



## ELECTRONIC SENSOR SYSTEM

### OBJECTIVES

The Electronic Sensor System programme is designed to teach the operation of Electronic Non Contact Sensors and their application in the industry. Electronic sensors are used in many types of application for feedback to electric relay controls and programmable controllers. Typical applications include sensing liquid levels through glass, metal from non-metal, colour shape and distance or proximity.

This course provides participants the ability to test each sensor's operation by presenting a variety of targets at various distances and angles. The sensors can also be interfaced to other training systems for real world applications.

### WHO SHOULD ATTEND

1. Anyone with technical knowledge in AC/DC theory preferably in the area of Magnetism, Inductance and Capacitance.
2. Technicians, Supervisors, Chargemen, Foreman and Engineers who wish to enhance their knowledge in the control of industrial processes and systems (IPS)

### COURSE OUTLINE

- Introduction Introduction to Electronic Sensors  
Equipment Familiarization and Safety
- Sensor Operation Inductive Proximity Sensor  
Capacitive Proximity Sensor  
Hall-Effect Sensor  
Magnetic Reed Switch  
Photoelectric Switches  
Fiber Optic Switch
- Applications Safety Detection  
Event Sequencing  
Material Sorting  
Liquid Level Sensing

#### DAY 1

1. Introduction to Electronics Non-contact Sensor, Basic Sensor Operation
2. Equipment Familiarization, Circuit Connection and Safety Precautions
3. The Operation and Characteristics of Inductive Proximity Sensor

#### DAY 2

1. The Operation and Characteristics of Capacitive Proximity Sensor
2. The Hall-Effect Sensor Operation, Hall-Effect Switch Characteristics
3. The Magnetic Reed Switch Operation, Magnetic Reed Switch Characteristics

#### DAY 3

1. The Photoelectric Switch Operation, Fiber Optic Switch Operation
2. Proximity Switch Circuit Applications – Safety Interlock and Event De-energizing
3. Applications Circuits: Event Sequencing, Material Sorting and Liquid Level Sensing

### TRAINER

PESDC has a panel of professionally qualified, well-trained and industrially experienced technical trainers.

### COURSE FEE

(STECH-E25)

**RM540.00 per pax (member)**

**RM660.00 per pax (non-member)**

*(Inclusive of course materials, lunch and refreshment)*

Certificate of Achievement will be awarded upon successful completion of the course.

*SBL  
claimable*

### COURSE DETAILS

**Duration : 3 Days**

**Date : Flexible**

**Time : 9.00am to 5.00pm**

**Venue : PESDC Training Complex**

*For Further Enquiries, please contact:*

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PESDC Training Complex

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