

Digital Systems and Microprocessors

Target group: Engineers / Technicians working in a hospital maintenance workshop.

On completion of the course you will be able to:

- To trouble shoot problems with digital equipment
- To do preventative maintenance
- To do 1st and 2nd line maintenance of digital equipment
- To communicate with equipment suppliers and maintenance departments about trouble shooting, part replacement and repairs of digital equipment

Content:

- Switch and relay control
- Numbering systems
- Logic syntheses
- Solid state logic (TTL, CMOS, etc)
- Noise and loading
- Encoders, decoders
- Relay drivers and delay devices
- Counters
- Shift registers and arithmetic systems
- A/D and D/A converters
- Multiplexing
- Memory systems
- Memory organization
- Addressing
- Stack machines
- Digital arithmetic
- Digital communications
- Microprocessor development systems
- C language interface
- Development tools