

# Design. Build. Protect.

## Control Systems Security Essentials

Courses for Executives and Technical Staff



Parsons PLUS creating a safer world

### Working Behind the Scenes

Parsons has a rich history and reputation of providing a full spectrum of engineering, construction, and program management services to support critical infrastructure. But what some may not know is that Parsons has worked behind the scenes, delivering cybersecurity services that protect our nation's most sensitive information and critical infrastructure, for more than 30 years. Parsons' defensive security services monitor and protect information technologies (IT) and control systems infrastructure against breaches, malware, and sabotage. Our proactive countermeasures identify methods used by our nation's most sophisticated cyber enemies. We deliver proven cybersecurity solutions and training and are ready to support you.

### The Challenge

Recently in a single year the U.S. Department of Homeland Security Industrial Control Systems Computer Emergency Response Team reported a doubling in the number of attacks on these systems in the United States. To protect against attacks effectively, an entire team must remain focused and be well trained in the latest cybersecurity techniques so that they may implement and maintain a highly effective security posture. In response to this situation, Parsons has designed two Control Systems Security Essentials courses, which will provide basic cybersecurity training for executives and technical staff, respectively. Both courses provide definitions of the key operational technology (OT), IT, and cybersecurity terms used daily; in addition, both provide background on the cultural differences between OT and IT, which can create challenges and lead to ineffective security practices.

### Courses Offered

- **Control Systems Security Essentials for Executives.**  
This 1-hour course provides a high-level overview of control system security, including a risk-based approach to cybersecurity.  
Suggested Audience: Executives, program managers, and project support personnel
- **Control Systems Security Essentials for Engineers.**  
This 8-hour course provides definitions, background, and guidance on securing control systems. It contains an end-of-course exercise that encompasses all learning objectives.  
Suggested Audience: control system engineers, IT staff, cybersecurity staff

### Company Overview

Parsons is a technology-driven engineering services firm with more than 70 years of experience in the engineering, construction, technical, and professional services industries. The corporation is a leader in many diversified markets with a focus on infrastructure, defense, security, and construction. Parsons delivers design/design-build, program/construction management, systems design/engineering, cyber/converged security, and other professional services packaged in innovative alternative delivery methods to federal, regional, and local government agencies, as well as to private industrial customers worldwide.

All across the world, at every time of day, Parsons is keeping people moving toward a brighter, safer world.

## Security Essentials Course Objectives

Upon completion of these courses, individuals will be able to:

- Understand the meaning of cybersecurity and its three basic tenets
- Explain how adding cybersecurity to each project will increase control system safety, security, and reliability
- Have a high-level understanding of the status of cybersecurity in our nation's critical infrastructure
- Recognize the increasingly dangerous threats and attacks to control systems
- Explain what is being done to secure our critical infrastructure
- Describe how aligning security initiatives with business objectives can help obtain funding

## Security Essentials Course Overview

- Cybersecurity Today
- Risk-Based Approach to Cybersecurity
- Threats and Critical Infrastructure Attacks
- Costs and Benefits of Cybersecurity
- Critical Infrastructure Sectors
- Industrial Control Systems Background and Security Status
- A Defense In-Depth Approach
- 20 Steps to Securing Control Systems
- Why Cybersecurity Technology Solutions Fail
- End-of-Course Exercise

## New Ways of Attacking the Problem

Parsons recognizes the sensitive, complex nature of control systems and has developed innovative technologies to visualize, model, and simulate operational technologies. In our state-of-the-art Cyber Solutions Center, we can work with you to replicate your operational environment for risk modeling, attack simulation, incident response training, architecture analysis, and more. Parsons offers security appliance configuration services, including deep packet inspection of industrial control OT and IT.

## Your Trusted Adviser

Parsons has been a respected partner in the federal, state, and municipal critical infrastructure community for decades. We look forward to extending our relationship and becoming your trusted cybersecurity adviser.

## Our Customers

- Numerous federal agencies and the intelligence community
- U.S. Department of Defense
- Major municipal utilities
- Metropolitan transit authorities
- Institutes of higher education
- Other confidential government and commercial industry customers

## Other Security Services

- Vulnerability assessments
- NOC/SOC security engineering and operations
- Control system security architecture design and engineering
- Advanced protocols and secure routing deployment

## CONTACT

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