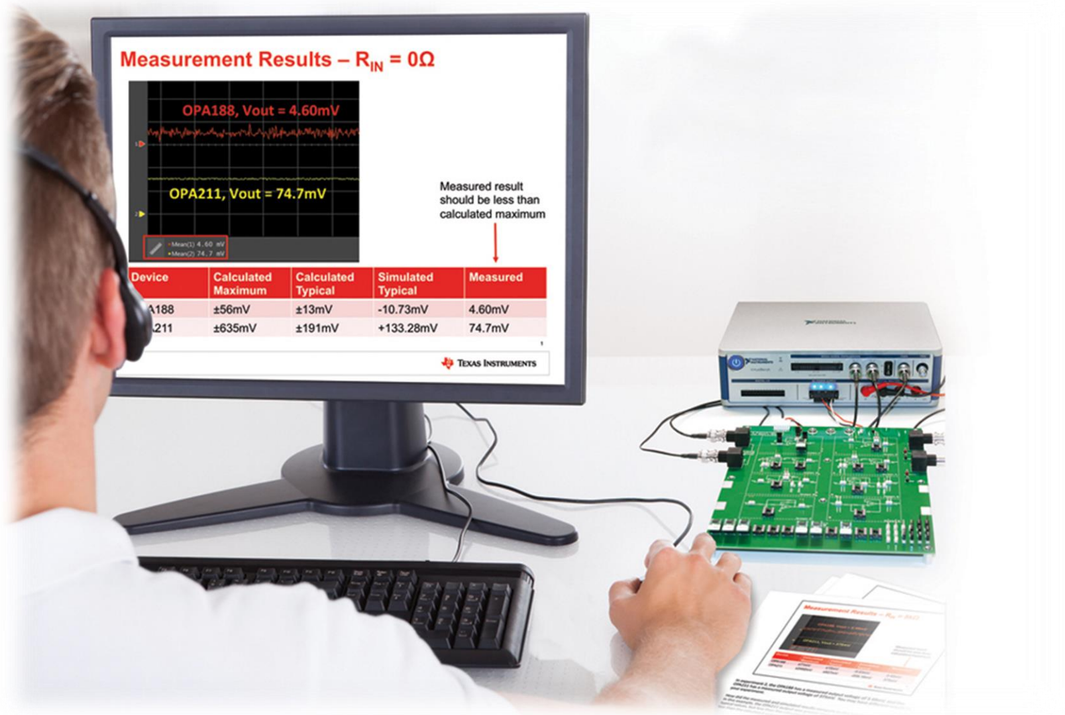
TI Precision Labs LIVE Training

Typical one-day agenda

Start	End	Duration	Lecture and Lab
9:00am	9:30am	30min	Introduction
9:30am	10:30am	60min	Short Topic 1
10:30am	10:45am	15min	Break
10:45am	11:45am	60min	Short Topic 2
11:45am	1:00pm	75min	Lunch
1:00pm	2:00pm	60min	Short Topic 3
2:00pm	3:15pm	75min	Long Topic - Part A
3:15pm	3:30pm	15min	Break
3:30pm	5:00pm	90min	Long Topic - Part B



Choose three of four short topics

1. **V_{OS} and I_B**
   How well do you know the major contributors to DC operational amplifier input errors?
2. **Input and Output Limitations**
   An inside look at an operational amplifier's input and output stages on different process technologies
3. **Bandwidth**
   Did you know when calculating operational amplifier bandwidth you should always use the non-inverting gain? Do you know why bandwidth impacts quiescent current?
4. **Slew Rate**
   We will provide an explanation of large and small signal analysis, slew boost, slew rate over temperature, slew rate vs. full power bandwidth, and the relationship of V_{os} and slew rate

Choose one of two long topics

1. **Noise**
   Understanding noise in a real-world circuit is critical to achieving your overall system noise performance goal, but noise calculations are complicated and often require long hand calculations. After attending this session you will be an operational amplifier noise expert! You will be able to quickly calculate the noise of your circuit
2. **Stability**
   You will learn the common causes of operational amplifier stability issues as well as common stability compensation techniques and their associated tradeoffs

Texas Instruments