

**PROFIBUS Troubleshooting and Maintenance course in combination with  
Certified PROFIBUS Installer course (2 days in-person)**

**Or**

**PROFIBUS Troubleshooting and Maintenance course (2 days, instructor-led online)**

Are you having problems with your PROFIBUS network? Then this is the training class for you. Learn the skills you need to find and isolate problems fast. At the end of the training, you will be able to maintain, strategically isolate, analyze and solve problems in PROFIBUS installations. During the class, you will learn and practice how to use the latest PROFIBUS Troubleshooting tools, including the all-in-one troubleshooting tool ProfiTrace 2 with Scopeware, and permanent network monitor COMBRICK.

The course is designed for those who install and maintain PROFIBUS DP or PA installations. The class provides a mixture of theory and hands-on experience to give you the skill set you need, and the ability to put it into practice immediately. Attendees will learn how to analyze, localize and solve PROFIBUS problems. The theory covered includes details about cabling, shielding, and grounding. The practical hands-on examples show you how to use various tools to find and fix your problems fast.

Both the course and the instructor have been certified by PROFIBUS PROFINET International (PI), which guarantees high-quality training. The course meets all the requirements of PI's Certified PROFIBUS Installers course. The course ends with both a written and practical test. Successful students will have their names listed on the PROFINET website as a Certified PROFIBUS Installer.

At the end of this workshop, you will have an understanding of PROFIBUS concepts, components, and cabling, and be able to find, analyze and solve problems in PROFIBUS installations. You will also be able to understand and handle troubleshooting and maintenance tools, such as PROCENTEC's ProfiTrace 2 with its built-in oscilloscope software - ScopeWare, and ProfiCaptain and COMBRICKS.

This course can be done as an instructor lead on-line course or in-person live course. The only difference being that the certification as a certified PROFIBUS installer is not possible on-line. Also, the on-line course has a reduced lab since you can build a cable on-line.

**Theory Topics Covered:**

- PROFIBUS DP
- PROFIBUS PA
- RS 485 and MBP
- Cabling techniques
- Grounding and shielding
- DP/PA segment couplers, repeaters and OLMs
- Fault finding strategies
- Measurement tools

**Hands-on Exercises:**

- Fault finding on both DP and PA
- Diagnostic messages

**Prerequisites**

There are no prerequisites for this course. However, it is highly recommended that the student has been introduced to PROFIBUS before.

**Class Day Information:**

- Attendees will receive course notes, writing materials and a certificate for Network Engineer and Installer. The certificate is given only if the student passes the test in the in-person version.
- Attendees will also receive a digital copy of 'Catching the process Fieldbus – An introduction to PROFIBUS and PROFINET' co-written by the instructor James Powell
- Class size is limited to a maximum of 8 students (2 students per training rack) for in-person training and 4 students for the on-line version

**Training Equipment:**

- Main PROFIBUS Master is an S7-1200. However, a Molex SST PROFIBUS Master is also available.
- IO-Devices include Helmholz TB-20 IO rack, 2 PROCENTEC I/O Simulators, COMBRICK, SITRANS TH400, P+F Digital valve controller.
- ProfiTrace bus monitor
- HP-25 PROFIBUS cable tester

**Instructor:**

Your instructor for this course is James Powell, P.Eng., co-author of 'Catching the process Fieldbus – An introduction to PROFIBUS and PROFINET' (published by PROFIBUS and PROFINET International). James has over 20 years of experience with PROFIBUS and over 25 years with Industrial Ethernet. He has presented technical training in China, Chile, Argentina, Ecuador, USA, Canada, UK, Germany and the Netherlands. He is a certified PROFIBUS DP, PA and PROFINET network engineer.

**Scheduled Classes:**

October 22,23, 2020 – Peterborough, Ontario

November 12,13, 2020 - Instructor-led online course (uncertified)

February 22,23, 2021 – Peterborough, Ontario

On-site classes are also available on demand.

**Cost:**

\$1,995 per person for in person training which includes certification as an installer.

\$1,895 per person for instructor-led online training.

**JCOM Automation** is a member of PROFIBUS PROFINET North America and is a certified PROFIBUS and PROFINET training center and Competence Center.

For more information, please contact JCOM Automation at [jamesp@jcomautomation.ca](mailto:jamesp@jcomautomation.ca) or +1-705-868-8745.