

# PLC Control Systems

Introductory course for power house product users

## COURSE TOPICS

- PLC and communication fundamentals
- PLC communication networks
- PLC hardware (power supply, CPU, I/O cards)
- Hardware errors versus control system errors
- How to use hardware indicators for basic troubleshooting
- Alarm messages on the system human machine interfaces (HMIs)
- Common troubleshooting issues
- Safety protocols



The programmable logic controller (PLC) control systems training course is designed for electrical technicians and technical support personnel who operate and/or maintain the PRECISE\* automated drilling systems. The course introduces participants to a basic overview of the functions and components of our PLC control systems, including proper troubleshooting and maintenance procedures for PLC control systems.

During this intense two-day, hands-on introduction to PLC system operation and maintenance, participants practice their skills during interactive laboratory exercises interspersed with lectures. They get to diagnose common system issues with actual engineering drawings, hardware indicators, and system alarm messages. No programming will be required in this course.

## LEARNING OBJECTIVES

- Introduction to basic terminology, functions, and components of our PLC system.
- Understand the PRECISE system topology to quickly sort out problems.
- Become familiar with our common PLC hardware components and wiring diagrams for quicker failure resolution.
- Learn to follow Schlumberger electrical diagrams systematically to determine the probable cause of I/O communication issues.
- Practice time-saving equipment checks using desktop demonstration units.
- Discover how to prevent or reduce the risk of common pitfalls and possible sources of trouble in the field.

## WHO SHOULD ATTEND

This course is for electrical technicians and technical support personnel who operate or maintain PRECISE automated drilling systems and power house products.

## REGISTRATION

Contact us by email at [rpctraining@slb.com](mailto:rpctraining@slb.com) or by telephone +1-713-849-1700.

Cancellations within three working days prior to the start of the class will be charged the full tuition fee. Substitutions are allowed.

## DURATION

Two training days  
(8:00 a.m. to 4:00 p.m. daily)  
Contact Schlumberger for available dates.

## LOCATION

Schlumberger  
5353 West Sam Houston Pkwy North, Suite 150  
Houston, TX 77041

Participants are responsible for their own accommodations and transportation.  
Contact us to schedule on-site or in-office training at your location.