

# Commissioning Technician Seminar (BSC CxCT)

November 6-8, 2023

Gaithersburg, MD

## Location:

**NEBB TEC**

8575 Grovemont Circle  
Gaithersburg, MD 20877

## This Seminar is Designed for:

- Entry-level professionals who are interested in advancing their knowledge of the technical commissioning test procedures required to effectively commission HVAC.
- Professionals seeking to enhance their knowledge of technical testing and troubleshooting of building systems and their associated controls.
- Experienced commissioners seeking to enhance their knowledge of building systems.

Registration Deadline:

**October 6, 2023**





## Our COVID-19 Response Plan

Considering COVID-19, NEBB has taken several proactive steps to help ensure the health and safety of our attendees and instructors. Precautions such as constant sanitization of the seminar area increased attention to high-touch areas in the rooms, limits on the number of attendees during the seminar, and protective gear for our instructors are in place. NEBB also will be practicing social distancing and maintaining 6 feet apart.

### Responsibilities for Each Attendee:

- If you are experiencing any symptoms of COVID-19 like running a fever, coughing, or shortness of breath, please do not attend the seminar.
- You have been exposed to someone who has tested positive for COVID-19 in the last 14 days.
- You have a compromised immune system or are considered “high risk.”
- Masks are required during the seminar and gloves can be worn if desired.
- Sanitize hands prior to entering the seminar location.
- Avoid shaking hands or engaging in any unnecessary physical contact.
- Signing a waiver prior to the seminar.





## Seminar Instructors:



### **Curtis Anthony**

Curtis Anthony is a Senior Associate at Newcomb & Boyd Consultants and Engineers. He is a past Board member of NEBB and former Chairman of NEBB's Cx Committee. He has more than 30 years of experience in Mechanical Construction, TAB, Building Systems Commissioning, and specialized containment disciplines. Curtis began his own company in 1992-2020, TAB/ Optimum Energy Solutions, Inc. Curtis has an array of experience in various building types, including health care and Bio safety laboratory facilities. Curtis has been a member of the Commissioning committee since 2013 and was instrumental in the development of various handbooks and Standards, including, the 2019 S110, and S120 standard. NEBB Certified Professional Credentials include TAB, Cx, RCx, FH, S&V, and is an Advanced NSF accredited certifier of Class 2 Bio Safety Cabinets.



### **Bill Kinser**

Bill Kinser is the President and CEO of ES2 a building automation, Cx, and TAB company. He is a registered professional engineer who provides mechanical design build services. Bill has held multiple NEBB certifications for over 20 years. His entire 32-year career has been in commercial construction and the HVAC industry.





## About This Seminar:

The technical commissioning process is an important aspect of any business and is a growth opportunity for those wanting to:

- Pursue their professional development in this segment of the industry
- Learn about performing system testing for the commissioning and retro-commissioning process
- View demonstration in testing procedures provided in the technical commissioning process
- Make first steps toward the Building Systems Commissioning CP

The goal of this seminar is to provide the knowledge for individuals to become successful technicians working under a NEBB Certified Professional and encourage the pursuit of Cx Technician certification. Those attending should have a base knowledge of commissioning work.

### Learning Objectives

- Fundamental knowledge of building systems commissioning
- Understanding of performing Pre-Functional and Functional Tests
- Air and water system troubleshooting
- Handling report preparation
- Evaluating existing systems and determining corrective actions
- Adherence to the overall safety plan
- Maintaining instruments and calibration program
- Knowledge in evaluating HVAC and control systems
- Understanding testing control systems



*This Seminar has been approved for 17.5 Continued Education Credits*



## Seminar Schedule:

If you are interested in certification and/or taking the exam, please contact [certification@nebb.org](mailto:certification@nebb.org)

### Monday, November 6, 2023

(7 CECs)

**7:30 AM:** Registration

**8:00 AM - 12:00 PM:**

Overview of NEBB, NEBB Commissioning Procedural Standards, Quality Assurance Program, and Commissioning Technician Roles and Responsibilities.

**1:00 PM - 5:00 PM:**

Hands-On Training: TAB Verification, Data Loggings, Sensor, and Device Checks.

*(Lunch Provided)*

### Tuesday, November 7, 2023

(7 CECs)

**8:00 AM – 12:00 PM:**

Hands-On Control Systems Training: Introduction to Building Automation Systems, Point-to-Point Verification, Graphics, Commissioning BAS.

**1:00 PM - 5:00 PM:**

Pre-Functional Testing, Functional Testing, Commissioning Reporting & Documentation.

*(Lunch Provided)*

### Wednesday, November 8, 2023

(3.5 CECs)

**8:00 AM – 12:00 PM:**

Seminar Wrap-Up, Review, and Q&A Session.

**1:00 PM:**

Optional Exam

*(Lunch Provided)*



## Travel Information:

We recommend all attendees that are unfamiliar with the seminar location or require travel from another location review the following information prior to registering for this seminar.

### Hotels:

Attendees can make reservations directly with the hotel of their choice. Below is a short list of hotels near the training center. Hotel and transportation costs are not covered by the seminar registration fee.

#### Homewood Suites Gaithersburg

805 Russell Ave  
Gaithersburg, MD 20879  
301-670-0008

[Booking Link](#)

#### Hilton Garden Inn & Homewood Suites by Hilton Rockville, MD

14975 Shady Grove Rd  
Rockville, MD 20850  
240-507-1900

[Booking Link](#)

### Airport:

Three airports service the Maryland/Washington Metropolitan area:

**Ronald Reagan Washington National Airport (DCA):** 30 miles from facility; 37 minutes average drive time; \$80 average taxi fare.

**Dulles International Airport (IAD):** 33 miles from facility; 34 minutes average drive time; \$80 average taxi fare.

**Baltimore/Washington International Airport (BWI):** 40 miles from facility; 44 minutes average drive time; \$100 average taxi fare.

## Important Dates and Times:

### Arrival in Gaithersburg, MD

Sunday, November 5, 2023

### Seminar Dates:

Monday - Wednesday, November 6-8, 2023

### Optional Exam

Wednesday, November 8, 2023

### Seminar Location:

NEBB TEC

8575 Grovemont Circle

Gaithersburg, MD 20877



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# NEBB NOV CxCT SEMINAR REGISTRATION FORM

**Registration form and payment must reach the NEBB office on or before October 6, 2023.**

Pre-registration and payment of fees are necessary to ensure your participation in the seminar.

Three ways to register:

1. Online through the [Certelligence Portal](#)
2. Email this form to [training@nebb.org](mailto:training@nebb.org), or
3. Mail this form to: NEBB, 8575 Grovemont Circle, Gaithersburg, MD 20877.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone/Cell: \_\_\_\_\_

Email: \_\_\_\_\_

Please list any dietary restrictions and/or ADA accommodations:

\_\_\_\_\_

**Seminar Fees (Check all that apply)**

- \$850 CxCT Seminar Registration Fee  
(Does not include candidacy application or exam fees)

**Publication Fees**

- \$200 NEBB/ \$250 Non-NEBB: Environmental Systems Technology
- \$90 NEBB/\$150 Non-NEBB: NEBB Commissioning Technicians Handbook
- \$150 NEBB/ \$200 Non-NEBB: Handbook for Energy & Water Calculations, includes CD with Energy Calculations
- \$125 NEBB/Non-NEBB: ANSI/NEBB S110:2019, Second Edition Whole Building Technical Commissioning of New Construction (Hard copy or Electronic)
- \$125 NEBB/Non-NEBB: ANSI/NEBB S120:2019, Third Edition Technical Retro Commissioning of Existing Buildings (Hard copy or Electronic)

*\*Prices for publications do not include shipping and handling*

**Optional Exam Opportunity:**

Please check the box below. If interested, please email [certification@nebb.org](mailto:certification@nebb.org) for the candidacy application process. Pre-approval and payment are required before the deadline.

- Yes, interested in taking the exam
- No, not interested in taking the exam

**Payment Method**

- Check enclosed made payable to NEBB
- Visa  MasterCard  American Express

Name on Card \_\_\_\_\_

CC Number \_\_\_\_\_

Expiration Date \_\_\_\_\_

Security Code \_\_\_\_\_

Signature \_\_\_\_\_

\$ \_\_\_\_\_ **Total Amount Due**

Note: Any candidacy or exam fees will be invoiced separately.

**Cancellation Policy:** Cancellation by registrants, regardless of reason, will be subject to a \$250 service charge to cover NEBB's expenses. A refund of the prepaid registration will be made less the \$250 service charge. No Shows or late cancellations (those who registered for the seminar who do not cancel at least 14 days prior to the seminar and subsequently do not attend the course) will forfeit the entire registration fee unless a replacement can be found. NEBB reserves the right to cancel any seminars having insufficient registrants, in which case, all prepaid registration fees will be refunded in full. Please advise NEBB and your hotel of your cancellation as soon as possible.





# Seminar Attendee Requirements:

To achieve the best educational experience, attendees are asked to read the following BEFORE attending the training seminar. It is assumed that all attendees have a thorough working knowledge of the requirements of these NEBB publications prior to attending the seminar.

- Attendees should have basic system knowledge of HVAC and Building Automation System Operations
- Attendees are required to bring all the required publications below to the seminar.
- Attendees are required to bring a laptop with Windows operating system, Adobe Acrobat, Microsoft Word, Microsoft Excel and have a working knowledge of the software prior to attending the seminar.
- Attendees will need to bring a calculator.

## Important Reminders:

1. Registrations will be filled on a “first come-first served” basis.
2. Seminar fees include course instruction, lunch, and am/pm breaks.
3. **Seminar fees do not include anything pertaining to certification. For information on certification or exams please contact [certification@nebb.org](mailto:certification@nebb.org).**

## Recommended Publications:

To achieve the best learning results, it is highly recommended that attendees **read the following publications BEFORE** attending the seminar:

- [NEBB Fundamental Formulas](#)
- Commissioning Technician’s Handbook – 2015
- ANSI/NEBB S110-2019, Second Edition: Whole Building Technical Commissioning of New Construction
- ANSI/NEBB S120-2019, Third Edition: Technical Retro-Commissioning of Existing Buildings
- NEBB’s Procedural Standards for Testing, Adjusting and Balancing of Environmental Systems
- Environmental Systems Technology
- [Honeywell Engineering Manual of Automatic Control of Commercial Buildings \(free download\)](#)

The instructor assumes that all attendees have a thorough working knowledge of the requirements of these NEBB publications prior to attending the seminar. Publications can be purchased online at [www.nebb.org](http://www.nebb.org).

## Questions About This Seminar?

Call 301-977-3698 or email [training@nebb.org](mailto:training@nebb.org)

