

Online Training Module Leading to Professional Certification

Skill Path (Track 1)	Contents	Estimated Duration	Goals/Objectives	Career Paths
ICS/SCADA Security Fundamentals	ICS SCADA Security Fundamentals Skill Assessment	5 hours, 30 mins	The ICS/SCADA Security Analyst skill path provides fundamental knowledge about SCADA systems and security, including protocols, access controls, physical security, cybersecurity tools and more.	<ol style="list-style-type: none"> 1. Cyber Defense Analyst, 2. Threat / Warning Analyst 3. Vulnerability Assessment Analyst 4. Network Operations Specialist 5. Cyber Workforce Developer and Manager 6. Systems Security Analyst
	Industrial Control Systems (ICS) Introduction			
	ICS Fundamentals			
	ICS Operation Environment			
	ICS Networking			
	ICS Security Introduction			
	ICS Security Management			
	ICS Security Fundamentals Project			
Skill Path (Track 2)	Contents	Estimated Duration	Goals/Objectives	
ICS/SCADA Security Analyst	SCADA Security Frameworks	6 hours, 56 mins	The ICS/SCADA Security Analyst skill path provides knowledge needed to defend the systems that control critical infrastructure. Participants would learn about assessing the security of ICS/SCADA systems and protecting them from cyber threats.	
	SCADA Security Assessment			
	SCADA Device Identification and Analysis			
	SCADA Vulnerabilities			
	Pentesting SCADA Services and Protocols			
	SCADA Access Controls			
	Remote Access and Field Site Security			
	SCADA Network Security			
	SCADA Intrusion Detection and Incident Response			
	SCADA Preventative Controls			
Labs (Hands-On) (Track 1 and 2)	Contents	Estimated Duration		
SCADA Cyber Range	Modbus PLC Introduction	6 hours, 30 mins		
	SNMP Reconnaissance			
	Datasheet Analysis			
	Scanning ICS/SCADA Networks			

	CTF1 – Reconnaissance			
	Attacking the Infrastructure			
	Firewall Rules for SCADA			
	Exploiting OS-level Vulnerabilities			
	Extracting Network Keys			
	Wi-Fi Password Cracking			
	Manipulating Protocol Data			
	SCADA Honeypot			
	Snort SCADA Rules			
	CTF 2 – Sniffing			
	CTF 3 – Defense			
	ICS/SCADA Pentesting CTF: Lights Out			
Certification Path (Track 1 and 2)	Contents	Estimated Duration		
Certified SCADA Security Architect (CSSA)	Introduction to SCADA Security	8 hours, 54 mins		
	ICS Protocols			
	SCADA Security Frameworks			
	SCADA Security Assessment			
	SCADA Device Identification and Analysis			
	SCADA Vulnerabilities			
	Pentesting SCADA Services and Protocols			
	SCADA Access Controls			
	Remote Access and Field Site Security			
	SCADA Network Security			
	SCADA Intrusion Detection and Incident Response			
	SCADA Preventive Controls			
	ICS/SCADA Security Best Practices			
	CSSA Exam Overview			