ABB UNIVERSITY

E163
Cyber Security for System 800xA

Customers increasingly develop cyber security awareness for control systems and demand security solutions from ABB. Students learn different approaches to cyber security for a careful planning and implementation of security measures. They get an understanding of cyber security mechanisms and solutions for control systems and explore in depth the System 800xA security model. As a result of this workshop the student will be prepared to adress control system security solutions.

Course Type
This is an instructor-led Expert Workshop with short presentations and demonstrations, extended exercises, hands-on sessions and discussion.

Participant profile
This Expert Workshop is targeted to project lead engineers, system administrators and service & support engineers.

Prerequisites
Participation in the 800xA T315(C&H) is highly recommended. In addition, basic knowledge of networking (switching, routing) and Microsoft operating systems is required.

Learning objectives
Upon completion of this course, the participant will be able to

- Be a good speaking partner for customer IT people.
- Describe the security goals, change management and the standard guidelines (like IEC/ISO 27000 and IEC 62443)
- Describe attack mechanisms, the vulnerability exploit cycle and intrusion detection.
- Use various IT tools to test a systems' robustness to identify possible vulnerabilities and, more importantly, test the mitigating measures.
- Configure group policies in an Active Directory, harden the Microsoft operating system and harden networking equipment (like switches).
- Create backup/restore- and rebuild procedures.
- Describe basic and advanced network architectures including security zoning and secure communication.
- Create secure interconnections between networks using firewalls.
- Describe how security updates are applied to System 800xA.
- Configure a Trellix ePolicy Orchestrator (ePO)
- Configure Microsoft Defender Antivirus
- Configure a Microsoft WSUS server.
- Understand secure remote connection.
- Configure default built-in security functions of System 800xA.
- Understand the benefit of the ABB Cyber Security Workplace.

Duration
4.5 Days

Agenda				
Day 1	Day 2	Day 3	Day 4	Day 5
Workshop Overview and Introduction	Firewalls	Trellix ePolicy Orchestrator (ePO)	Secure Remote Platform (SRP)	Cyber Security Workplace
Security Theory	System Hardening	or Microsoft Defender	ABB System Update Service	Prove your knowledge: Apply gained knowledge in various exercises.
Penetration Testing		Microsoft Windows Services Update Server (WSUS)	Disaster Recovery	
Network Architecture			System 800xA Security	

Additional topics can be covered if agreed upon in advance. Do not hesitate to contact us, we would be happy to make you an offer.

ABB University

www.abb.de/abbuniversity
www.abb.de/controlsystems

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

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG. Copyright© 2017 ABB
All rights reserved

Address

ABB AG
Technical Training
Service Control
Stierstädter Straße 5
60488 Frankfurt am Main

Office

Phone: +49 69 7930 4801
Fax: +49 69 7930 4652
Mail: abbuniversity@de.abb.com

Customer Center

Phone: +49 180 5 222 580