



# Certified Wireless Analyst

Get fully up to speed on wireless – with certification to prove it!

Learn the fundamentals, jargon and buzzwords, principles of operation and ideas behind the full range of today's wireless technologies.

Get the CWA Certification Package, complete with high-quality courses featuring our entertaining instructor, graphics and bullets, plus certification:

**Course 2231: Wireless Fundamentals**

- Radio fundamentals. Radio spectrum.
- Digital: modems and modulation

**Course 2232: Mobile Communications**

- Cellular principles. Mobility and handoffs.
- Digital voice. Mobile Internet Access.
- The generations: 1G, 2G, 3G, 4G
- The technologies: FDMA, TDMA, CDMA and OFDM
- The systems: GSM, 1X, UMTS, HSPA and LTE

**Course 2233: Fixed Wireless**

- Wireless LANs, 802.11 standards, WiFi, security
- Bluetooth, WiMAX, point-to-point and satellites

Upgrade your skills – and your résumé – with this set of courses, giving you the core technical knowledge base required in the wireless business.

Guaranteed to pass with unlimited exam repeats!  
No-questions-asked 30-day 100% money-back guarantee.  
Quality and recognition you can count on.

**Invest in yourself!**

**Get started today**

**at [teracomtraining.com](http://teracomtraining.com)**

## **Benefits of Certification for Individuals**

TCO Certification differentiates you from the rest of the crowd when applying for a job or angling for a promotion.

The knowledge you gain taking these high-quality courses, confirmed with TCO Certification, is foundational knowledge in radio and wireless: fundamental concepts, mainstream technologies, jargon, buzzwords, 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**

Take advantage of these courses for individual learning, a team, or for an entire organization. The scalable myTeracom Learning Management System can register and manage all of your people through their courses, lessons and exams, and generates reports showing progress and scores.

For larger organizations, the courses and exams can also be licensed and deployed on an organization's internal LMS.

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

## **Quality You Can Trust**

Benefit from decades of knowledge, insight and experience distilled into clear lessons, logically organized to build one concept on another.

Based on Teracom's proven instructor-led training for AT&T, Verizon, Bell Canada, Intel, Microsoft, Cisco, Qualcomm, NSA, CIA, FAA, US Army, Navy, Marines and Air Force and hundreds of others. This training is top-notch, top-quality and right up to date with the topics and knowledge you need.

Supplier to the US Government under GSA contract GS-02F-0053X

*Get started today with this invaluable addition to your knowledge and skills!*

## What You Get With The CWA Certification Package

### 1. High-quality, up-to-date, comprehensive training

You will get a solid foundation of structured knowledge. You will learn the fundamentals, technologies, jargon and buzzwords... and how it all fits together

### 2. The certification exam

Each course in the certification package has an associated exam, typically ten multiple-choice questions with a 20-minute time limit.

You get unlimited repeats of the exam - which means guaranteed to pass. Plus, on achieving a passing grade:

### 3. 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.

The PDF can be immediately printed on plain or textured paper 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 and sealed, can be sent to you by mail for \$25 plus first-class mail cost.

### 4. 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.

### 5. 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.

### 6. TCO Certification Designation

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

“are a Certified Wireless Analyst”,

“hold a Certified Wireless Analyst certification from the Telecommunications Certification Organization”,

are “certified as a Wireless Analyst by the Telecommunications Certification Organization”,

are a “Telecommunications Certification Organization (TCO) Certified Wireless Analyst”,

are “TCO-certified”,

and may sign your name

“Richard Smith, CWA,” or “Jane Smith, Certified Wireless Analyst”

### 7. A 30-day no-questions-asked 100% money-back guarantee.

## **Course 2231 Wireless Fundamentals**

Begin with the fundamentals: what radio is, how it's organized and how and it's used to communicate information. Since most systems are digital, we spend some time understanding how modems represent 1s and 0s on radio and explain jargon like QAM and QPSK. We finish with penetration and fading.

- A. Radio
- B. Wireless Spectrum and Radio Bands
- C. Analog Radio
- D. Digital Radio: How Modems Work
- E. Propagation, Penetration and Fading

## **Course 2232 Mobile Communications**

With a good foundation in place, we'll cover mobile communications from A to Z: cellular principles, digital voice, data over cellular, mobile Internet access, the technologies: FDMA, TDMA, CDMA and OFDM, and the generations: 2G GSM, 3G 1X, UMTS and HSPA and 4G LTE. This is where the money is!

- A. Mobile Network Components and Operation
- B. Cellular
- C. 1G: Analog Frequency-Division Multiple Access
- D. Second Generation: Digital Cellular
- E. Digital Cellular: Voice Communications
- F. Internet Access via Cellular: "Data" Communications
- G. 2G TDMA (IS-136): Time-Division Multiple Access
- H. 2G TDMA (GSM): Time-Division Multiple Access
- I. 2G CDMA: Code-Division Multiple Access
- J. Spread Spectrum
- K. CDMA Operation and Patents
- L. 3G: CDMA 1X and UMTS
- M. 4G: LTE
- N. 4G: OFDM
- O. Dynamic Assignment of Subcarriers
- P. Spectrum-Sharing Roundup: FDMA, TDMA, CDMA, OFDM

## **Course 2233 Fixed Wireless**

We'll round out your knowledge with fixed wireless: WiFi, 802.11, WiFi security, Bluetooth, WiMAX, point-to-point microwave and satellites.

- A. Infrared
- B. Bluetooth
- C. WiFi: Wireless LANs
- D. WiFi Security and WPA2
- E. 802.16 WiMAX
- F. Point-to-Point Microwave
- G. Satellite

Invest in yourself! Upgrade your résumé with this essential core knowledge.