Power Systems

M104E

Power Systems Extension

Course Description:
The Power Systems extension complements the M104 course, considering the integrated nature of the Power System on a vessel and the interactions between its constituent parts, and with the other systems on board. Operational, safety and fault-finding aspects are covered, as well as a consideration of the constraints and sometimes conflicting requirements influencing the design philosophy.

This is a one-day course. A more detailed insight into power systems is provided by M400–Power Systems.

Learning Outcomes:
To give an insight into the operation, functionality and basic design principles of offshore power systems to enable trainees to operate and maintain their systems safely and competently, and to undertake first line fault finding, so reducing downtime and improving safety.

Prerequisites:
General electrical background. Staff attending should be familiar with vessel operational procedures, and have an understanding of the various items of equipment in use in a vessel power system (engines, generators, transformers, switchgear, etc).

Attendees should ideally have previously completed the M104 Automation Operator Familiarization and Maintenance course.

Participants:
Vessel operating and maintenance staff; Chief Engineers and other engineering staff, electro-technical officers (ETOs); shipyard electrical design staff and anyone with an interest in system design, maintenance, fault-finding and trouble-shooting, FMEA, and system improvements.

The course is not limited to GE equipment or systems and uses failure/incident case-studies from various systems to explain concepts and solutions.

Duration:
1 day