

# PROFINET Product Development Course,

5<sup>th</sup> May @ MMU



## PROFINET, the future backbone network for production networks

PROFINET uses Industrial Ethernet as communication medium and has many advantages if you want to bring Ethernet and Internet to the factory floor. However, the office world where Ethernet has been so successful is very different from the industrial world where electrical shocks, humidity, high temperature, moving parts, and EMR are constantly present. Not only the cables, connectors, and switches have to be industrialised (e.g. using rugged and metal housing) but also the multiple protocols worked so well for the Internet have to be selected and extended to meet the requirements for determinism and speed.

Manfred Popp is the author of three influential books in the area, “The Rapid Way to PROFIBUS”, “The Rapid Way to PROFINET” and “Industrial Communication with PROFINET”.

**Meet Manfred Popp on 5 May at MMU if you want to find out how PROFINET works and how PROFINET solves real-time communication utilising and enhancing the existing Ethernet protocols.**

With both TCP/IP and real-time protocols, PROFINET will be the future backbone network linking lower level fieldbus instruments and upper level enterprise functions making information technology an increasingly integral part of the automation industry. Does your workforce have the knowledge and skill to develop, design and maintain industrial networks?

This training course is for both PROFINET product developers and for a wide range of audience who wants to know PROFINET and industrial Ethernet. The course content is carefully selected to fit into a one-day schedule and contains the most important aspects of PROFINET. The course has been delivered in Germany for a number of years and will be a unique experience for the UK audience.

## Course Content

<b>Ethernet basics</b> <b>PROFINET basics</b> <ul style="list-style-type: none"><li>▪ Device model and addressing</li><li>▪ From engineering to start-up</li></ul> <b>PROFINET: unsynchronised communication</b> <ul style="list-style-type: none"><li>▪ PROFINET IO, RT classes, and UDP/IP communication</li><li>▪ Data exchange, diagnosis and alarms</li></ul> <b>PROFINET: synchronised communication</b> <ul style="list-style-type: none"><li>▪ Isochronous real-time</li></ul> <b>Static device description</b> <ul style="list-style-type: none"><li>▪ Parameterisation via GSD</li></ul> <b>Dynamic device description</b> <ul style="list-style-type: none"><li>▪ Tool Calling Interface (TCI)</li></ul>	<b>PROFINET features and service</b> <ul style="list-style-type: none"><li>▪ Redundancy, topology display</li><li>▪ PROFIsafe, iPar-Server, device replacement without engineering stations</li></ul> <b>Development kit</b> <b>Questions, answers and discussions</b> <b>Other details</b> <p>Duration: 1 day (9:15 am - 4:30 pm) Course Rate: £195 per person Course Date: 5<sup>th</sup> May 2010 Venue: Manchester Metropolitan University Web: <a href="http://www.mmu.ac.uk/profibus">www.mmu.ac.uk/profibus</a> Booking: <a href="mailto:admin@uk.profibus.com">admin@uk.profibus.com</a></p>
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