



Course Catalog Number: Ttm-3
Course Track: Thermodynamic Measurements
Course Topic: Temperature
Course Career Level: Beginner+

Monday, August 26 | 8:00 AM - 12:00 PM | 1/2-Day AM (4 Hours)

Course Title: Fundamentals of Temperature Measurement and Calibration

Instructors: Mike Coleman, Fluke Calibration and Mike Imholte, Boston Scientific

Abstract: This course provides fundamental knowledge about temperature measurement and temperature calibration. It is applicable for someone that is new to temperature calibration or for someone that wants to stay updated on topics such as the international temperature scale, common temperature calibration instrumentation, - such as RTDs, PRTs, SPRTs, thermistors, thermocouples, and digital thermometers, methods of temperature calibration, and a review of mathematics used in temperature measurement and calibration. It is also a good opportunity to bring up questions to help solve your temperature measurement challenges. The course includes instrument demonstrations of PRT RTPW measurement, measurement in a dry-block calibrator, and thermocouple wiring and instrumentation setup. This course is preparatory for the Advanced Topics in Temperature Measurement and Calibration.

Learning Objectives:

1. Learn how temperature is measured and controlled for application in industry.
2. Learn about the common temperature measurement devices used in industry.
3. Learn about the mathematics used in temperature calibration.
4. Learn how to properly maintain temperature reference standards for reliable performance.

Instructor Curriculum Vitae (CV): Michael Coleman is the corporate temperature metrologist for Fluke Calibration. He has worked in test and calibration for 23 years starting at Intel and 20 years at Hart Scientific and Fluke Calibration. His areas of expertise in contact thermometry are calibration of SPRTs, PRTs, Thermocouples, Thermistors, Digital Thermometer Systems, Humidity Sensors, and Humidity Chambers. Michael works is the technical manager of the primary temperature calibration laboratory in American Fork, Utah supervising calibration processes and working with Fluke design engineering in development of new Fluke temperature calibration products. He also provides webinar-based training and classroom training at Fluke Calibration. He graduated from Brigham Young University with a BS in Electronics Engineering Technology.