CfPE Technology Solutions
Leading Edge's Knowledge Transfer Provider

Process Control Engineering, Strategies and Application Technology Course

Training Date: 10 – 14 December, 2023
Training Venue: Kuala Lumpur, Malaysia
Training Time: 8.30 am – 2.30 pm
Training Fee: USD 4,500 per participant

COURSE OBJECTIVES

The course exposes participants to the various process control loop and their characteristics, proper modes selection, configuration; Enhanced PID control system; and multivariable loop. Participants will be taught on Basic Tuning, simple and most difficult control application in the plants and how to overcome some difficult process.

WHO SHOULD ATTEND?

Plant or process supervisors, team leaders, instrument engineers, lectures and others who need to upgrade the knowledge and a comprehensive review or new experience of advanced process control.

TRAINING OUTCOMES?

At the end of the course, the participants should be able to:
⊕ Explain the process behaviour and effect of order lag on control system.
⊕ Identify the problems of plant control.
⊕ Select proper control modes for various process control applications.
⊕ Identify the combination type of process control.
⊕ Tuning the control loop.
⊕ Differentiate the advanced and basic control system.
⊕ Explain the general guidelines for cascade, split range and ratio control.
⊕ Understand the basic principles of dead time and predictive control.
⊕ Outline the structure of the control equation contained in a feed forward controller.
⊕ Understand the problems associated with multivariable control and the solution approaches that are available to solve these problems.
⊕ Apply multivariable control systems.

SELECTED CUSTOMERS

COURSE PROGRAM

- Proportional, integral and derivative algorithm.
- Transfer function of close and open loops.
- Process behaviour
- Stability and frequency response analysis, root locus analysis, improving the steady state error and transient response.
- Optimum control setting.
- Advance control level one; cascade control, split range control, selector control, non linear and basic ratio control, (the need and setting parameters).
- Ratio and feed forward control, mass and energy heat balance approach.
- Feed forward control, lead, lag, gain and dead time compensator approach.
- Multivariable control loop; modelling, prediction, coupler decoupler controller, smith predictor and internal multivariable control (IMC).
- Supervisory control system.
- Introduction to optimization and constrain control.
- Development of control system to control distillation column and other examples of plant application control.

About the Course Instructor

Engr. Azahar bin Mat Noor, graduated with Bachelor of Engineering (Honors) in Electrical Engineering and major in control system from the University of Technology Malaysia and is both a Registered Professional Engineer (Mechanical) with Board of Engineer, Malaysia and a Member, The Institution of Engineers, Malaysia. He also holds an Instrumentation and Control System certificate from YEW Mitaka, Tokyo.

He had working experiences with several companies such as the Institute Technology Petroleum Petronas (INSTEP) and Centre for Instructor and Advanced Skill Training (CIAST).

Since the past 20 years in teaching, he had delivered for several courses such as;
- Process Design and Process and Instrumentation for process engineer.
- Process control technology for Instrument Engineer.
- Process control technology and application.
- Control valves service and repair.
- Instrumentation and measurement Engineering.
- Basic Instrumentation and Fundamental of Process Control.

Registration Form

Please Send Your Registration To:

Tel:	006.019.979.0465	Fax:	006.09.617.8443	E-mail	info@cfpets.com

Course Details

Course Name:	Process Control Engineering, Strategies and Application Technology	Course Date:	10 – 14 December, 2023
Venue:	Kuala Lumpur, Malaysia	Fee:	USD 4,500.00

Company Information

Organization	
Address	

HR / Training Manager		Invoice to be sent to	
Name :			
Tel no.:			
Fax no.:			
E-mail :			

Participant Information

	Participant # 1	Participant # 2	Participant # 3
Full Name :			
Job Title :			
Department :			
Telephone No. :			
Mobile No. :			
Fax No. :			
E-mail Address :			

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