Course Overview
Course number: ELX-0002
Course length: 4.5 days

Need to improve your knowledge for designing and implement your Experion LX System?
This course provides participants the ability to perform the following Experion LX System tasks:
• FTE (Fault Tolerance Ethernet) specification
• FTE working principle and implementation
• Build control strategies using Experion LX Control Designer software to create more complex Function Block Diagrams
• Use Station Designer software to configure the HMI to provide user interface including shapes and scripts

The course presents the C300 Controller and Engineer/Direct/Flex Station hardware platforms and both configuration software packages. It includes hands-on lab exercises where students develop Function Block diagrams and Control Station configurations using Experion Control Designer and Station Designer software.

The course is divided into three sections. It covers the C300 Controller with networking, Engineer/Direct station and operator interface.

Course Benefits
Students will gain an understanding of the Experion LX system architecture, configuration methods and commissioning tools to:
• Understand and use function blocks to configure more complex control strategies for the customers
• Understand and use Engineer/Direct/Flex Station and operator interface to satisfy the process
• Understand the communication between Experion LX and SCADA system

Course Delivery Options
• In-Center Instructor-Led Training
• On-Site Instructor-Led Training

Who Should Take This Course?
All System Engineer System Integrators who are responsible for the Sales, System Designing and System Configuration for Experion LX system and Engineer/Direct Station, and want to improve their knowledge for Experion LX system.

Prerequisite/Skill Requirements
Prerequisite Course(s)
• ELX-0001

Required Skills and/or Experience
• Basic configuration for Experion LX system
• Prior experience configuring process control systems
• Working knowledge of Windows 7

Desirable Skills and/or Experience
• Basic networking knowledge
• Basic Distributed Control System knowledge

Course Topics
You will learn how to...
• System Architecture Overview
  o FTE principle and configuration
  o Server Redundant
• Choose the proper Experion LX software for your application
  o Configuration Studio
  o Control Builder
  o Quick Builder
  o HMIWeb Display Builder
• Principle of Control Builder
• Control Strategy configuration
- PID Control Module Configuration with Cascade Control/ Split Range Control
- DevCtl (Device Control) Control Module Configuration with interlock
- Sequential Control Module Configuration with exception

**Control Strategy Management**
- Import/Export control strategy
- Backup/Restore C300 Controller
- Backup/Restore Control Strategy Database
- Synchronization between C300 controller, Station and database

**Station Configuration**
- Build/configure Engineer Station
- Build/configure Direct Station
- Setup the connection between Engineer Station and Direct Station
- History archiving
- History arching management

**Communication between Experion LX and SCADA**

**Distributed System Architecture**

**Develop your Experion LX operation interface**
- User graphic principle
- Use HMIWeb Display Builder to design user graphic
- HMIWeb Display Builder Scripting
- HMIWeb Display Builder Solution Package

**System Security**
- Station-based security
- Operator-based security

**System Architecture Overview (Big Picture & Major Data Flow)**

---

**Additional Training**

To increase your knowledge and skills, there are additional courses available from Automation College.