

ABB UNIVERSITY - INDIA

# **INT568 Freelance System Engineering**



Using the fundamentals of a distributed control system, learn to engineer a Freelance system and become familiar with configuration and commissioning.



#### Participant profile

This training is targeted to Freelance users and system integrators who need to get a comprehensive overview about the Freelance system capabilities.



#### Workshop goal

The goal of this course is to engineer a Freelance system and to become familiar with configuration and commissioning tasks.





## Prerequisites and recommendations

Students shall know the fundamentals of working with Distributed Control Systems and have basic knowledge of IEC 61131-3 programming and of working with Microsoft Windows.



# Workshop Objectives

Upon completion of this workshop, the student will be able to:

- Describe the network structure in the Freelance architecture
- Describe the functionality of the major system components
- Describe the structure of application programs i.e. variables, programs, tasks
- Configure and maintain objects in Freelance Engineering
- Configure the AC 700F controller with local I/O's
- Configure the AC 900F controller and establish field- bus connectivity to corresponding Remote IO's
- Create and maintain standard and user specific function blocks
- Load the controller and work in online mode
- Create and modify standard displays
- Manage and configure alarm and events
- Setup trends and configure historical data collection

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#### Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities.



# Registration

Enrollments are on first come, first serve basis. To express interest, please write to ABB Energy Industries India at in-energyindustries@abb.com

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## Main topic

- AC 700F and AC 900F Hardware
- OPC communication
- Applications with Function Block Diagram (FBD)
- and Structured Text (ST)
- User function blocks
- Standard displays
- Trends
- Alarm and events
- Logs and reports
- Free graphics
- Sequential Function Charts
- Import / export
- Bulk data handling
- System documentation



## Days

- Tuesday, 8:00 AM 5:00 PM
- Wednesday, 8:00 AM 5:00 PM
- Thursday, 8:00 AM 5:00 PM
- Friday, 8:00 AM 12:00 PM



# Location

ABB India Limited Registered Office Plot No. 5 & 6, 2nd Stage Peenya Industrial Area IV Peenya, Bengaluru – 560 058 Karnataka, India



**Duration** The duration is 4 days

Course Outline				
Day 1	Day 2	Day 3	Day 4	
<ul> <li>Course overview</li> <li>Freelance system architecture</li> <li>Engineering</li> <li>Application structures</li> <li>Advanced configuration and commissioning</li> </ul>	<ul> <li>Applications with Function Block Diagram (FBD) and Structured Text (ST)</li> <li>Standard displays</li> <li>Trends</li> </ul>	<ul> <li>Alarm and events</li> <li>Logs and reports</li> <li>Free graphics</li> <li>Sequential Function Charts (SFC)</li> <li>User function blocks</li> </ul>	<ul> <li>System Connectivity</li> <li>Bulk Data Manager</li> <li>Import/Export</li> <li>System Documentation</li> </ul>	

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