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Training Services Available.

Introduction.

I am pleased to introduce you to the Training Listings available in the Technical Training field.

For these courses, it is essential that the delegates are computer literate. This just means that you must know your way around a computer. You do not have to be an absolute genius. I am available for travelling if needed for Customer On-Site training if there is a minimum of 3 delegates.

In addition to the courses listed, I also give similar training on an **E-Learning platform.** Just contact me for further details.

Who Should Attend?

- Instrumentation and Control systems personnel from artisan to engineer.
- Electrical personnel from artisan to engineer.
- Instrumentation and Electrical design personnel.
- Network specialists with a leaning towards control systems networks.
- Plant maintenance personnel in the electrical and instrumentation field.
- Anyone wishing to extend their knowledge if they are already in a related field.
- Mechanical personnel who install and maintain Control Valves.

What are the Benefits?

Most of these courses are of a practical nature, and you will be hands on with the appropriate software for a specific course. You will feel confident to move to the next level and implement the things that have been taught on the course. As you work with the product, you will learn even more from your own experiences.

Industry Use.

- **Petro-Chem.**
- **Oil and Gas.**
- **Food and Beverage including Breweries.**
- **Iron and Steel Industry.**
- **Power Generation.**
- **All Mining.**
- **Car Manufacture.**
- **Water and Sewage.**
- **Glass Manufacture.**
- **Entertainment.**
- **Any Manufacturing Operation that uses Automation.**

The ones listed are just an Overview. There are many more I am sure.

Instrumentation and Control systems including PID control. ****

This course is aimed at anyone involved in instrumentation and control systems who require a greater understanding of the commonly used disciplines such as Flow, Pressure, Temperature and Level measurement and includes detailed coverage of PID control. From beginner level. You will be shown the different options available and the most suitable for different applications.

Duration: 4 days.

Control Valves.

This course will give a better understanding for selecting the correct control valve for the correct application, covering types, characteristics, sizing and any other special features that may be required. This course is for **Instrument Mechanics and Mechanical artisans** who are involved in selection, installation, and maintenance of control valves.

Duration: 2 days.

Siemens S7 TIA and WinCC Programming. Basic.***

This course is an introduction and basic programming course for anyone who has little or no exposure to the Siemens PLC or programming systems.

Duration: 3 days

Generic PLC Training and Scada/HMI Training not Manufacture Specific.***

This covers PLC's Explained from basic to a little more advanced. Ideal for someone who has little or no PLC knowledge.

Duration: 3 days.

Ethernet Networks using Hirschmann Managed Switches.

This course is quite advanced and is suitable for someone who has a basic knowledge of Ethernet networks, but needs to know more using Managed Switches. Topics covered, IP addressing and Subnet Masks, Supernetting, Vlan Creation, Redundancy Types, Layer 3 Routing. Suitable for **Ethernet Networking specialists and Control Systems** personnel who wish to obtain a full understanding of Ethernet Networking to the highest level. There are 3 courses available from the basic to the very advanced.

Duration: 5 days for each level. Administered through IAC technologies. Main distributers.

Basic Rockwell Studio 5000 PLC Training

This course is aimed at technicians/engineers with little or no exposure to Studio 5000. This is for **Instrumentation and Electrical personnel.** Exposure to other PLC systems would be an advantage but not essential. The ability to navigate around a computer with mouse and keyboard is paramount.

You will become familiar with navigating and setting up the Studio 5000 software, communicating to a controller and going online, becoming familiar with some of the basic commonly used instructions, becoming familiar with the different platforms using Studio 5000 and creating a project.

Duration: 3 Days.

Rockwell Studio 5000 PLC Basic Ladder Programming.***

This course is aimed at **Instrument and Electrical** personnel who have had some exposure to Studio 5000 or having completed the Basics training.

You will become familiar with the purpose and usage of many commonly used instructions and carry out best practices as far as programming is concerned. This will enable you to program ladder with confidence, carry out changes and design from scratch.

Duration: 3 Days.

Rockwell Studio 5000 PLC Training Advanced.***

This course is aimed at **Instrument and Electrical** personnel who are familiar with Studio 5000 and need to be able to develop projects from scratch using all the available tools and techniques.

You will become familiar with the purpose and usage of many commonly used instructions, periodic and event tasks, produced and consumed tags, add-on instructions, communicating between controllers, message instructions and much more. You will be confident of creating a project in the most efficient manner. This course is quite in-depth.

Duration: 5 Days.

Rockwell Studio 5000 PLC Fault finding.

This course is aimed at **Instrument and Electrical** personnel who are familiar with Studio 5000 and are responsible for the day to day maintenance and problem solving of their control systems.

You will learn the methods used to locate and correct problems with the Studio 000 system. This will cover hardware and software issues, programming and controller problems and is applicable to all the platforms.

Duration: 3 Days.

Rockwell Studio 5000 PLC Function Block Diagram Development (FBD).

This course is aimed at **Instrument and Electrical** personnel who are familiar with Studio 5000 and wish to use function block diagrams for their operation.

You will learn the best methods used to program routines using the FBD language. This will encompass logical as well as analog applications and will include **PID control**.

Duration: 3 Days.

Rockwell Studio 5000 PLC Programming using Structured Text(ST) Sequential Function Charts(SFC).

This course is aimed at **Instrument and Electrical** personnel who are familiar with Studio 5000 and statement listing, sequencing requirements.

You will learn the best methods used to program routines using the ST/SFC language. to suit their application. Generally used with sequencing applications.

Duration: 3 Days.

Ethernet Networking. The basics

This course is aimed at **Instrument, Electrical** and **Networking/IT** personnel who have to create and maintain Ethernet networks within their organization. Some Ethernet knowledge is advantageous.

You will learn the rules when designing and maintaining an Ethernet network. This is a universal protocol utilizing the 7-layer OSI model.

Duration: 3 Days.

Rockwell FactorytalkviewSE Programming.***

This course is aimed at **Instrument and Electrical** personnel and **Software Developers** who are familiar with computer navigation and some exposure to HMI systems would be an advantage.

You will learn how to develop, design and implement an HMI project using all the techniques available within Factorytalk studio. FactorytalkviewSE is suitable for computer based standalone or networked applications. This will link to a Studio 5000 project.

Duration: 5 Days.

Rockwell FactorytalkviewME Programming.

This course is aimed at **Instrument and Electrical** personnel and **Software Developers** who are familiar with computer navigation and some exposure to HMI systems would be an advantage.

You will learn how to develop, design and implement an HMI project using all the techniques available within **Factorytalk Studio. FactorytalkviewME** is suitable for linking to **PanelviewPlus** terminals.. This will link to a Studio 5000 project.

Duration: 5 Days.

Other courses available On Demand

The following courses can also be offered on demand. The training topics refer to legacy equipment which is still in use but gradually being replaced with the latest technology. The demand for these courses is quite low. Further detail can be supplied on request.

UPS and Backup Power Supply Systems. This course will show you the different options available for power backup and UPS.

Duration: 3days.

Listed below are courses on legacy equipment available On Demand.

PLC5: Courses available are Fundamentals, programming, maintenance and advanced.

SLC500: Courses available are Fundamentals, programming, maintenance and advanced.

RSview32: This is the earlier HMI system before the advent of factorytalkview. A

5-day programming course is available.

This is just a short summary of some of the training that is available. Courses can be customized to suit individual requirements.