DISTILLATION CONTROL TECHNOLOGY AND APPLICATION COURSE

Training Dates:	As per schedule	**Training Venue:**	Kuala Lumpur
Basic Fee:	RM3,450.00 + SST per participant (this includes course materials, meals, refreshment and attendance certificate)		

DURATION

21 hours (Three (3) days)

TARGET GROUP

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.

TARGETED INDUSTRY/INDUSTRIES

Oil and gas industries, power plant, petrochemical plant, pump oil plant, food industries and others related industries.

CERTIFICATION

This course can be certified for the continuing professional development program likes the program by the board of engineers Malaysia, TEVT, Malaysia skill certificate and instrumentation competency certificate.

COURSE OVERVIEW

The course exposes participants to the various process control loop and their characteristics, proper modes selection and configuration. The course also cover usage of enhanced PID control system and multivariable loop. Participants will be taught on PID Tuning and the technique to upgrade the strategy of control technology to enhance the application of process control on distillation column.

COURSE OBJECTIVE

The objective of the program is to provide instrument engineers, plant tech, plant operators and others plant personnel with a good knowledge and skill so that they can optimum operating plant.

COURSE 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 all variables on distillation column.
- Apply single loop PID controller on distillation column.
- Tune PID for optimum operating.
- Explain the general guidelines for cascade, split range and ratio control.
- Upgrade the control system to improve the performance.
- Apply feed forward control system on distillation column.
- Differentiate advanced and basic control system.
- Understand the basic principles of dead time compensator and how to increase performance very long dead time.
- Identify process having dead time too long and apply dead time compensator to improve the lag system.
- Apply supervisory control system on distillation column.

TRAINING METHODOLOGY

- Lecture
- Classroom discussions
- Short video presentation
- Case study

COURSE CONTENTS

- Process behavior and PID controller.
- Transfer function of close and open loops.
- Optimum control setting.
- Basic operation of distillation tower
- Basic process control on distillation column.
- Cascade control on distillation column.
- Split range control on distillation column.
- Feed forward control on distillation column.
- Application of smith predictor on analytical controller.
- Application of supervisory control system.
- Interacting process and non interacting controller.
- Predictive and trajectory control system.

ABOUT THE 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.
He is 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.