately.

### 3. A personalized Letter of Reference / Letter of Introduction

You also receive a personalized Letter of Reference / Letter of Introduction explaining the courses you took and the knowledge you have, and inviting anyone you give it to to contact us as a reference... excellent addition to your CV.

### 4. Right to display the TCO logo

You'll have the right to display a high-resolution copy of the TCO logo on your résumé, business card, LinkedIn profile, web page, blog, or email signature.

### 5. TCO Certification Designation

Passing the Certified Telecommunications Analyst, you will be able to state that you:

- "are a Certified Telecommunications Analyst",

- "hold a Certified Telecommunications Analyst certification from the Telecommunications Certification Organization",

- are "certified as a Telecommunications Analyst by the Telecommunications Certification Organization",

- are a "Telecommunications Certification Organization (TCO) Certified Telecommunications Analyst", - are "TCO-certified",

and may sign your name

- "Richard Smith, CTA," or "Jane Smith, Certified Telecommunications Analyst"

Register for CTA Certification Package Register for Course 101 or Telecom BOOT CAMP

# **Benefits of Certification For Individuals**

One benefit of TCO certification is differentiating yourself from the rest of the crowd when applying for a job or angling for a promotion.

The knowledge you gain taking Teracom's Online Courses, confirmed with TCO Certification, is foundational knowledge in telecommunications, IP, networking and wireless: fundamental concepts, mainstream technologies, jargon, buzzwords, and the underlying ideas - and how it all fits together.

This type of knowledge and preparation makes you an ideal candidate to hire or promote to a task, as you will be able to build on your knowledge base to quickly get up to speed and work on a particular project - then have the versatility to work on subsequent projects.

TCO Certification will help demonstrate you have this skill... a desirable thought to have in your potential manager's mind.

# **Benefits of Certification For Employers**

Teracom certification packages are an extremely cost-effective way of implementing consistent, comprehensive telecommunications and network technology fundamentals training, ensuring that both existing resources and new hires are up to the same speed, with a common vocabulary, framework and knowledge base.

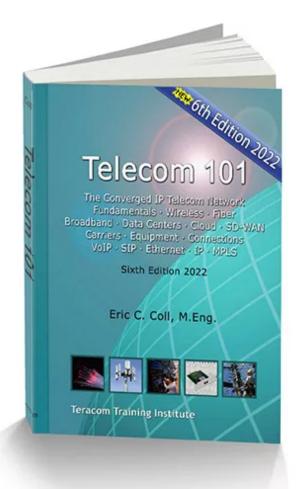
The course exams provide concrete measurements of competency in key knowledge areas.

Management can view reports on the progress and results of team members, and export results to Excel with the click of a button. These reports identify skills strengths and deficiencies, and are a demonstration of meeting managerial objectives of team building and return on investment.

Get this training for your whole team. The scalable myTeracom Learning Management System can register and manage all of your people through courses, exams and certificates.

For larger organizations, the courses and exams can also be licensed and deployed on your LMS.

### Get started today to make this invaluable addition to your knowledge and skills!



# CTA Study Guide Telecom 101

Sixth Edition 2022. High-Quality Reference Book and Study Guide Covering All Major Telecommunications Topics... in Plain English.

550 pages • printed in color • 6th edition • published 2022 ISBN 9781894887113 (softcover) • ISBN 9781894887120 (hardcover) • ISBN 9781894887137 (eBook) Telecommunications • Broadband • Data Communications • Networking • IP • Convergence • Fundamentals • Wireless • Fiber • Data Centers • Cloud • Carriers • Equipment • PSTN • SD-WAN • VoIP • SIP • Ethernet • MPLS

Packed with information, authoritative, covering all major topics - and written in plain English -Telecom 101 is also an invaluable textbook and day-to-day reference on telecom.

Completely updated and revised, the new Sixth Edition of Telecom 101 is the materials from the latest version of Teracom's famous Course 101 Broadband, Telecom, Datacom and Networking for Non-Engineers, plus additional topics and chapters.

In a user-friendly softcover version, printed in color, hardcover, or eBook, Telecom 101 brings you in one volume consistency, completeness and unbeatable value.

Telecom 101 also serves as a study guide for the Telecommunications Certification Organization TCO Certified Telecommunications Analyst (CTA) telecommunications certification, covering all material required for the CTA Certification Exam except the security module.

Ideal for anyone needing a book covering all major topics in telecom, data communications, IP and networking... in plain English. A wealth of clear, concise, organized knowledge, impossible to find in one place anywhere else.

### Get a professionally bound printed copy to enhance your learning!



### $\star \star \star \star \star$ Best Book on the Market for Telecom, 6 stars

By Amazon Customer on August 6, 2017

### Format: Paperback | Verified Purchase

This is by far and away the best book for someone in the telecom field who works with these products on a daily basis. There is no other book that I have found that addresses these concepts in a clear and relevant manner. I work for AT&T and trust me, this book is on point.

It is also meaningful for someone interested in learning about telecom. The author starts the book by providing an overview of telecom and how it relates to modern technologies in use today.

Not only is the information extremely relevant and well written, the author is humorous and uses great real world examples to validate his points. A must read!!

## ★★★★★ Exceptional Book

By Boruch T. on July 26, 2016

Format: Kindle Edition | Verified Purchase

It's an EXCEPTIONAL book. it explains EVERYTHING in Telecom in such plain easy to understand English. From Binary codes to how carriers perform COS and QOS by MPLS everything was explained thoroughly and easy language. Its a must for anybody that plans on dealing with telecom.

read more reviews



### Invest in yourself

Implement a major career-enhancing upgrade to your knowledge, or prepare for a job in the telecommunications business.

### Get the knowledge you need

Understand telecom, datacom and networking fundamentals, jargon, buzzwords, technologies and standard practices... and how it all fits together.

### Benefit from decades of experience

with courses covering all major topics, right up to date, in clear lessons logically organized to deliver structured knowledge that lasts a lifetime.

### Instructor-led, self-paced or self-study

Get the preparatory coursework in instructor-led classroom training, online courses and Certification Packages, or the self-study textbook.

<u>more</u>

# **Teracom Advantages**

#### • Proven courses used by the biggest telecom carriers to train their employees

These courses are the same courses used by the biggest telecom carriers in the business to train their employees - constantly updated to deliver the core technical knowledge required in the telecom business today.

This is the best quality training of its kind available.

#### • GSA Schedule

Teracom online courses and certification packages are on our US Government supply contract... which took two years and a 200-page application... so you know you are getting quality.

#### • Career-enhancing knowledge

This training is an ideal way to implement a career-enhancing upgrade to your knowledge, or to prepare for a job in the telecommunications business.

#### Unlimited Exam Pass Insurance Included

The included Exam Pass Insurance allows you to repeat module exams if necessary - which means guaranteed to pass the exam if you're willing to learn.

#### • Instructor-led, self-paced or self-study coursework

Get the preparatory coursework in instructor-led classroom training, self-paced instructor-led video modules, or the self-study textbook.

#### • Team training

The coursework combined with the CTA Exam is a highly cost-effective and consistent way for managers to get team members up to a common speed with measurable results.

The myTeracom Learning Management System provides management reports showing your team's progress on the exam modules with a few clicks of the mouse.

**Register for CTA** 

Learn about Team Training and Group Discounts

# **Technical Level and Intended Audience**

Our training has been taught to wide acclaim across North America since 1992 and is designed for the non-engineering professional needing an overview and update, and for those new to the business needing to get up to speed quickly on telecommunications, data communications, IP, MPLS, wireless, networking, Voice over IP (VoIP) phone systems, SIP and security.

Our emphasis is conveying the key concept-level knowledge in plain English - which you can't get reading trade magazines or talking to vendors. We put in place a solid, valuable and long-lasting understanding. It is our goal to bust the buzzwords, demystify the jargon, and cut through the double-talk to present a clear, cohesive picture.

Based on Teracom's proven instructor-led training courses developed and refined over twenty years providing training for organizations including AT&T, Verizon, Bell Canada, Intel, Microsoft, Cisco, Qualcomm, the CIA, NSA, IRS, FAA, US Army, Navy, Marines and Air Force and hundreds of others, Teracom online courses are top-notch, top-quality and right up to date with the topics and knowledge you need.

# The no-hassle training solution



Teracom's high-quality online courses are delivered in Google Chrome browser on any Windows or mac desktop or laptop, iPad, android tablet or phone with an internet connection... to any number of people, anywhere, anytime.

Ideal for self-paced training, courses are divided into lessons. Stay on a lesson for as long as you like, and move to the next lesson then write the course exam only when ready.

Team training packages with group discount and management reporting from our Learning Management System are very popular.

With the Unlimited Plan, you can repeat exams as needed, and retake courses anytime in the future. There are no time limits or expiration dates. 30-day 100% money-back guarantee.