ACADEMY

CYBER SECURITY

SYSTEM ENGINEERING APPROACH TO IMPLEMENTING CYBERSECURITY IN PRODUCT DEVELOPMENT

Learn through interactive exercises, real-world case studies, and industry-proven tools that you can apply immediately.

Designed for real-world engineering—our approach fits seamlessly into V-Model, Agile, CI/CD, or Hybrid product development processes

We continuously invest in training and research to stay ahead of evolving cybersecurity threats and industry advancements.

APPLY NOW

VISIT OUR WEBSITE

www.cyber-vectors.com

Core Concepts & Methods

- System Thinking & Stakeholder Management : Align cybersecurity with product development by effectively managing diverse stakeholder needs, including engineering, compliance, safety/security, and quality teams.
- Requirements Management for Secure Development : Learn to define clear, actionable security requirements using structured methodologies like EARS. Ensure traceability, consistency, and validation across development phases.
- Secure Product Development Lifecycle : Apply cybersecurity principles in system architecture, design, and implementation while integrating security seamlessly into V-Model, Waterfall, Agile, CI/CD, or Hybrid development frameworks.
- Verification & Validation (V&V) Strategies : Develop effective testing strategies, including fuzz testing, penetration testing, and functional security validation, to maintain security throughout the product lifecycle.
- Lifecycle Management & Post-Production Security : Ensure long-term product security with SBOMs, secure software updates, and incident response strategies.
- Real-World Application & Tools : Utilize system engineering techniques and industry-standard tools to implement cybersecurity effectively within complex product development environments.

Target Professionals

- Systems Engineers & Product Developers (Hardware, Software, Electronics)
- Cybersecurity, Risk, and Compliance Professionals
- Quality & Safety Assurance Engineers
- Security & DevOps Teams
- Technical Project & Program Managers

Practical Impact

- Seamless Cybersecurity Integration: Learn how to embed security into the development lifecycle without disrupting innovation or efficiency, regardless of your development model.
- Actionable & Practical Knowledge: Gain hands-on experience with real-world methodologies, tools, and techniques that you can apply immediately.
- Expert-Guided Learning & Continued Support: Learn from experienced professionals in cybersecurity and system engineering, with ongoing support to help you implement what you've learned.