

## Process Control Training Course APC-100

Building Control Room Skills for Operators, Technicians & Engineers

Train your Control Room Personnel with Modern Process Control Software Tools, Training and Procedures.

Practical Process Control Knowledge is not taught at Schools and Colleges. It requires plant experience.

PiControl Training converts your DCS/PLC Control Engineers, Technicians and Operators into Skilled Process Control Personnel in a remarkably short time.

Are your experienced engineers, technicians or operators approaching retirement?

Do you want your new workforce to be trained quickly with practical skills and knowledge?

PiControl training imparts years of practical process control experience into this powerful practical process control training course.

For more information or to register, contact  
[www.picontrolsolutions.com](http://www.picontrolsolutions.com)  
[info@picontrolsolutions.com](mailto:info@picontrolsolutions.com)  
(832) 495-6436

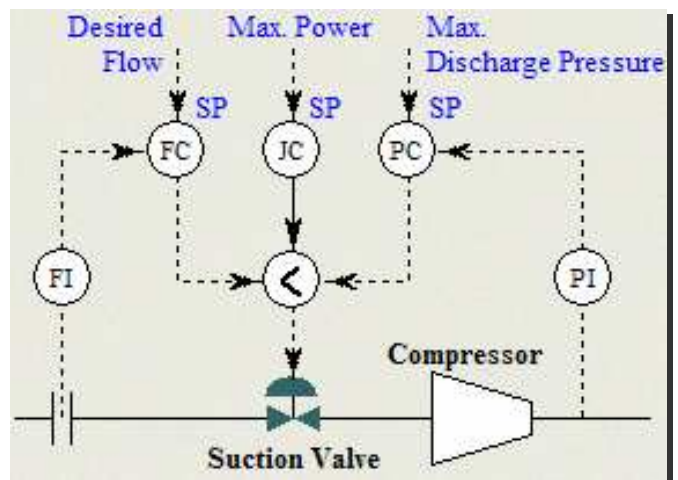
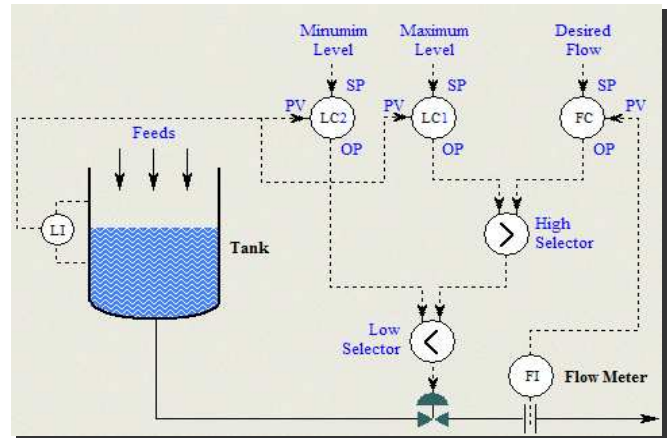
 PiControl  
Solutions

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- PID Tuning
- Primary Control
- Advanced Control
- DCS and PLC

See detailed DEMO on this training course at [www.picontrolsolutions.com](http://www.picontrolsolutions.com)

# Process Control Training Course APC-100

## RATIONALE & OBJECTIVES

Practical process control competence requires years of experience and demands skills that are usually not well taught in educational institutions. In addition, process control courses are frequently fraught with theoretical material that makes the subject inaccessible to most practitioners.

PiControl has developed a course that fills a void in process control training. Students who take the PiControl course can develop basic process control understanding and skills in a very short time. They can use skills acquired in the course to accomplish a variety of tasks, such as

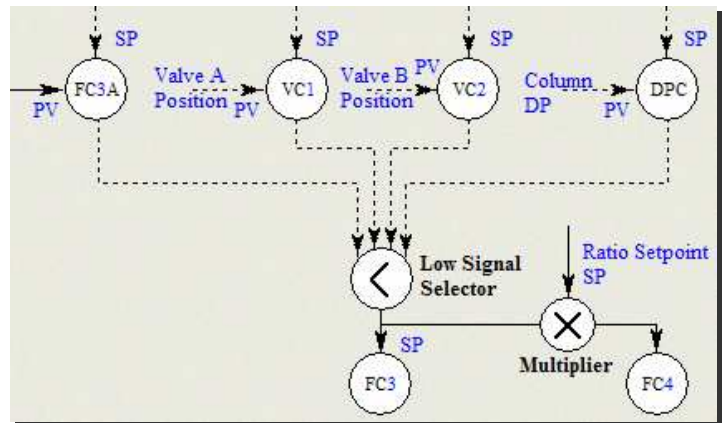
- Reduce process upsets
- Reduce equipment wear & tear
- Increase production
- Reduce utilities
- Increase safety and reliability
- Increase profit

## EXPECTED COURSE OUTCOMES

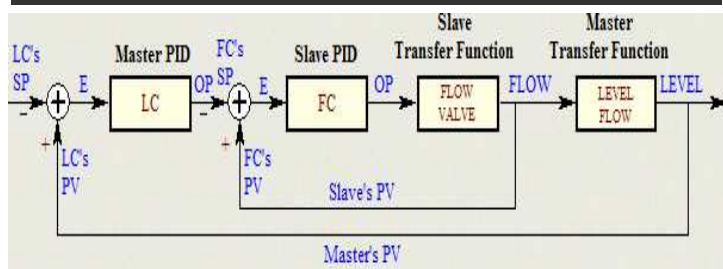
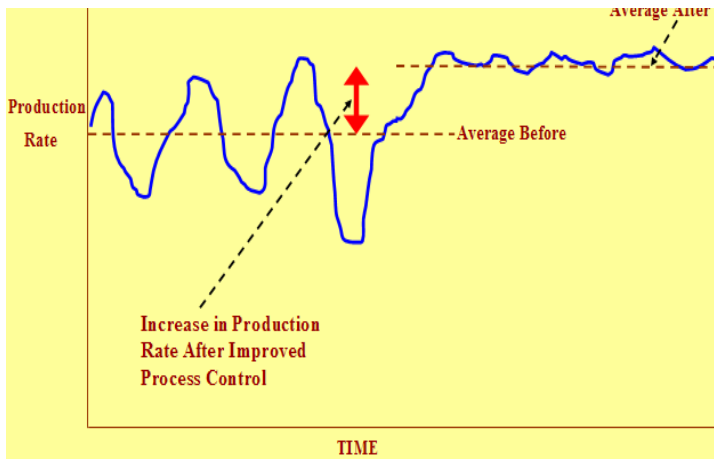
Students who complete this course will know how to:

- Understand process control schematics
- Tune PID and advanced controllers
- Troubleshoot common control-room problems
- Implement advanced control schemes directly on a DCS
- Reduce process upsets while satisfying process and equipment constraints
- Implement model-based control

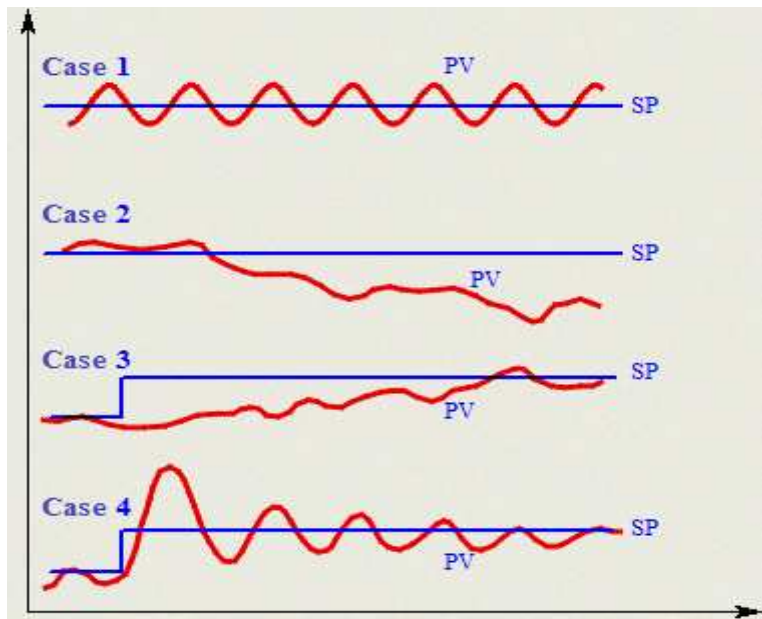
## Build Powerful Controllers all Inside DCS/PLC



## Maximize Production Rates, Stabilize Operation



## Troubleshoot, Debug and Fix Control Problems



## Process Control Training Course APC-100

### DISTINGUISHING FEATURES OF THIS TRAINING COURSE

- Debunk (simplify) process control jargon
- Use intuitive computer simulations rather than complicated mathematics to convey fundamental process control concepts
- Cover state of the art control technology
- Present a variety of applications
- Hands-on practice of concepts taught in course using **SIMCET™** (process control simulation software)

### COURSE DELIVERABLES

All students taking this course will get

- A copy of class notes
- A CD with all course material
- A copy of **SIMCET™** (process control simulation software)
- 16 hours of Houston Community College CEU credit

FREE SOFTWARE SUPPORT OVER THE PHONE & EMAIL FOR ONE YEAR AFTER COURSE COMPLETION

### PID Tuning Skills Grade Report

TEST	P		I		D		F		SCORE
	BEST	USER	BEST	USER	BEST	USER	BEST	USER	
TEST 1	0.97	3.00	12.00	35.00	0.00	0.00	2.00	4.00	74.41
TEST 2	40.00	3.00	50.00	20.00	0.00	2.00	0.00	0.00	54.90
TEST 3	11.00	2.00	30.00	25.00	0.60	1.00	1.00	1.00	75.31
TEST 4	2.00	3.00	350.00	45.00	2.20	0.00	3.00	2.00	61.11
TEST 5	8.00	4.00	16.00	50.00	1.10	0.00	0.00	0.00	70.06
TEST 6	15.00	3.00	30.00	100.00	0.00	0.00	0.00	0.00	58.79
TEST 7	9.00	3.00	90.00	140.00	0.00	2.00	0.00	0.00	75.30
TEST 8	7.00	2.00	120.00	35.00	0.00	0.00	0.00	0.00	74.86
TEST 9	5.00	5.00	10.00	55.00	0.60	0.10	0.00	0.00	76.31
TEST 10	2.00	3.00	15.00	75.00	1.00	0.00	0.00	0.00	79.13
TEST 11	1.30	2.00	55.00	35.00	0.00	0.00	0.00	0.00	89.63
TEST 12	3.70	5.00	20.00	20.00	0.00	0.00	0.00	0.00	97.02
OVERALL SCORE									73.90

Practice and Play with PID Tuning on Real-Time PID Simulator and then take PID Tuning Tests to test your tuning skills. This process prepares you to skillfully fix and improve PID tuning and other control problems in the control room.

### COURSE INSTRUCTOR

**Prof. Michael Nikolaou, Ph.D.**

With over 20 years of experience, Prof. Nikolaou packages and presents a powerful and practical industrial process control course. Prof. Nikolaou is an active researcher, professor and industrial consultant with numerous technical publications and industrial success stories.



### COURSE OFFERINGS

This two-day course is offered at the customer's site upon request or at the Houston Community College Northeast.

For information on specific dates and to register, please visit our web site:  
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