Overview of Courses

With the presence of strong players within the global economy such as China, and an increasingly competitive UK market place, manufacturing industry is having to look more closely at improving production output and reducing downtime to remain competitive.

With our manufacturer-specific PLC training, maintenance engineers are able to become familiar with the actual PLC technology in use at their place of work and in turn help minimise downtime, reduce waste and increase production output.

Courses are available at both Basic and Intermediate levels and on popular PLC models from leading brands including:

- Siemens
- Allen Bradley (Rockwell)
- Mitsubishi

Course attendees will each complete a Training Record Log detailing the key knowledge and essential practical skills covered on the course. Individuals are required to sign off essential topics to confirm understanding and competence.

Target Group

All engineering personnel involved with the maintenance and personnel and troubleshooting of automated systems controlled by a PLC.

Previous Knowledge

Basic level courses:
Delegates should have an engineering background, understand the basics of PLC’s and be competent with the use of PC’s and Microsoft Windows.

Intermediate level courses:
Delegates without PLC knowledge should consider attending ‘E311, Introduction to Programmable Logic Controllers’.

Intermediate level courses:
Delegates should have a good working knowledge of using the equipment or have attended the Basic level course for the particular PLC system.

Syllabus Guide:

Basic level courses:
- Understanding common hardware and status indicators
- Terminology, structure and organisation of programs
- Running and using the PLC manufacturer’s software to access and monitor live programs
- System maintenance tools and program transfer procedures
- Diagnostic tools and fault-finding techniques

Intermediate level courses:
- Using more powerful program and status display tools
- Understanding more complex ladder program code and be able to follow other program types
- Better understanding of data handling and the use of more complex data structures
- Understanding use of enhanced diagnostic tools and procedures

Didactic Courses

A perfect balance of teaching and hands-on experience

Basic & Intermediate PLC training (Siemens, Allen Bradley – Rockwell or Mitsubishi specific systems)

Basic level:
Users will be able to:
- Work safely and competently with the specific PLC
- Be able to connect a laptop to the PLC and monitor
- Perform PLC maintenance procedures
- Troubleshoot common PLC and field faults

Intermediate level:
Users will be able to:
- Understand and be able to follow more complex program code
- Be able to use more powerful program monitor and display tools
- Be able to use enhanced diagnostic tools to quickly identify and resolve abnormal system operation

Course Duration
Courses are run at our training centre in Wellingborough and take place over three to five days depending on the chosen course.

For course availability contact Festo direct on 01604 667584, email business_centre@festo.com
Alternatively contact your local Premier Stockist.

These courses are delivered with our training partner INTACS.

Pneumatics... Hydraulics... PLC’s... Mechatronics... Electrical Drives... Electro-pneumatics... Fieldbus...
## Basic & Intermediate PLC training (Siemens, Allen Bradley – Rockwell or Mitsubishi specific systems)

<table>
<thead>
<tr>
<th>PLC manufacturer &amp; course type</th>
<th>Course outline – full syllabus available on request</th>
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</thead>
<tbody>
<tr>
<td><strong>Siemens S7-300/400 PLC courses</strong></td>
<td>The Basic Maintenance and Troubleshooting course equips maintenance and service personnel with the essential knowledge and skills to maintain and troubleshoot S7 PLC systems.</td>
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<tr>
<td>Siemens S7-300/400 Basic Maintenance and Troubleshooting, 5 days</td>
<td>The course covers a more complex range of S7 fault finding skills for maintenance and service personnel and gives practical experience of monitoring and understanding more complex code using advanced diagnostic tools and techniques.</td>
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<tr>
<td>Siemens S7-300/400 Intermediate Maintenance and Troubleshooting, 5 days</td>
<td>This course enables individuals to understand existing PLC code, use the full range of STEP7 diagnostic tools to troubleshoot and analyse abnormal system or machine performance and write their own PLC code for new projects.</td>
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<tr>
<td>Siemens S7-300/400 Programming, 5 days</td>
<td>The Intermediate Maintenance and Troubleshooting course covers the most commonly used supplementary instructions and gives practical experience of interpreting, monitoring and understanding typical, but more complex code as well as using more advanced diagnostic tools and techniques.</td>
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<tr>
<td><strong>Siemens S5 PLC Maintenance and Troubleshooting courses</strong></td>
<td>The Basic Maintenance and Troubleshooting course equips maintenance and service personnel with the essential knowledge and skills to maintain and troubleshoot S5 PLC systems.</td>
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<tr>
<td>Siemens S5 Basic Maintenance and Troubleshooting, 5 days</td>
<td>The Intermediate Maintenance and Troubleshooting course equips maintenance and service personnel with the essential knowledge and skills to maintain and troubleshoot S5 PLC systems.</td>
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<tr>
<td>Siemens S5 Intermediate Maintenance and Troubleshooting, 5 days</td>
<td>The Basic Maintenance and Troubleshooting course equips maintenance and service personnel with the essential knowledge and skills to maintain and troubleshoot SLC / MicroLogix PLC systems.</td>
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<tr>
<td>Siemens S5 Intermediate Maintenance and Troubleshooting, 5 days</td>
<td>The Intermediate course develops and builds on the basic course to provide a comprehensive coverage of enhanced program and diagnostic tools and techniques.</td>
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<td><strong>Rockwell/Allen Bradley PLC-5 &amp; ControlLogix PLC courses</strong></td>
<td>The Basic Maintenance and Troubleshooting course equips maintenance and service personnel with the essential knowledge and skills to maintain and troubleshoot PLC-5 PLC systems.</td>
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<tr>
<td>Rockwell/Allen Bradley SLC 500 Basic Maintenance and Troubleshooting, 5 days</td>
<td>The Basic Maintenance and Troubleshooting course equips maintenance and service personnel with the essential knowledge and skills to maintain and troubleshoot AB ControlLogix PLC systems.</td>
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<tr>
<td>Rockwell/Allen Bradley SLC 500 Intermediate Maintenance and Troubleshooting, 5 days</td>
<td>The Basic Maintenance and Troubleshooting course equips maintenance and service personnel with the essential knowledge and skills to maintain and troubleshoot AB ControlLogix PLC systems.</td>
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<tr>
<td>Rockwell/Allen Bradley ControlLogix PLC Basic Maintenance and Troubleshooting, 5 days</td>
<td>The Basic Maintenance and Troubleshooting course equips maintenance and service personnel with the essential knowledge and skills to maintain and troubleshoot AB ControlLogix PLC systems.</td>
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<tr>
<td>Rockwell/Allen Bradley ControlLogix PLC Intermediate Maintenance and Troubleshooting, 5 days</td>
<td>The intermediate course familiarises personnel with the higher level functionality of ControlLogix processor hardware, instruction sets, I/O modules, communications options and system operational features with enhanced diagnostic ability using RSLogix 5000. Accessing, monitoring and troubleshooting networked ControlLogix PLC’s is also covered.</td>
</tr>
<tr>
<td><strong>Mitsubishi PLC courses</strong></td>
<td>The Basic Maintenance and Troubleshooting course equips maintenance and service personnel with the essential knowledge and skills to maintain and troubleshoot Mitsubishi PLC’s.</td>
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<td>Mitsubishi FX, A and Q Series Maintenance with HMI Part 1, 3 days</td>
<td>Part 1 is for new users with Mitsubishi PLC’s and software. It covers the first-line maintenance and troubleshooting skills needed to be able to support and troubleshoot simple applications.</td>
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<tr>
<td>Mitsubishi FX, A and Q Series Maintenance with HMI Part 2, 3 days</td>
<td>Part 2 provides attendees with a structured approach to fault-finding, shows how to relate the learning to their own site systems and shows how to ensure that the benefits of the training are not lost through lack of practice.</td>
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<tr>
<td>Mitsubishi FX, A and Q Series Maintenance and Troubleshooting Part 1 &amp; 2, 5 days</td>
<td>Part 1 is aimed at the beginner with Mitsubishi PLC’s and software and will cover the first-line maintenance and troubleshooting skills needed to be able to support and troubleshoot simple applications.</td>
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<tr>
<td>Mitsubishi FX, A and Q Series Maintenance and Troubleshooting Part 1 &amp; 2, 5 days</td>
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**Guaranteed results**

Our partners INTACS are so confident that we can deliver the right training for your people that we are even prepared to offer a money-back guarantee of satisfaction.

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