

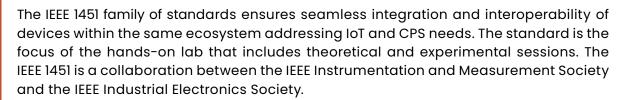


## **2024 IEEE**

INTERNATIONAL SYMPOSIUM ON



## COME PARTICIPATE IN THE HANDS-ON LAB AT IEEE M&N 2024!



This session will consist of a 1-hour theoretical class and a 2-hour laboratorial class.

## Conceptual background- 1 hour

- » Introduction and Motivation
- » IEEE 1451 Family Reference Model
- » Transducer Electronic Data Sheets
- » TIM TransducerChannels Structure and Organization
- » TransducerChannels Attributes and operating modes
- » Triggering, Synchronization and Status
- » Message Structures and Commands TIM/NCAP
- » How to use the IEEE 1451 in my product

## Hands-on Application Lab – 2 hours

- » The laboratory explores how to develop a Transducer Interface Module (TIM).
- » A Low-Power Temperature Smart Sensor's source code is provided to be executed in a MSP430.
- » First, the TIM internal structure is explored. Afterwards, the attendees will be guided in adding a new transducer channel.

Participants will receive the following support documentation free of charge:

- PowerPoint oresentation used in the two lectures
- TIM source code (MSP430 version)
- Access to online tools
- Laboratorial protocol

Participation will be limited, so please sign up now! Students are especially encouraged to join.

**GOOGLE FORM** 



This Hands-on-Lab will be a session in parallel with the Workshop on the second day of the conference, July 3, 2024. For more information on the Workshop, please visit the M&N 2024 Website.