# Verwer Training and Consultancy Ltd



Professional Training and Consultancy for the Automation and Control Industry

# Certified PROFIBUS Installer Course

An Internationally accredited introductory course for PROFIBUS installers and all people involved with PROFIBUS at a technical level.

# Do you want to ensure a reliable and maintainable PROFIBUS installation?

Then make sure that your installation team is fully qualified by attending the Certified PROFIBUS Installer Course. The course has become the accepted basic standard for many industries. For example most water and waste water treatment companies in the UK now insist that anyone involved with PROFIBUS at a technical level is trained to at least the Certified Installer level.

The Certified PROFIBUS Installer Course is a one-day course that teaches the layout, installation and testing of complete PROFIBUS networks. The course was developed by Andy Verwer whilst at Manchester Metropolitan University in 2001 in response to the immediate requirements of the automation and control industry. The course is accredited by PROFIBUS International and is now recognised across the world as the best introductory course in PROFIBUS technology.



On-site Installer Training in Brisbane Australia

The course provides a practical, hands-on approach to fieldbus network layout and installation and covers the essential requirements for a successful and maintainable PROFIBUS network. Examples and case study materials are used throughout to highlight the many common, but potentially very costly, pitfalls and mistakes that are made in laying out and installing PROFIBUS systems.

## Why bother with Certified training?

Fieldbus, and particularly PROFIBUS, provides a reliable and cost-effective solution for a wide range of instrumentation and control equipment used in manufacturing, materials handling, automated

storage, building and process industries. However, fieldbus installation is fundamentally different from other types of electrical installation because it uses high-speed digital communications. It is a well-documented fact that most of the faults that we find in fieldbus installations are caused by simple errors in layout and installation. With this training, such problems can be avoided at the outset, rather than after the installation is complete, when correction may require expensive re-routing or re-wiring.

The course incorporates theory and practical tests fully accredited by PROFIBUS International and is offered across the world as the standard in PROFIBUS installation training.



## Who should attend the course?

Perhaps confusingly, the course is not just for installers, but provides the basic but essential information for anyone who is involved with PROFIBUS at a technical level: i.e. designers, commissioning engineers, maintenance technicians and of course installers. The course also provides an essential pre-requisite to more advanced training like the PROFIBUS Commissioning and Maintenance Course, the System Design Course or the Certified PROFIBUS Engineer Course. Although centred on the most widely used fieldbus technology, PROFIBUS, most of the course content is equally applicable to other fieldbus technologies.



Installer training in Wales

No prior knowledge of fieldbus systems is required before attending. Nevertheless, even very experienced fieldbus engineers who have previously attended the course say that they have gained valuable knowledge on how to avoid problems.

### What does the course cover?

A practical approach to the layout of PROFIBUS networks is used to show how to apply the basic rules to design real factory and plant layouts. Topics such as connection technologies, cable and network testing are covered using a hands-on approach with up-to-date equipment.

The course starts with the basics of PROFIBUS DP & PA transmission technologies, including RS485, MBP and fibre-optics, then goes on to cover in detail:

- Basic PROFIBUS DP and PA network technology, station types and addressing, network configuration and start-up.
- Causes, effects and avoidance of transmission-line reflections and the importance of correct line-termination.
- Network and segment size and layout limitations and the effect of transmission rate.
- Common wiring and layout pitfalls, modern cable and connector systems.
- Considerations for network maintenance and commissioning.
- Correct use of repeaters, couplers, link modules and fibre-optic segments.
- Wiring and installation testing and the use of bus test tools.
- Interference pickup (EMC), cable routing and earthing considerations, earth potential problems and their avoidance.

Practical and multiple-choice theory tests at the end of the course ensure that the attendees understand the material and are competent in wiring and testing PROFIBUS networks. Successful candidates will be

awarded Certified PROFIBUS Installer status and can elect to have their name and company affiliation listed on the profibus.com web site.

#### Can the course be delivered on-site?

The course is available for on-site training for up to 12 people and is often combined with the PROFIBUS Commissioning and Maintenance course or the Certified PROFIBUS Engineer Course. We can even arrange for the trained team to carry out a half-day on-plant network health check using the training kits. This makes a cost effective solution for companies who want their whole installation/maintenance teams trained and certified.



Installer training in Scotland

The Certified PROFIBUS Installer Course has been widely accepted as a recognised qualification across the world. The course has been delivered overseas by Andy Verwer on many occasions, for example, Australia, South Africa, USA, Czech Republic, Brazil, China, Singapore and elsewhere. Over 1000 installers have been trained by VTC in the last five years.

### A sample of comments from previous attendees

- "Excellent course. Recommended to anyone who is involved in fieldbus installation."
- "For one day we covered much more than I would have expected."
- "The course was excellent and added much of value to my PROFIBUS experience."
- "It is imperative that installers of PROFIBUS networks attend this course"
- "Really enjoyed it and learned a lot; can't wait to come back for the Engineers Course"
- "Very well structured course ... A really full day packed with useful and practical information"
- Great course, a long day, but well worth it"

### **Further Information**

For dates, costs and booking information contact:

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