Course Outline
Duration 4 days
Beneficial to maintenance staff who have S4 operational experience
Students must have attended the S4 operator course.

Subject areas
Safety Instructions
Safe working practices
Pinch and Trapping points
Emergency stops & the enabling device
Teach velocity
Static precautions

System Description
Robot mechanical unit & control system overview
Circuit diagrams

System block diagram
Mains connections
Power supply
Customer connections
Motors on chain
Power unit

Computer system description
Main computer
Robot computer
Memory expansion board

System Parameters
Setting system time & date

Error logs
Using the trouble shooting guides
Input / Output connections

The ‘Cold Boot’ procedure
System Calibration
Motor offsets
Revolution counter updating

The servo system
Rectifier, servo drive boards & resolver feedback
Motor removal and set up
Serial measurement system
Cable connections

Preventative maintenance procedures
Oil quantities
Battery replacement
Greasing

Objectives
On completion, participants will be able to perform:
- Electrical repair and preventative maintenance
- System parameter set-up and editing
- Trouble shooting and component replacement