

**Course Title: Pneumatic Systems****Course Code: EEA 104 (i)****Course Background / Summary:**

Participants will be able to define the physical magnitude used in pneumatic systems and explain the major components of pneumatic from supply to work post. This course is purposely designed and focuses on identifying and interpreting pneumatic systems in terms of design and practical, troubleshooting the malfunctioning systems, and analyzing the operation of pneumatic systems.

**Course Objectives:**

- Develop a strong fundamental knowledge of the basic principles of pneumatics, and introduce concepts useful in the day-to-day application and troubleshooting of pneumatic components
- Identify the construction and function of the components in pneumatic control systems
- Design, size and troubleshoot pneumatic circuits
- Identify and use control schematics

**Target Audience:**

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

**Course Duration: 3 Days****Course Contents****1.0 Introduction and Fundamentals of Pneumatic System****2.0 Production of Compressed Air: Distribution and Maintenance Unit****3.0 Valve: Directional Control, Flow Control & Non-return****4.0 Pneumatic Actuator****5.0 Pneumatic Circuit: Control System Development, Design & Assembly Pneumatic Circuit****6.0 Application of Pneumatic Systems**