Basic Programmable Logic Controllers

Thursday - Friday April 18-19, 2013 8:00 am - 4:30 pm

- This 2-day course is designed to give students a good understanding of Programmable Logic Controllers (PLC's). This course places a heavy emphasis on understanding the logic and operation of the PLC.
- Taught using Allen-Bradley SLC 500 series, MicroLogix 1500 PLC's and RSLogix 500 programming software.
- 4 75% hands-on. Maximum of two students per training station.
- This course is oriented towards beginners. A basic familiarity with computers and electrical systems is helpful, but not essential.
- Limited to 12 students per class to ensure maximum training quality.

Typical Students

- Technicians
- ♣ Electricians
- Maintenance Personnel

- Engineers
- Operators
- Managers and Supervisors

Course Overview and Topics

This course covers PLC programming, installations, and troubleshooting. Emphasis is placed on logical thinking and efficient, logical program development.

Key concepts covered in the basic PLC course include: Programming AND / OR conditions, Seal / Latch instructions, Examine ON / Examine OFF instructions, PLC program scan cycle, program documentation, batch programming techniques, understanding PLC addressing, common program problems and bugs, safety considerations, programming counters and timers, comparison statements, numerical / integer operations, Latch / Unlatch instructions, hardware considerations, diagnostics and troubleshooting, emerging trends and capabilities.

- Brief history of PLC's
- Relays vs PLC's
- ♣ PLC processor operation
- ♣ PLC I/O addressing
- AND/OR programming
- ♣ XIC and XIO instructions
- Sealing bits / latch programming

- ♣ RS Logix software tool
 - Safety considerations
- ♣ PLC timers & counters
- Latch & unlatch statements
- ♣ Diagnostics & troubleshooting
- ♣ Going online, uploading & downloading

Cost: \$600 per attendee. **Registration closes FRIDAY, April 12, 2013 or when filled.** Please mail, scan/email, or fax registration form. *Mail* or bring check to first day of class. Make checks payable to HCC- FLATE.

Mail to: Lourdes Fleurima

FLATE – HCC Brandon 10414 E Columbus Dr. Tampa, FL 33619

<u>Location and Directions:</u> Hillsborough Community College – Brandon. For Directions Visit <u>www.fl-ate.org/contact/directions.html</u>

For more Information and to reserve you seat, call us at 813-259-6577, FAX: 813-259-6576 or email us lfleurima@hccfl.edu. For more information about the course content, contact Dr. Alessandro Anzalone azalone2@hccfl.edu



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REGISTRATION FORM

PLEASE FILL OUT FOR EACH PARTICIPANT

GENERAL INFORMATION

REGISTRATION DATE:		
COURSE NAME:		
COURSE DATE:		
PARTICIPANT INF	ORMATION	
COMPANY:		
FIRST NAME:	LAST NAME:	
PHONE:	FAX:	
ADDRESS:	CITY, STATE:	
	ZIP CODE:	
EMAIL:		



