

# Industrial Control System Engineering Training

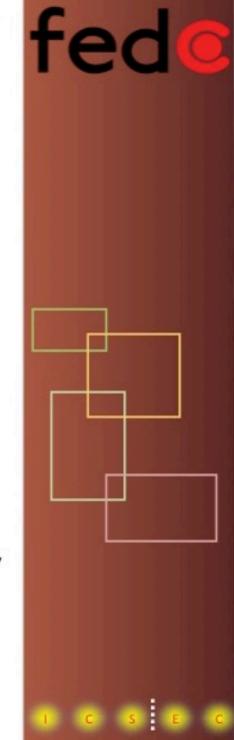
"The Essentials of Engineering, Practical and Technical Knowledge of ICS Environment"



### Core Value:

"The All-in-One training to cover the Essentials of the ICS Environment Philosophy and Engineering Aspects"

- Integrated materials
- SCADA workshop
- Programming Workshop
- Measurement Workshop
- Game Session Safety Design and Engineering
- Case Study System Best Practice
- Case Study Understanding the System Philosophy of ICS Environment
- Hands-On Skills for Real Work Implementation



#### Purpose

To develop good understanding and fundamental knowledge regarding the ICS environment (Process Instrumentation, Communication Framework, DCS, SIS, SCADA, PLC, DMC and Flow Computer)

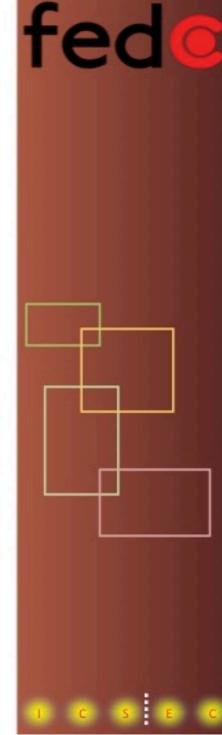
### **Training Content**

Process Instrument fundamental, communication framework essentials (analog, semi-digital and digital), the ICS Environment system philosophy, engineering and operations framework (covering DCS, SIS, SCADA, PLC, DMC and Flow Computer), Industrial Standard exposure API, ISA, AGA and IEC

#### Detail Syllabus

Please refer to the page 4 to 7

P A G E

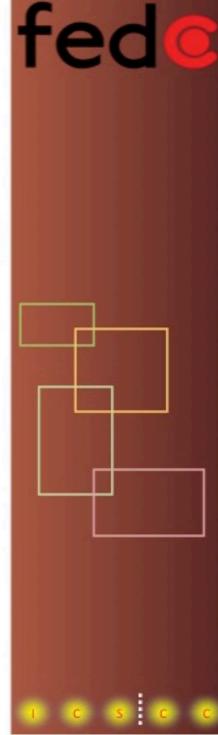


#### Targeted Participants

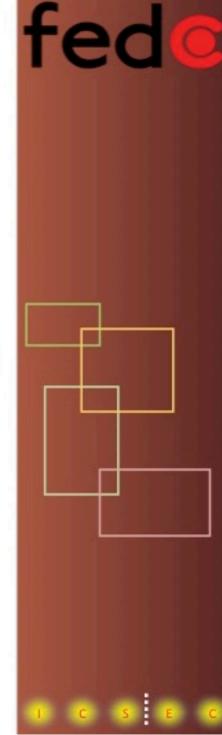
IT Engineer/Technician, Instrument Control Engineer/ Technician, Mechanical Engineer/Technician, Process Engineer/Technician, Operations Department (Plant Operator/Supervisor)

#### Enroll Now!

Please email us at fedco@fedco.co.id or register online at fedco.co.id/register

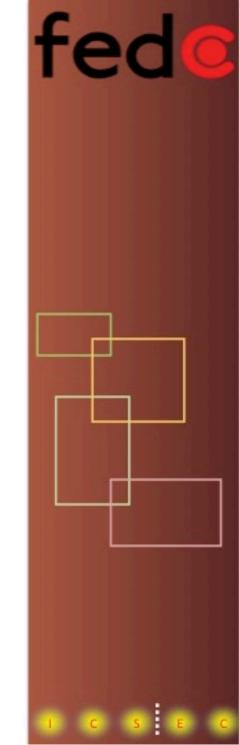


- Opening Questions
- Course Overview
- Process Instrumentation
  - Flow, Pressure, Level and Temperature
    - ✓ The Philosophy and Engineering (including the type of sensing devices, measurement system, typical implementation and best practice approach)
- Communication Framework
  - Analog Communication
  - Semi-Digital Communication
  - Digital Communication

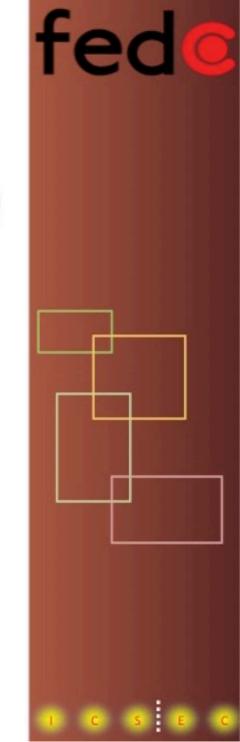


- Distributed Control System (DCS)
  - The Evolution
  - The Philosophy and Engineering (including controls engineering fundamental and type of controls framework)
  - Industrial Standard for Programming Framework
  - Best Practice for Real Case Implementation
  - Case Study System Best Practice
- Safety Instrumented System (SIS)
  - The Philosophy and Engineering
  - Safety Framework and Safety Life Cycle Essentials
  - Game Session

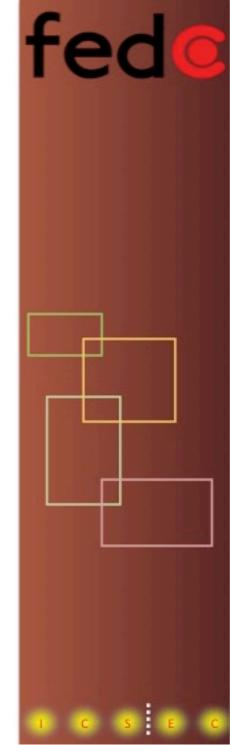
     Safety Design and Engineering



- Supervisory Control and Data Acquisition (SCADA)
  - The Evolution
  - The Philosophy and Engineering
  - Best Practice for Real Case Implementation
  - SCADA Workshop
- Programmable Logic Controller (PLC)
  - The Philosophy and Engineering
  - Programming Framework Fundamental
    - ✓ Ladder Diagram vs. Function Block Diagram Workshop
  - Best Practice for Real Case Implementation



- Flow Computer
  - The Measurement Philosophy and Engineering
  - The Type of Meter and Characterization
  - The Custody Transfer Measurement Framework
  - Measurement Workshop
- Dynamic Matrix Control (DMC)
  - The System Overview
  - Implementation and Engineering of DMC
- Case Study
   Understanding the System Philosophy of ICS Environment
- ICS Environment A Security Overview
- Course Wrap-Up and Closing



### Course Period

4 Days – Full time course

#### Venue

Offline (On-site or Off-site) and Online Training

#### Price

IDR 14.950.000/participant (local)
USD 1,495/participant (international)

#### Notes

- The training cost including training module, certificate, lunch, coffee break and souvenir
- ✓ Accommodation and transportation are excluded from the training cost
- ✓ Minimum 2 participants to run the course for Offline training

