SANS
INDUSTRIAL CONTROL SYSTEMS SECURITY

In a world that is seeing increasingly sophisticated and impactful industrial cyber threats, these courses prepare OT security professionals to lead, defend, and protect industrial control systems at the foundational, management, tactical and advanced skill sets. With SANS ICS Security, train to defend what makes, moves, and powers the world.

FOUNDATIONAL

ICS 410 — ICS/SCADA Security Essentials
Gain foundational skills to protect critical infrastructure safe from cyber threats
(GICSP — Global Industrial Cyber Security Professional)

MANAGEMENT

ICS 418 — ICS Security Essentials for Managers
Manage the people, processes, and technologies for OT cyber risk programs

TACTICAL
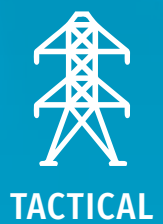
ICS 456 — Essentials for NERC Critical Infrastructure Protection
Maintain a defensible compliance program up to NERC CIP standards
(GCIP — GIAC Critical Infrastructure Protection)

ICS 515 — ICS Visibility, Detection, and Response
Monitor threats, perform incident response and enhance network security
(GRID — GIAC Response and Industrial Defense)

ADVANCED

ICS 612 — ICS Cyberecurity In-Depth
Identify threats in a real-world ICS environment to protect against adversary attacks

Course	ICS Security Analyst	ICS Security Architect	ICS Security Incident Responder	ICS Security Manager	Process Control Engineering
	Acquires and manages resources, supports, and performs key industrial security protection while adhering to safety and engineering goals	Ensures control system network security compliance and best practises for control networks	Executes specific industrial incident response for incidents that threaten or impact control system networks and assets, while maintaining the safety and reliability of operations	Builds and maintains business relationships with engineering staff and C-suite stakeholders by communicating and managing cyber-to-physical risks while reducing security risk to engineering operations and simultaneously prioritising safety	Tests, programs, troubleshoots, and oversees changes of existing processes or implements new engineering processes through the deployment and operations of engineering systems and automation devices
ICS 410	●	●	●		●
ICS 418			●	●	
ICS 456	●		●	●	
ICS 515	●		●		
ICS 612	●	●	●		●

Where multiple courses are shown for a given role, determination of the best course to take would be based on the number of years of experience and sector of work.