Class Offer	Class Dates			
Sysmac Studio Operations	March 4th / 5th	May 13th / 14th	Sept. 9th / 10th	Nov. 11th / 12th
Sysmac Studio Programming	March 11th	May 20th	Sept. 16th	Nov. 18th
Basic PLC Programming	April 1st / 2nd		Oct. 7th / 8th	
Advanced PLC Programming	April 22nd / 23rd		Oct. 21st / 22nd	
PLC Maintenance	March 25th		Sept.30th	
PLC Function Block	April 29th		Oct. 28th	

Check out our website for a full list of available classes and to register at www.lakewoodautomation.com/training/

Training Course Descriptions:

Sysmac Studio Operations

The purpose of the Sysmac Studio Operations course is to introduce an individual to the basic concepts of Sysmac Studio, troubleshooting, and programming using a mixture of lectures and hands on labs. This course is designed for the individual with little Omron MAC (PLC) programming experience. The topics that are covered in the Sysmac Studio Operation course are as follows: History of PLCs; hardware layout; configuration of the NX1P2 via Sysmac Studio; the Omron I/O tag based addressing scheme; functions; function blocks; variables; arrays; structures; unions; searching; inline structured text; Sysmac Stuidio programming software; entering and debugging of a basic ladder logic program; and basic trouble shooting techniques. The hardware used in the class will be the Omron NX1P2 MAC(PLC). The class will be structured towards software navigation & basic online functions.

Sysmac Studio Programming

The purpose of the Sysmac Studio Programming course is to introduce an individual to the basic concepts of Sysmac Studio and programming using a mixture of lectures and hands on labs. This course is designed for the individual with little Omron MAC (PLC) programming experience. The class will be structured towards learning how to program.

Basic PLC Programming

The purpose of the Basic PLC Training Course is to introduce an individual to the basic concepts of the Omron PLC using a mixture of lectures and hands on labs. This course is designed for those with little or no prior PLC experience. The topics covered are: the history of the Omron PLCs; wiring to the PLC; I/O addressing; basic functions of an Omron PLC (SCAN); the design, entering and debugging of a basic ladder logic program; CX-Programmer software; on-line editing; and basic trouble shooting techniques. The hardware used in the class will be the Omron CJ2M PLC.

Advanced PLC Programming

The purpose of the Advanced PLC Training Course is to introduce an individual to the more advanced concepts of a PLC using a mixture of lectures and hands on labs. The topics that are covered in the Advanced PLC training course are as follows: BCD, DEC, HEX and Binary conversions; PLC instructions and indirect addressing. The hardware used in the class will be the Omron CJ2M PLC.

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PLC Maintenance

The purpose of the Omron PLC Maintenance Course is to introduce an individual to the basic concepts of Omron PLC Maintenance and Troubleshooting using a mixture of lectures and hands on labs. This course is designed for the individual with little Omron PLC programming experience. The topics that are covered in the Maintenance training course are as follows: A brief history of the Omron PLC family; wiring to the PLC; the Omron I/O addressing scheme; basic functions of an Omron PLC (SCAN); CX-Programmer programming software; on-line editing of programs; and data memories and basic trouble shooting techniques.

PLC Function Block

The purpose of the PLC Function Block is to introduce an individual to the basic concepts of a Function Block (FB) using a mixture of lectures, hands on labs, and simulation software. This course is designed for the individual with little or no prior FB programming experience. The topics that are covered in the FB training course are as follows: description of a function block; advantages of using a function block; different component names within a function block; ladder function blocks; structured text function blocks; and different programming formats.

Class Requirements:

- Understanding of the windows operating system.
- A laptop with the most recent version of software being used during class.
- Have administrator privileges to install any drivers, software, and change the IP address of their computer.

If there are any questions about class requirements, please contact the technical service department of Lakewood Automation via email at technical@lakewoodautomation.com.

Billing and Cancellation Policy

Lakewood Automation reserves the right to cancel or change training dates and will not be held liable for any expenses, loss of income, or inconvenience caused.

All classes will be invoiced or cancelled 14 days before the class begins. If you need to cancel, it must be done before this date.

All No Charge classes will be billed $200 for a no show or cancelling within 48 hours of the class. If you attend the class there will be no charge.

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