# Sound & Vibration Measurement S&V Seminar

**September 2-5, 2025** 

## This Seminar is Designed For

- Individuals interested in pursuing NEBB certification in sound and/ or Vibration measurement
- Professionals from other disciplines who want to expand their knowledge of sound and vibration as it relates to their business
- Firms interested in learning more about sound and vibration
- Engineers and architects interested in expanding their knowledge of sound and vibration

### Location

**Engineering Dynamics, Inc.** 3925 S. Kalamath St.

Englewood, CO 80110



# **September 2-5, 2025**



**Stuart McGregor** 

Stuart McGregor, PE, is a senior acoustical engineer at Engineering Dynamics, Inc. He has 30 years of experience as an acoustical engineer and vibration analyst, for environmental and building projects. He is a member of NEBB's Sound and Vibration S&V Committee, NEBB Certified Professional S&V and ANSI CAT II Vibration Analyst certified (via the Vibration Institute). Stuart is active in the Rocky Mountain NEBB chapter and has been a co-instructor for NEBB CP and CT sound and vibration training seminars.



**Chad Mathews** 

Chad Mathews is a principal at Air Technologies, Inc. in Austin, TX. He has 20 plus years of experience in the TAB industry and maintains TAB, SM, and VM CP certifications. He is a member of NEBB's Sound and Vibration S&V Committee. He is active in Texas NEBB and has been a co-instructor for NEBB CP and CT sound and vibration training seminars.



### **About This Seminar:**

NEBB's Sound and Vibration Seminar is designed to prepare professionals from all disciplines in the correct methods to properly perform consistent, repeatable readings to meet sound and/or vibration specifications for projects.

Sound and vibration measurement is a valuable service for building owners who strive to maintain a quality environment and minimize maintenance costs. Sound and vibration measurement have been shown to provide tangible cost savings.

- Sound measurement and analysis play an important role in providing acceptable space usage for various commercial, manufacturing, and industrial activities.
- Vibration measurement and analysis is a proven predictive maintenance activity that helps minimize repair and downtime costs for rotating machinery.

### **Learning Objectives**

- Learn how to satisfy the specification and customer requirements and know how to perform accurate repeatable sound and vibration measurements.
- · Learn basic troubleshooting and diagnostic knowledge.



### Tuesday, September 2, 2025

(6.5 CECs)

7:30 am: Registration

**8:00 am – 4:30 pm:** Physics of Sound, Practice making sound level measurements, Practice Problems. Sound level Instrumentation, Calibration of Sound Level Instrumentation, Sound Level Measurement, Analysis of Sound Measurement, NEBB Documentation Procedures, Practice Problems

(Lunch provided)

### Wednesday, September 3, 2025

(6.5 CECs)

**8:00 am - 12:00 pm:** Review, Practice making sound level measurements, Practice Plotting NC and RC Charts. (Lunch provided)

**12:30 pm – 4:30 pm:** Vibration Fundamentals, Acceleration, Velocity, Displacement, Simple Harmonic Motion, Single Degree of Freedom Systems, Relationship between Acceleration and Velocity, Displacement Phase.

### Thursday, September 4, 2025

(6.5 CECs)

**8 00 am – 4 30 pm:** Vibration Unit Conversions Calculations, Vibration Instrumentation, Overall vibration level meters, Spectrum Analyzers, Frequency Range, Bandwidth, Lines of Resolution, Frequency Resolution, Windowing, Transducer Sensitivity, Accelerometer, Velocity Transducers and Displacement Sensors. (Lunch provided)

## Friday, September 5, 2025

(O CECs)

8:00 am - 12:00 pm: Sound Optional Written & Practical Exams.

1:00 pm - 4:30 pm: Vibration Optional Written & Practical Exams.



### **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 in close proximity to the training center. Hotel and transportation costs are not covered by the seminar registration fee.

### **Holiday Inn Denver Lakewood**

7390 W Hampden Ave. Lakewood, CO 80227 (303) 980-9200

### **Comfort Suites Lakewood - Denver**

7260 W Jefferson Ave. Lakewood, CO 80235 (303) 988-8600

### Airport:

### **Denver International Airport (DEN):**

30 miles from the facility; 40 minutes average drive time; \$57 average taxi fare.

### **Important Dates and Times:**

# **Arrival in Englewood, CO**Monday, September 1, 2025

#### **Seminar Dates:**

Tuesday-Thursday, Sept. 2-4, 2025

# Optional SM and VMCP Paper-based Exam and Practical Exams

Friday, September 5, 2025

#### **Seminar Location:**

Englewood, CO 80110

# **Engineering Dynamics, Inc.** 3925 S. Kalamath St.



### **NEBB SEPT. S&V SEMINAR REGISTRATION**

### Registration and payment must be submitted on or before August 2.

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

### **Register Online**

- 1. Log into your <u>Certelligence</u> portal
- 2. Scroll down to "My Events"
- 3. Select your desired seminar and complete the registration

#### **Seminar Fees**

\$1000 Sound Measurement Seminar Registration Fee (Does not include candidacy application or exam fees)

\$1000 Vibration Measurement Seminar Registration Fee (Does not include candidacy application or exam fees)

### **Publication Fees**

- \$95 NEBB/ \$125 Non-NEBB: Procedural Standards for the Measurement of Sound and Vibration
- \$90 NEBB/ \$130 Non-NEBB: Sound and Vibration Design Analysis
- \$150 NEBB/ \$200 Non-NEBB: Sound Measurement HSC

### **Optional Exam Opportunity**

If you are interested in testing after the seminar, please email certification@nebb.org for the candidacy application material. **Pre-approval and payment are required before July 18th**.

### **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.

# **Attendee and Seminar Requirements:**

### **Recommended Publications:**

To Achieve the best learning results, it is highly recommended that attendees read the following publication BEFORE attending the seminar:

- Procedural Standards for the Measurement and Assessment of Sound & Vibration
- Sound & Vibration Design and Analysis
- Sound Measurement Home Study Course

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.

### **Important Reminders:**

- 1. Registrations will be filled on a "first come-first served" basis.
- 2. Seminar fees include course instruction, lunch, am/pm breaks.
- 3. Seminar fees do not include anything pertaining to certification. For information on certification or exams please contact certification@nebb.org.



### 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.

### • We ask that you

- 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

### • Please stay home 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"

