

# CLASS #100 - 2301A / 2301E Load Sharing & Speed Control

## **Description**







This class will give students the opportunity to learn more about servicing and commissioning the 2301A (Analog) and 2301E (Digital) Load Sharing and Speed Controls. During this course, the student will learn about the theory, installation, programming, operation and maintenance of these control systems with the help of simulators. The hands-on part of the course will include programming, adjustments, and troubleshooting techniques on these control systems.

### **Class Objectives**

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

- Demonstrate a strong understanding of the theory of operation of both control systems and how it interfaces with actuators and other auxiliary controls such as the SPM-A synchronizer.
- Calibrate and program the control via either potentiometer (2301A) or PC interface (2301E) and general linkage set-up.
- Configure mA inputs for protection and control purposes (2301E).
- Understand control modes such as frequency or kW load control, and when each mode is in effect.
- Demonstrate and understand methods and types of synchronization available within the control *i.e.* SPM-A phase matching or discrete.
- Understand and implement the control in any application such as AMF, peak or base load, Isolated, Utility parallel, and Co-Generation modes.
- Understand how the control interfaces to SCADA systems via Modbus®.
- Understand dual dynamics and how to implement this for optimum engine control.

#### **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.