

# Basic Hands-On Metrology

**A four-day “how to” course that describes and demonstrates measurement concepts and techniques**

## Course outline

- Introduction to measurement
- Safety in the cal lab
- Math for the calibration specialist
- Basic electronics for metrology
- Working and secondary standards
- Lab instrumentation and precautions
- Environmental impact on measurement uncertainty
- Understanding and using instrumentation specifications
- Important considerations regarding cables, connectors, and adapters
- What is a “guard” and when to use it
- Digital multimeters calibration principles
- Basic thermometry calibration principles
- Basic pressure calibration methods and techniques
- Handheld scope calibration considerations and concerns
- Documentary quality standards and the calibration professional
- Course exam

## Who should attend

This course is designed for those who have not had any formal measurement/calibration training. This might include people with an engineering degree, people cross-training from mechanical calibrations, and people moving from plant process calibration to instrumentation calibration. You will find this course is essential for understanding the necessary

calibration processes and techniques for obtaining repeatable results. This is also an excellent course for quality assurance professionals who want to know more about the world of calibration and metrology.

## Prerequisites

A high school education and an understanding of basic math, algebra, physics, and science is recommended. Some hands-on experience in plant process maintenance, process calibration, or meter calibration is helpful.

## Course information

**Course No.:** TRC 1101  
**Course length:** Four days or 32 hours of class time (This supports requirements for continuing education.) Each student who completes the course will receive a Fluke Certificate of Completion.  
**Course Materials:** Fluke will provide all the course materials needed for the class.

## Registration

Complete and submit the on-line registration form at [www.flukecal.com/training](http://www.flukecal.com/training). Once you submit the form, a Fluke Calibration representative will contact you to verify space availability and to discuss payment terms. If you have an active MET/SUPPORT Gold plan or Gold CarePlan, you are eligible for a 20 % discount course fees. Once you provide payment to finalize the registration, you will receive an email confirmation with course details. We recommend that you register at least 60 days in advance of the desired course.



## Cancellation

You may cancel your training reservation at no charge by notifying Fluke Calibration at least two calendar weeks prior to the class start date. If cancellation is received less than two weeks in advance, you will be charged the full tuition for the course.

Fluke Calibration reserves the right to cancel any course that does not reach minimum enrollment two weeks prior to class start date. If this happens, you will be notified immediately.

**Economical training for groups**

If you want to train a large group, an on-site course can be an economical solution. Contact Fluke for a price quote and details.

**Contact us**

**Email:** training@flukecal.com

**United States**

877-292-3225 (toll free)  
+1 425-446-5500 (international)

**Canada**

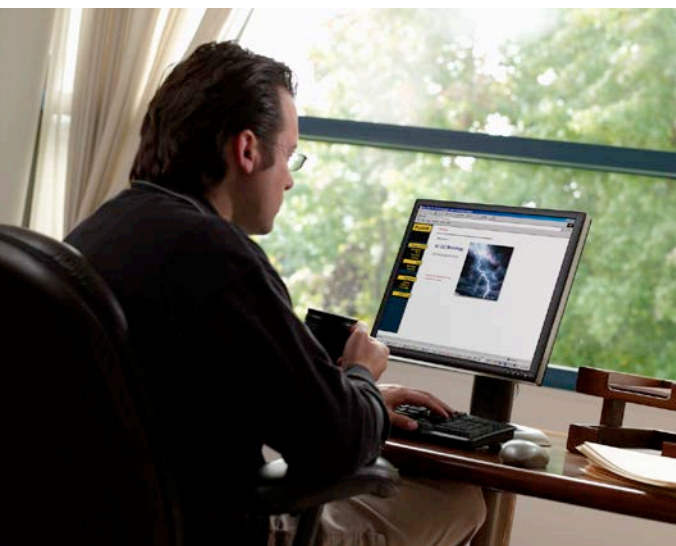
800-36-FLUKE (toll free)  
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Visit the website at:  
**[www.flukecal.com/training](http://www.flukecal.com/training)**,  
for the latest Fluke Calibration  
has to offer in calibration and  
metrology training.

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