



# PROFITECH 2005

Hands-On Certification Training





The PROFIBUS Trade Organization (PTO), in cooperation with the PROFIBUS Interface Center (PIC), is proud to offer the sixth year of the PROFIBUS Certification Training Course. This class is an intensive, hands-on, four and a half day training program conducted at the PIC in Johnson City, Tennessee. Attendees passing the test will receive an official PROFIBUS Certified Engineer Certificate and 24 PDH hours. In addition, their names along with their email address will be posted on the PROFIBUS Web site.

## ABOUT THE CLASSES

This class provides a mix of theory about PROFIBUS protocol and “hands-on” problem-solving exercises. Since it is highly technical in nature, the prerequisites for attending are:

- Industrial automation background (PLC programming and/or experience with fieldbus systems)
- Familiarity with basic communication terms and features (Master-Slave, etc.)
- An understanding of RS485, repeaters, addressing, etc.

For the training, two identical racks equipped with multi-vendor slave devices are used. The racks can be used on their own or in combination. The ProfiTech 2005 Certification Courses will be offered on the following dates:

March 28 - April 1  
April 25 - 29  
May 23 - 27  
June 27 - July 1

September 26 - 30  
October 31 - Nov. 4  
November 28 - Dec. 2

*“Really appreciated the high calibre of instruction. The guys were great and very knowledgeable regarding the PROFIBUS products and the industry in general. The testing phase gave very definite legitimacy to the end result.”*

*-Les Nyulak,  
Cutler-Hammer Canada*

*“I found that the PROFIBUS Engineer Certification has really helped me. I really feel that all the Open Bus technologies should follow suit and come up with their own certification. The information provided in the classroom as well as the Certification Testing has given me the tools to succeed from planning to implementation. Do yourself a favor, attend this Certification Course!*

*-Phillip M. McGough  
Emerson Process Management*



*“The PROFIBUS class was one of the best classes I have attended. The information was clear and concise. The instructors were excellent. The troubleshooting tools and programs were very good.”*

*-Norman Ross  
Nestle R&D Center, Inc./Ohio*



*“The PROFIBUS Class was excellent. The material is well organized and complete. The instructor Ron Mitchell is very knowledgeable, not only from the theoretical side but also from the practical world point of view. It is one of the best training courses I have attended.”*

*-Nitin Dhayagude  
Schneider Automation, Inc.*

## CLASS SYLLABUS

### PROFIBUS Overview:

- Protocol Positioning
- Bus Access
- Multi-Master Systems
- Functionality & Protocol Structure of devices
- DP & PA Features
- DP & PA Commonality
- PA Configurations
- Future Protocol Trends

### Network Setup & Debug

- Installation & Wiring - Copper
- Network Configuration
- Bus Timing
- Alternative Media

### DPVO Telegrams Overview

- Telegram Format
- Master & Slave Interactions

### PROFIBUS Bus Monitor

- Monitor Features
- Tracing, Triggering & Filtering

### DPVO Master/Slave Interaction Details

- Master Class 1
- Master Class 2

### System Debugging

- Bus Monitor
- Other Tools

### Bus Timing

- Single-Master System
- Multi-Master System

### DPV1 Telegrams Overview

- Telegram Formats
- Master & Slave Interactions

### DPV1 Master/Slave Interaction Details

- Master Class 1
- Master Class 2

### PA Network Setup & Debug

- Wiring & Installation
- Configuration - DP/PA Link
- Configuration - DP/PA Coupler
- Use of Bus Monitor

### Network Components

- DP/DP Coupler
- Other Components

### Summary of Things to Do & Check

### New Features/Profiles

- PROFIsafe
- PROFIdrive
- PROFINet

## AGENDA - DAYS 1 THROUGH 5

**Day 1 :** Technical Material & Exercises, 12:30 pm to 4:30 pm

**Day 2 - 3 :** Technical Material & Exercises, 8:30 am to 4:30 pm

**Day 4 :** Technical Material & Exercises, 8:30 am to 12 pm  
Practical Exam, 1:00 to 3:30 pm & 3:30 pm to 6 pm

**Day 5 :** Written Exam, 8:30 to 12 pm

Coffee & pastries at 8 am, morning and afternoon snacks and lunch provided each day.  
Class dinner on Tuesday evening.

*“It certainly was a deserved certificate and all others in the class felt the same. We were tested on comprehension and not so much for what we remembered. You have two very excellent instructors in Ron and John; they were patient with us, knowledgeable and just plain good people. My only regret is that I did not attend this school a year ago.”*

*-Roger Randolph  
CRB Consulting Engineers*

## CLASS FEE INCLUDES

- Advanced PROFIBUS training by qualified instructors
- Complete set of course materials
- Breakfast and lunch on course days
- PIC-hosted dinner
- Official PROFIBUS Certified Engineer Certificate for graduates
- 24 PDH Credit Hours
- Web site listing as Certified Engineer with contact information
- Use of ProfiTech logo for recognition as PROFIBUS Certified Engineer



## REGISTRATION FORM

PROFIBUS Trade Organization  
16101 N. 82nd St., Suite 3B • Scottsdale, AZ 85260  
480-483-2456 • Fax: 480-483-7202 • [us.profibus.com](http://us.profibus.com)

### Attendee Information:

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

**Class Fee:**     PTO Member \$2,195     Non-Member \$2,695

### Payment Type:

Check (P.O. number required): \_\_\_\_\_

Credit Card Number: \_\_\_\_\_  Visa     Mastercard     Am. Express

Exp. Date: \_\_\_\_\_ Authorizing Signature: \_\_\_\_\_

Fax completed form to 480-483-7202

### Must indicate date preference:

- March 28 - April 1
- April 25 - 29
- May 23 - 27
- June 27 - July 1
- September 26 - 30
- October 31 - November 4
- November 28 - December 2

- Print or type all items to ensure accuracy— complete entire form.
- No refund upon cancellation.
- Confirmation will be sent to individuals attending.
- Discounted hotel rates available.
- Questions?  
Contact Lynne Froehlich  
480-483-2456 or  
[lynne.froehlich@profibus.com](mailto:lynne.froehlich@profibus.com)