

Process Training University

Course Descriptions

A-101 pH/Conductivity Measurement School

This course (8 hours) starts by providing maintenance and engineering personnel with a basic understanding of pH and conductivity analytical technologies. This basic portion focuses on concepts applicable to virtually any manufacturer's equipment. Following this introduction, we proceed with in-depth training on pH and conductivity. The class is a combination of classroom and hands-on training.

C-200 Basic Profibus Training (non-Certified)

This basic Profibus training course (24 hours) is an intensive hands-on and theoretical 3-day training program. This course provides the introduction to digital communications and PROFIBUS basics (token passing, master/slave, messages, etc.), DP/PA links and comparisons, installation instructions, components, termination and cycle time calculations, voltage and current calculation of a PA segment and much more.

C-201 Certified PROFIBUS PA Engineer Training

This program (24 hours) is officially recognized by PROFIBUS International and represents a worldwide training standard. During the first three days trainees gain a thorough base of knowledge regarding PROFIBUS PA and parts of DP technology. On the fourth day, the program finishes with an exam. The lessons build upon each other in a way that the depth of the course steadily intensifies while core topics are brought home through repetition and the participant's personal hands-on experience.

C-203 FieldCare Plant Asset Management Training (FDT)

After completing this course (8 hours), participants will understand what Plant Asset Management means, what can be the scope and how it can be used to improve a process. They will understand the differences, advantages and disadvantages of analog and digital data transmission in terms of configuration and maintenance.

C-204 Basic Industrial Ethernet Technology Training

In this course (16 hours) learn how an Ethernet network is installed with the help of actual hands-on tasks. Beginning with configuring your own Ethernet cable and planning your network, discover how Ethernet works in detail. Features like device setup, troubleshooting as well as wireless and fiber optical networks are part of the training.

I-101 Basic Instrumentation School

This hands-on introductory course (16 hours) to instrumentation started by providing maintenance and engineering personnel with a basic understanding of wiring, signals, instrumentation technologies, applications and installations. Fundamental operation of the common instruments found in today's process industries is examined from a view applicable to virtually any manufacturer's equipment. Typical troubleshooting procedures for instrumentation are covered and practiced.

I-104 Loop Checkout & Troubleshooting Training

This loop checkout and troubleshooting course (16 hours) starts by providing maintenance and engineering personnel with a basic understanding of control loop fundamentals, and basic process control theory. Following this introduction, instrument loop drawings are studied in detail, with a review of P&IDs. Next is a discussion of loop calculations needed to checkout and troubleshoot control loops, followed by actual hand-on exercises in the PTU® (Process Training Unit). The advanced hands-on portion of the course reviews test equipment used in loop checkout and troubleshooting, and is followed by basic and advanced hands-on exercises in the PTU. Finally, methodologies for loop troubleshooting are explored, followed by basic and advanced loop troubleshooting exercises in the PTU.

F-100 Coriolis Flow Fundamentals

This is a basic fundamental course (4 hours) for Coriolis mass flow technology for maintenance technicians. We dedicate a half day to Coriolis technology to give you a basic understanding of this flow measurement technology. The class consists of a classroom presentation, product demonstration, group discussion, and a small amount of hands-on training with working table top units. There is a live installation demonstration on a PTU.

F-101 Flow School – Introductory

This introductory course (16 hours) to flow starts by providing maintenance and engineering personnel with a basic understanding of numerous flow technologies. The basic portion focuses on the physics of flow and concepts applicable to virtually any manufacturer's equipment. Following this introduction, we proceed with in-depth training on magnetic and Coriolis flow meters. The class is a combination of classroom and hands-on training.

F-102 Flow School – Advanced

This advanced course (16 hours) is designed for those students having successfully completed basic Flow School (F101). The class starts by providing instrument techs and engineers with a brief section on the basic understanding of numerous flow technologies. Following this introduction, we proceed with in-depth training on vortex, magnetic, ultrasonic and Coriolis flow meters. This class primarily is hands-on training at our PTU.

F-103 Coriolis Flow School

This Coriolis flow course (8 hours) starts by providing maintenance and engineering personnel with a basic understanding of the Coriolis principle. This basic portion focuses on concepts applicable to virtually any manufacturer's equipment. Following this introduction, we proceed with in-depth training on density and concentration measurements. This class is a combination of classroom and hands-on training in our PTU.

F-104 Basic Flow School

This basic course (8 hours) starts with the fundamentals of flow which focus on the physics of flow and concepts applicable to virtually any manufacturer's equipment. The next portion provides maintenance and engineering personnel with a basic understanding of numerous flow technologies and operating principles. Following this introduction, we proceed with in-depth material on magnetic and Coriolis flow meters. The class is a combination of classroom and hands-on training.

L-101 Level School – Introductory

This introductory level course (16 hours) starts by providing maintenance and engineering personnel with a basic understanding of numerous level technologies. This basic portion focuses on concepts applicable to virtually any manufacturer's equipment. Following this introduction, we proceed with in-depth training on Time of Flight (ToF) technologies that include a variety of radar types as well as ultrasonic level transmitters. This is a combination of classroom and hands-on training.

L-102 Level School – Advanced

The advanced Level School (16 hours) begins with a brief review of current level technologies. Following the technology refresher, we proceed to look deeper at each level measuring technology discussing then implementing proper techniques of configuration and calibration and troubleshooting. There is an emphasis on an in-depth understanding of ToF technologies and envelope curves. This class is primarily focused on hands-on training at our PTU.

L-100 Radar Level Fundamentals

This is a basic fundamental course (4 hours) for guided wave and free space radar level for maintenance technicians. We dedicate a half day to radar technology to give you a basic understanding of this level measurement technology. The class is primarily classroom presentation, product demonstration, group discussion, and a small amount of hands-on training with working table top units. There is a live installation demonstration on a PTU.

L-103 Time of Flight (ToF) School

This ToF course (8 hours) for level starts by providing maintenance and engineering personnel with a basic understanding of numerous ToF technologies. This basic portion focuses on concepts applicable to virtually any manufacturer's equipment. Following this introduction, we proceed with in-depth training on ToF technologies that include a variety of radar types as well as ultrasonic level transmitters. The class is a combination of classroom and hands-on training.

L-104 Free Space & Guided Radar School

This is an introductory course (8 hours) for free space and guided wave radar level for maintenance and engineering personnel. We dedicate a half day to each technology to provide a basic understanding of these level technologies. The class is a combination of classroom and hands-on training on a PTU.

P-101 Pressure & Temperature School

This introductory course (16 hours) provides maintenance and engineering personnel with a basic understanding of numerous pressure and temperature technologies. This basic portion focuses on concepts applicable to virtually any manufacturer's equipment as well as the skills needed to set up and maintain such equipment. Introductions and lectures on the technologies are followed with in-depth demonstrations and hands-on training exercises.

Course Pricing

Hours	Course number	Price pp
4	F-100, L-100	\$275
8	A-101, F-103, F-104, L-103, L-104, C-203	\$650
16	1-101, F-101, F-102, L-101, L-102, P-101, C-204	\$1,500
24	C-200 Basic Profibus, FF, and other network engineering technology	\$2,500
24	C-201 Certified Profibus PA Engineer	\$2,995
	Discounted price for Profi International Organization members	\$2,495