

**Course Title: Electro Hydraulic System**

**Course Code: EEA 105 (ii)**

**Course Background / Summary:**

This course focuses on designing the fundamental of electric circuit control which will be adapted to the electro-hydraulic controls; whereby the applications on the SMC training kits will expose the participants towards understanding how electro- hydraulic functions. Participants will learn the elements of troubleshooting/fault finding.

**Course Objectives:**

- Define the fundamentals of electro-hydraulic components in terms of components characteristics.
- Design the electrical control circuit and adapt the control circuit (including hardware and PLC control) to the electro-hydraulic circuit.
- Design and fault finding of an electro-hydraulic circuit.

**Target Audience:**

- Industrial operators
- Technicians and engineers responsible for the operation, maintenance, troubleshooting, and repair of hydraulic operated machinery
- Teaching staff/instructors

**Course Duration: 3 Days**

**Course Contents**

**1.0 Introduction and Advantages of Electro Hydraulic System**

**2.0 Fundamental in Control Circuit (Hardware and PLC Control)**

**3.0 Electro Hydraulic Circuit: Control System Development: Design & Assembly**

**4.0 Electro Hydraulic Applications**

**5.0 Electro Hydraulic in Simulation**

**6.0 Application of Hydraulic Systems**