

ABB UNIVERSITY COURSE DESCRIPTION

# **US926**

# Cyber Security Services for ABB Automation Systems Cyber Security Fingerprint



Learn how to perform a Security Fingerprint on an ABB control system.

### 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.

#### **Student Profile**

This course is for ABB personnel who install, commission, support, and maintain ABB control systems.

### **Prerequisites**

Students should have good working knowledge of Windows 7/8.1, Windows Server 2008/2012 R2, TCP/IP Networks, and Microsoft Active Directory administration and troubleshooting. Successful completion of ABB University Courses NA939, NA940, and US925 meets these prerequisites.

### **Course objectives**

Upon completion of this course the participants will be able to:

- Understand and be able to communicate security principles such as "least privilege", 'least function", and "defense in depth".
- Be able to answer questions about the requirements of the cyber security standards ABB's customers are seeking to comply with
- Identify deficiencies in network architecture and make recommendations for proper segmenting of a network into zones

- Identify and have some familiarity with tools and techniques for vulnerability and penetration testing of systems
- Perform a Cyber Security Fingerprint on an ABB control system
- Remediate the deficiencies identified in a Cyber Security Fingerprint
- Configure IPSec on an 800xA system
- Configure Windows Security Event Log and gain basic knowledge of monitoring

## **Main topics**

- · Cyber Security Fundamentals
- · Cyber Security Standards
- · Network Architecture
- · The threats hacker methods/tools/exploits
- · Defense audits and hardening
- · Defense forensics and monitoring

#### **Duration**

The duration is 5 days

Security Principles and		Day 3	Day 4	Day 5
occurrey ramespico una	Hacker Tools and Techniques	The ABB Cyber Security	• IPSec Configuration in	• Industrial Defender
Standards		Fingerprint	800xA	
<ul> <li>Secure Network</li> </ul>		• Remediation of Issues Found	<ul> <li>Security Maintenance</li> </ul>	
Architectures		in Fingerprint	SE46 White Listing	