YOU WILL LEARN HOW TO:

- Understand current wireless networking offerings on the market
- Apply today's wireless technology to industrial automation
- Implement your own simple wireless LAN (WLAN) for your office and industrial plant
- Implement simple radio telemetry links for SCADA systems
- Explain the strengths and weaknesses of the different wireless technologies
- Describe standards such as IEEE 802.15.4 and IEEE 802.11
- Implement effective security on your network
- Describe how spectrum and frequency allocation is done
- Understand the basic terminology and jargon used in this area

WHO SHOULD ATTEND:

This course is designed for personnel with a need to understand the techniques required for using and applying wireless communications technology as productively and economically as possible. This includes engineers and technicians involved with:

- Control and instrumentation
- Control systems
- Consulting
- Design
- Electrical installations
- Equipment manufacturing
- IT personnel
- Maintenance supervisors
- Process control
- Process development
- Project management
- Regulatory and legal issues
- SCADA and telemetry systems
The Workshop

Wireless communications is being rapidly implemented in the industrial environment, with great success, provided certain ground rules are applied. These include ensuring a robust wireless link, correct integration with the wired communications systems, and proper data security.

The critical objective of wireless communications networks must be to achieve similar capacities, bandwidths, responsiveness, and availability to that of wire-based communications systems.

Apart from covering wireless basics, the workshop provides an in-depth coverage of the main industrial wireless technologies in use today, viz. radio modems, IEEE 802.11 wireless LANs (Wi-Fi) and IEEE 802.15.4 wireless PAN technology as implemented by a multitude of process control system vendors. WirelessHART is a specific example of this.

The workshop also covers some of the secondary technologies that are not known as industrial technologies per se, but which still find widespread application in industrial environments. These include Bluetooth, LP radio, mobile (cellular) data systems and VSAT.

At the end of the course you should have a clear understanding of the choices available to you in designing and implementing your own industrial wireless network.

Pre-requisites
A working knowledge of data communications and applications is useful, but is not essential.

Practical Sessions

This is a practical, hands on workshop enabling you to work through practical exercises which reinforce the concepts discussed.

Practical sessions include:
- Set up an IEEE 802.11 WLAN and connect to an Ethernet network
- Troubleshoot simple problems
- Perform a path loss calculation
- Perform a simple analysis of the protocol packets

To gain full value from this workshop, please bring your laptop/notebook computer.

On-Site Training

✓ SAVE over 50% by having an IDC workshop presented at your premises.
✓ Customise the training to YOUR workplace.
✓ Have the training delivered when and where you need it.

Contact us for a FREE proposal.