

# COURSE DESCRIPTION

## Programmable Controller Systems

### SLC-500 Maintenance Part 1 with RSLogix500

#### Course Objectives

At the end of the course the delegate will be able to:

- Recognise the major components and connections of an SLC-500 system
- Appreciate the basic principles of operating the SLC-500
- Use RSLogix500 software as a fault finding tool
- Download a backup copy of an SLC-500 application into a new processor
- Interpret common relay ladder logic instructions and programs
- Modify control parameters such as timer and counter presets
- Document ladder logic programs, on-screen, with RSLogix500

#### Topical Outline

- Identifying SLC 500 System Components.
- Getting started with RSLogix 500 Software.
- Downloading, Going online and Saving ladder diagram programs.
- Monitoring and Entering Data.
- Understanding & Interpreting Bit Instructions.
- Understanding & Interpreting Timer and Counter Instructions.
- Documenting a Project.
- Understanding & Interpreting Comparison & Data Handling Instructions.
- Understanding & Interpreting Program Control Instructions.
- Searching Ladder Logic, Forcing Inputs and Outputs.
- Troubleshooting Noise-Related problems.
- Troubleshooting Processor and Power Supply Problems.
- Troubleshooting Discrete I/O & Analog I/O Problems.
- Troubleshooting and Maintaining Integrated Practice.

#### Duration

3 Days



### COURSE NUMBER: 1003

#### Course Purpose

SLC-500 Programmable Controllers act as the heart of the control system in a wide range of industrial applications. RSLogix500 is a high functionality Microsoft Windows based software product used to troubleshoot and develop SLC-500 applications. When a machine breaks down or plant stoppage occurs, the problem needs to be diagnosed and rectified as quickly as possible. This course provides the necessary information and hands-on experience to efficiently interpret, troubleshoot and recommend a course of action for an existing SLC-500 installation in a downtime situation.

#### Who Should Attend

This course is designed for individuals who are responsible for troubleshooting and maintaining a control system based on any of the SLC-500 range of programmable controllers. Delegates wishing to modify existing SLC project code should also attend course GBR1203, "SLC-500 Maintenance Part 2, with RSLogix500 Software" in the same week.

#### Prerequisites

Experience of maintaining electrical controlled systems including an appreciation of where programmable controllers are used. A working knowledge of Microsoft Windows 2000 or Windows XP is **essential**. This course is the prerequisite for course GBR1203, "SLC-500 Maintenance Part 2, with RSLogix500 Software" that covers program editing and modification.

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#### Power, Control and Information Solutions

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe/Middle East/Africa: Rockwell Automation SA/NV, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846