

## **In-House Basic OCS Factory Training**

**April 18-20 (arrive on the 17th, class ends at 1 pm on 20th)**

**Limited Space - 12 students (1 per station)**

**Cost \$457 / student + travel & hotel**

Includes:

- 50% discount on a controller - see list below (limit 1/student)
- Programming cable kit and Training Material

Training will be based on:

- CsCAPE 9.9 SP8 (or current version of Cscape)
- Advanced Ladder – Register & Tag Based
- MQTT and IEC-61131 live demo presentations (no hands-on)

## **In-House Advanced OCS Factory Training**

**May 9-10th (arrive on the 8th, class ends at 4 pm on 10th)**

**Limited Space - 12 students (1 per station)**

**Cost \$457 / student + travel & hotel**

Includes:

- 50% discount on a controller - see list below (limit 1/student)
- Programming cable kit and Training Material

Training will be based on:

Variable-based Advanced Ladder Logic Programming, including:

- PID
- Subroutines
- Structures
- User-Defined Function Blocks

User Interface features, including:

- Recipes
- Importing Images & Fonts
- Audio/Video

Ethernet Communications, including:

- Modbus TCP
- Ethernet Global Data
- WebMI
- MQTT

Did your desired topic not make the list? We've also set aside some classroom time for Topics "By Request". If you have a topic that's particularly important to you – and it didn't make our list – just let us know!

## **In-House IEC 61131 Training**

**June 6-7 (arrive on the 5th, class ends at 4 pm on 7th)**

**Limited Space - 12 students (1 per station)**

**Cost \$457 / student + travel & hotel**

Includes:

- 50% discount on a controller - see list below (limit 1/student)
- Programming cable kit and Training Material

Horner OCS All-in-one Controllers can be programmed using multiple logic styles - all available in our standard application programming software - Cscape. These logic styles include traditional "register-based" Advanced Ladder Logic, more modern "variable-based" or "tag-based" Advanced Ladder Logic - and the IEC 61131 industry standard.

The Standard OCS Factory Training and Advanced OCS Training courses are based around Advanced Ladder Logic - both Register-based and Variable-based. This course will focus strictly on IEC 61131 application development in Cscape.

Over the first day-and-a-half - the following topics will be covered:

- Introduction to the IEC 61131 Standard
- Introduction to the Cscape IEC 61131 programming environment
- Cscape Standard IEC 61131 vs Cscape Enhanced IEC 61131
- Classroom and Hands-on Experience with the following IEC 61131 programming languages:
  - Structured Text, Ladder Logic, Function Block Diagram, Sequential Function Chart
- Variable Handling topics:
  - Memory Mapping for Real-world I/O, Arrays, Structures, Bitfields, Enumeration
- HMI Screen Creation
- Networking
- Troubleshooting Techniques - Basic & Advanced

There will be laboratory exercises included for each of the four major IEC 61131 languages - Structured Text (ST), Ladder Logic (LD), Function Block Diagram (FBD) and Sequential Function Chart (SFC).

The final half-day of the course will include time for completion of labs along with one-on-one consultation for application advice if needed.

### **Prerequisites**

Students attending this course should be at least familiar with PLC programming in general, or Horner OCS programming in particular. For students below this familiarity level - the Standard Factory Training course is a better starting point.

### **Equipment**

Students need to bring their own laptop computers, with Cscape preinstalled and operational - at least to the level of establishing communications with an OCS controller prior to arriving. This is especially critical for those students who do not have administrative access to their laptops. Cscape 9.90 SP8 or later is recommended.

**Hotel option:**

Holiday Inn Express \$99+

Holiday Inn Express & Suites

410 South Missouri Street, Indianapolis, IN 46225

**Check in: Mon. (4/17), Mon. (5/8) or Mon. (6/5); Check out: Thurs. (4/20), Weds. (5/10), or Thurs. (6/8)**

Option 1 - Reserve online:

**April - Horner APG Standard Factory Training Holiday Inn Express Reservation Link**

**May - Horner APG Advanced Factory Training Holiday Inn Express Reservation Link**

**June - Horner APG IEC Training Holiday Inn Express Reservation Link**

Option 2 - Call in:

Danielle Finneran - [dfinneran@dorahotelco.com](mailto:dfinneran@dorahotelco.com)

Main 317-822-6400; Direct Line 317-405-4542

## Registration

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Company Name: \_\_\_\_\_ Title: \_\_\_\_\_

Office Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

I'm interested in attending:

<b>In-Person Basic - \$457.00</b>	<b>In-Person Advanced - \$457.00</b>	<b>IEC 61131 - \$457.00</b>
(P/N: TRAINING-FACTORY)	(P/N: TRAINING-ADVANCED)	(P/N: TRAINING-IEC-FACTORY)

I'm interested in purchasing a controller for 50% OFF:      Yes      No

Optional purchase of an OCS Controller at 50% current list price

MICRO OCS	XL SERIES*	XL PRIME SERIES*
X2 (A or R)	XLE/XLEe	XL4 Prime
X4 (A or R)	XLT/XLTe	XL6 Prime
X5	XL4	XLW Prime
X7 (A or R)	EXL6	XL7 Prime
X10 (A or R)	EXLW	
	XL7	
	EXL10	

- **Limit One Controller per student**
- **Custom parts are not eligible for Training discount**
- **Shipping charges (from Indianapolis, IN location) will be an additional cost**

I grant to Horner APG, its representatives and employees the right to take photographs and videotapes of me. I authorize Horner APG, its assigns and transferees to copyright, use and publish the same in print and/or electronic and digital media. I agree that Horner APG may use such photographs of me with or without my name and for any lawful purpose, including such purposes as publicity, illustration, advertising and web content.

I have read and understand the above.

Name (Print and Signature): \_\_\_\_\_

Company: \_\_\_\_\_

Date: \_\_\_\_\_