

# 2018 ISA Water/Wastewater and Automatic Controls Symposium

August 7 to 9, 2018 • Hyatt Regency Bethesda • Bethesda, Maryland, USA  
 Presented by the ISA Water/Wastewater Industries Division – [www.isawwsymposium.com](http://www.isawwsymposium.com)  
 Technical co-sponsors: Chesapeake AWWA Section, the WEF Intelligent Water Technology Committee ,  
 Chesapeake Water Environment Association, and ISA Baltimore-Washington Section



August 6-7, 2018 – Optional Short Course

## IACS Cybersecurity Operations & Maintenance: Secure Your Control System

ISA Course IC37S

### Course Description

**Length:** 2 days

**Date:** Mon-Tues, August 6-7, 2018

**CEU Credits:** 1.4

**Course Hours:** 8:00 a.m. – 4:00 p.m., includes lunch both days

**Price:** \$1,440 for ISA members, \$1,620 for affiliates, \$1,800 list & community members

### Course Schedule

DAY	Topics, Exercises, Etc.
Day 1 A.M.	Welcome and Pre-Instructional Survey Introduction to the ICS Cybersecurity Lifecycle Section 1: Review of the Assess Phase Section 2: Review of the Design Phase Section 3: IACS Asset Management Exercise #1: Asset Inventory Section 3: System Hardening Exercise #2: ICS Device Hardening Exercise #3: Disabling USB Storage Devices
Day 1 P.M.	Exercise #4: Whitelisting Section 3: Access Control & Remote Access Section 3: Patch Management Exercise #5: WSUS demo Section 3: Malware Management Exercise #6: PLC backup and configuration management Exercise #7: Complete a MOC form Section 3: Information & Documentation Management

Day 2 A.M.	Daily Progress Reviews & Overview of Day 2 Objectives Section 3: Change Management Section 3: Physical Security Exercise #8: What's wrong with this picture Section 4: Detecting Abnormal Activity Section 4: Network and Host Intrusion Detection Section 4: Monitoring Logs Exercise #9: Event Detection, Tracking, and Log Monitoring Section 4: Periodic testing / auditing Exercise #10: Vulnerability scanning
Day 2 P.M.	Section 5: Incident Response Lifecycle Section 5: Incident Response Planning Section 5: Incident Management Section 5: Post Incident Analysis & Forensics Exercise #11: Network packet capture analysis Exercise #12: Troubleshooting and Forensics Review of Overall Course Objectives Post-Instructional Survey Final Course Evaluation