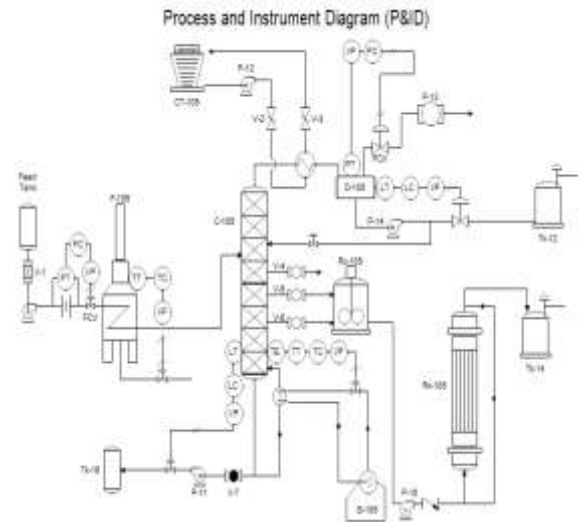


Code – AETD2: Design & Development – Instrumentation & Control Engineering

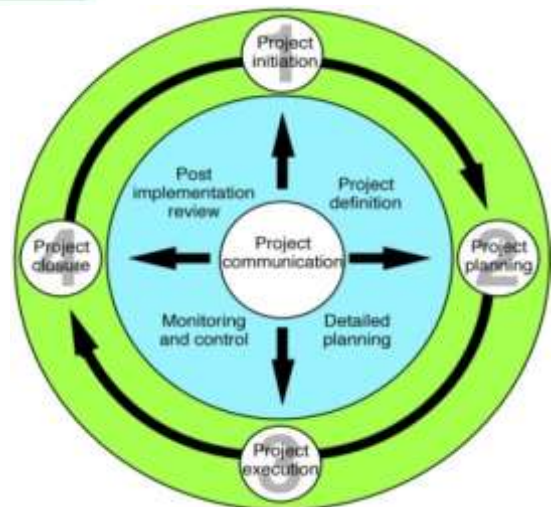
Module -A : Introduction to Instrumentation & Control

- A.1 Basic concepts in Instrumentation & control
- A.2 Definitions & Overview of Flow, Level, Pressure & Temp
- A.3 Primary Measurement
 - Flow (F) Engineering guide
 - Level (L) Engineering Guide
 - Pressure (P) Engineering Guide
 - Temperature (T) Engineering guide
- A.4 Secondary Measurement
- A.5 Final Measurement (Final Control Elements)
- A.6 Hazardous Area Classification (HAC)
- A.7 Control System
 - Programmable Logic Controller (PLC)
 - Supervisory Control and Data Acquisition (SCADA)
 - Distributed Control System (DCS)



Module -B : Project Management

- B.1 Introduction to Project Management
- B.2 What is meant by Project Work? Project Life Cycle?
- B.3 Feasibility Study
- B.4 Concept of Design (CD) Engineering
- B.5 Front End Design Engineering (FEED)
- B.6 Detail Engineering - Instrumentation & Control
- B.7 Design Deliverables - Instrumentation & Control
- B.8 Detail Engineering - Sample Project
- B.9 Lesson Learned
- B.10 Project Closeout Report



Module -C: Examples - Engineering Study and Case Study

- C.1 Extended Training of Detail Engineering will be given on request.
- C.2 Industrial Visits - Vendor Shops / Manufacturing Units (Offline Course only)

