

Course Content

Title: Introduction to Process Control

Potential PDH: 16

Code: BTT033

Description:

The basics of process control will be discussed with focus on instrumentation, analyzers, control applications, and higher-level control. Learning is largely through participation and repetitive exercises.

Outline:

1. Controller Basics
 - Elements of a Controller
 - Controller Modes
 - Concepts
 - Control Configurations
 - Controller Malfunctions
2. Material Balance
3. Heat Exchange
 - Chemistry Concepts: Heat
 - Heat Transfer Objectives
 - Control Relationships
 - Exchanger Malfunctions
 - Condensers
 - Partial/Full/Total Condensers
 - Control Relationships
 - Constraints
 - Malfunctions
 - Partial Condenser Control Matrix
 - Full or Total Condenser Control Matrix
 - Steam Heaters
 - Control Relationships
 - Constraints
 - Malfunctions
 - Reboilers
 - Control Relationships
 - Constraints
 - Malfunctions
 - Steam Generators
 - Control Relationships
 - Constraints
 - Malfunctions
4. Single Stage Flash

Instructor: