ThreatGEN® Red vs. Blue
ICS 201: Industrial Cybersecurity Vulnerability & Risk Assessment

Course Overview

This course builds upon the knowledge gained in ICS 101 by applying technical cyber risk and vulnerability assessment skills. Through a combination of lecture and hands-on labs, students will learn how to perform standards-based gap assessments and technical ICS vulnerability assessments using industry standard tools and applications. In addition to standard methodologies, they will also learn "ICS safe" methods. Finally, they will tie it all together by learning consequence-driven risk calculation methods.

BONUS CONTENT:
Students will have access to our "Linux for Beginners" eLearning course as well as a bonus lab where students will learn how to use VBA and PowerShell scripts (in a way that students of all levels can follow and utilize) to automate vulnerability assessment data analysis and maximize the value of vulnerability scanning tool reports.

What will you get out of this course?

- ✓ Learn to perform security standards-based gap assessments.
- ✓ Learn and apply consequence-driven risk assessment concepts.
- ✓ Learn to perform ICS vulnerability assessments in technical hands-on labs.
- ✓ Learn to perform ICS vulnerability assessments that are safe for ICS environments.
- ✓ Learn to use VBA and PowerShell scripts to analyze vulnerability assessment data.
- ✓ Learn to maximize the value of vulnerability scanning tool reports.
- ✓ Taught by industry-leading, world-class ICS cybersecurity experts with years of real-world experience.

Intended Audience

- **Anyone interested in gaining beginner to intermediate knowledge of ICS/OT cybersecurity**
- **Anyone interested in or tasked with ICS/OT risk assessment and management.**
- **Anyone interested in learning more about technical ICS/OT vulnerability assessment.**
- **Cybersecurity managers**
- **Plant managers and asset owners**
- **IT cybersecurity staff tasked with ICS/OT cybersecurity**
- **Engineers tasked with ICS/OT cybersecurity**

Course Syllabus

1. **Overview of Assessments**
2. **Vulnerability Assessment Tools**
3. **Common Vulnerability Assessment Techniques Review/Overview**
4. **OT/ICS Assessments vs IT Assessments**
5. **OT Vulnerability Assessment Methods: Non-Technical Assessments**
6. **OT Vulnerability Assessment Methods: Technical Assessments**
7. **Putting it All Together: Analysis, Quantification, Scoring & Prioritization**