

## CLASS #108 – GCP31 & LS 4 Controls



### Description

This class will give the student the opportunity to learn more about servicing and commissioning power management systems using the GCP31 & LS4 controls. During this course, the student will learn about the theory, installation, programming, operation and maintenance of the GCP31 & LS4 control system with the help of our two engine simulators. The hands-on part of the course will include programming, adjustments, and troubleshooting techniques on the control system.

### Class Objectives

Upon successful completion of this course the student will be able to:

- Demonstrate a strong understanding of power generation control theory pertaining to the GCP31 & LS4 control system.
- Calibrate, program Relay Manager Logic statements and Application set-up.
- Configure mA and VDO sensors for protection and control purposes.
- Understand control modes such as frequency and voltage control or load and power factor control, and when each mode is in effect.
- Demonstrate and understand the type of synchronization available within the control.
- Understand and implement the control in any application such as AMF, peak or base load, Isolated, Utility parallel, and Co-Generation modes.
- Understand how to implement the control into complex bus arrangements such as multiple feeders and bus-ties.
- Understand how the control interfaces with engine ECM units via J1939 communications or to SCADA systems via Modbus®.
- Understand how to configure extended I/O (IKD modules).

### Course Duration

The course runs for three days and is conducted at our premises in Kingsgrove, NSW. We can offer this course as part of an on-site training program (details available on request). Class size is limited to a maximum of eight students.

### Attainment

A “Certificate of Attainment” is awarded to students who successfully pass a written examination.

*The instructor reserves the right to modify the class content to best suit the needs of the class.*