

# PRINCIPLES OF INSTRUMENTATION (POI) TRAINING



## COURSE OBJECTIVE:

The purpose of this training is to educate instrumentation technicians, engineers or technical salespersons on the basics of various process measurements and electronic testing tools that they will be using on a daily basis. Upon completion of this course, attendees will further develop their overall knowledge and have the ability to communicate on the same level as experienced personnel. POI Training is offered as a comprehensive package or may be customized to meet the individual's specific training needs. Speak with Emily Jones, TechStar's Customer Experience Coordinator for more information.

## TOPICS REVIEWED

- Communication Basics D
- Level Measurements
- Wireless Communication
- HART Communication Basics
- Pressure Measurements
- Multi-meter Basics
- Understanding Hazardous Areas
- Temperature Measurements
- Calibration Tools and their Uses
- Signal Conditioning and Isolation
- Liquid Flow Measurements
- Gas Detection
- Gas Flow Measurements

## COURSE OVERVIEWS

COURSE	POI 1-4 (Full Course)	POI 1-4 (Full Course)	POI 1	POI 2	POI 3	POI 4
Focus			Tools for Testing, Calibrating, Troubleshooting and Simulating Process Instrumentation	Flow	Level	Introduction to Temperature, Pressure, Gas Detection & Wireless Communication
DURATION	4 DAYS	2 DAYS	1 DAY	1 DAY	1 DAY	1 DAY
Topics Covered	Covers all agenda topics.	Covers all agenda topics.	<ul style="list-style-type: none"> <li>• Communication Basics</li> <li>• HART Communication</li> <li>• Understanding Hazardous Areas</li> <li>• Signal Conditioning &amp; Isolation</li> <li>• Multi-Meter</li> </ul>	<ul style="list-style-type: none"> <li>• Differential Pressure Transmitters</li> <li>• Vortex Shedding Flow Meters</li> <li>• Electromagnetic Flow Meters</li> <li>• Coriolis Flow Meters</li> <li>• Ultrasonic Transmitters</li> <li>• Thermal Dispersion Flow Meters</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous Level Measurement – Through Air Radar and Guided Wave Radar</li> <li>• Radiometric/ Nuclear Level Measurement</li> <li>• Displacer Level Measurement</li> <li>• Level Switches</li> <li>• Magnetic Level Indicator Bridle</li> <li>• Point Level Measurement</li> </ul>	<ul style="list-style-type: none"> <li>• Temperature Measurements</li> <li>• Pressure Measurements</li> <li>• Wireless Communication</li> <li>• Gas Detection</li> </ul>



### TECHSTAR UNIVERSITY TECHNICAL TRAINING

We offer technical training courses on the various industrial automation solutions that we offer. These hands-on courses are continually taught in our state of the art technical training centers in Deer Park (Houston), Dallas, Corpus Christi, Baton Rouge and Tulsa. Any of our courses can also be taken onsite at any location and can be tailored to meet the specific needs and applications of customers just like you. Please visit our website to review our complete technical training offering.



### TECHSTAR ON CALL

When it comes to our customers and their applications, we are always on call. Our technical resources create customized training based on your specific needs, delivered on an individual level. Whether it be onboarding new personnel, training for specific products or a mandatory recertification to maintain compliance, we partner with you every step of the way to ensure your goals are met



### FUNCTIONAL VERIFICATION UNIT - THE UNIT

Interactive training that is specific to your company's process is always preferred but interrupting production to test your new knowledge is probably not an option. This is where the newest addition to our Training & Development Solutions, The Functional Verification Unit – THE UNIT, comes into play. Test your knowledge in THE UNIT completing lab scenarios during one of our technical training courses. Having issues in production that you need to work through? Schedule some time in THE UNIT with one of our technical resources to mimic your specific process conditions, test and troubleshoot.



### T3: TECHSTAR TECHNICAL TALKS

Distance learning is an essential component to ensure that you're well educated in your critical processes. We are excited to bring our technical experts to our customers both live and on demand with our T3: TechStar Technical Talks. Join us for sessions on different applications, solutions and the latest innovations applicable to Oil & Gas, Water/Wastewater, Food & Beverage, Pharmaceuticals and more.

Reserve a seat for one of our Live T3 Sessions and receive the following:

- TechStar Training Kit – Delivered Prior to Your Session
- CEU/PDH Credits – Available Upon Request

The learning doesn't stop there! Discuss a specific application, sensor or anything regarding your process or facility 1:1 with one of our technical experts at a time that is convenient for you. Schedule a meeting online for one of our T3: Custom Option 1:1 sessions.



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I'm here to help you with your company's training needs! Contact me with any questions.

