

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



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



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 style="list-style-type: none"> • Course overview • Freelance system architecture • Engineering • Application structures • Advanced configuration and commissioning 	<ul style="list-style-type: none"> • Applications with Function Block Diagram (FBD) and Structured Text (ST) • Standard displays • Trends 	<ul style="list-style-type: none"> • Alarm and events • Logs and reports • Free graphics • Sequential Function Charts (SFC) • User function blocks 	<ul style="list-style-type: none"> • System Connectivity • Bulk Data Manager • Import/Export • System Documentation

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

www.abb.com/abbuniversity

800xA is a registered or pending trademark of ABB. All rights to other trademarks reside with their respective owners.

We reserve the right to make technical changes to the products or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not assume any responsibility for any errors or incomplete information in this document.

We reserve all rights to this document and the items and images it contains. The reproduction, disclosure to third parties or the use of the content of this document – including parts thereof – are prohibited without ABB's prior written permission.

Copyright© 2021 ABB
All rights reserved