

Electrical Design for Mission Critical Supply (13 hours)

Within the built environment, mission critical facilities have particular power requirements that significantly impact how they are designed and operated.

The course introduces the power system design and the components that support typical data centers or critical facilities. It prepares individual to fully understand data centers' electrical design & build by exploring the international Standards and sharing the speaker's experience.

You will understand the mission critical supply system, from power components to distributions and efficiency; from power requirements to designed, testing, commissioning and maintenance.

Day 1

- Concept on primary supply and secondary supply
- Power flow in mission critical supply system
- Features of major equipment for critical supply
 - (1) Uninterrupted power supply and power storage
 - (2) Backup generator
 - (3) Automatic transfer switch
 - (4) Static transfer switch
 - (5) Isolation transformer
- Efficiency assessment
- Power quality review

Day 2

- Configuration diagram of critical supply (N+1 / 2N) design & analysis
- Review of cable sizing to incorporate harmonics content
- Earthing system design
- Testing and commissioning requirements
- Brief of Systems Merging Appraisal Test (SMAT)

Remark

Course content can be modified based on special requests and arrangements.

This section is thoroughly conducted by vendor neutral Chartered Engineers (CEng) who have more than 15 years in ICT, Data Centre Construction, Design & Build and Facilities Maintenance.