



# Reverberation Chamber Theory and Experiment Short Course

February 17-21, 2025

Oklahoma State University  
Stillwater, OK

Several standards including MIL-STD 461, RTCA DO 160, IEC 61000-21, SAE J551/J113 and ISO 11451-5 permit the use of reverberation chambers for EMC certification testing. The recommended test methods for environmental standard testing for UAS systems closely follows the existing MIL and DO 160 standards. The most recent updates to ISO 11451-5 (and 11) standard supports using the reverb chamber at frequencies below the normal lowest usable frequency of a RC, using different RF injection methods. This comprehensive course will provide an awareness of all aspects of usage of reverberation chambers for EMC testing as a route to compliance.

**4.0 CEUs** This course is designed for engineers and technicians who will be involved in radiated emission or immunity testing of commercial or military systems using reverberation chambers. The course will also be valuable to personnel evaluating the use of reverberation chambers as a complement to or replacement for other types of radiated test facilities.

Registration before  
**January 17, 2025**  
**\$3,750**

The theory portion covers the statistical nature of reverberation chamber testing, characterization of the EM test conditions, and the tradeoff between uncertainty in test results and test time. The experimental portion includes demonstrations, test setups and instrumentation, statistical sampling

Registration after  
**January 17, 2025**  
**\$4,690**

techniques (mechanical tuner operation and frequency sweeps), and chamber characterization and calibration measurements. While the experimental portion includes reverberation chamber demonstrations it consists primarily of a series of hands-on experiments conducted in 4 to 5 person groups. The notes format includes the objective, a description of the experiment, instrumentation, test setup, procedures, and room for specific measurements, analyses, results, and conclusions. Participants will have a thorough understanding of the operation of a reverberation chamber for EMC testing. They will have developed a test plan for an immunity test with specified conditions and objectives. They will also have a permanent record of data collected and analyzed, and an extensive set of notes.

Register online at <http://ceatpd.okstate.edu> or by calling 405-744-5714

