



Software Assurance for Executives Course Materials Now Available

Can you meet the growing challenge of highly networked systems?

What software assurance resources and methods are available for software you acquire or develop?

For More Information

To learn more, please contact
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www.cert.org/mswa/SAE-description.html

The Importance of Software Assurance

As connectivity grows, we must consider the large-scale, highly networked, software-dependent systems upon which all of our critical infrastructure relies—from phones to power, to water, to industries such as banking, medicine, and retail.

Software assurance is the term that has come into common usage to describe this context. The Committee on National Security Systems (CNSS) defines software assurance as the level of confidence that the software is free from vulnerabilities, either intentionally designed into the software or accidentally inserted at any time during its life cycle, and that the software functions in the intended manner.

Software Assurance for Executives Course Materials: A Timely Resource for an Increasingly Connected World

With support from the Department of Homeland Security, the CERT Division at Carnegie Mellon University’s Software Engineering Institute has released course materials to guide executives and managers in their understanding of software assurance, from foundational concepts to emerging topics such as cloud computing and standards that support software assurance.

The course materials include both video modules and slide presentations. All materials are publicly available at www.cert.org/mswa/SAE-description.html

Video Modules and Slide Sets

The Software Assurance for Executives video modules begin with a discussion of software assurance challenges and then present resources and methods available to address software assurance in development and acquisition. These modules will give executives and managers a better understanding of software assurance challenges, development and acquisition assurance, mission assurance, the Microsoft Security Push and the Microsoft Secure Development Lifecycle, threat modeling, agile software development, assurance issues in cloud computing, and sustainment, governance, and standards in support of software assurance.

The Software Assurance for Executives slide sets provide information for both managers and executives and cover topics throughout the software assurance life cycle.

The video modules and slide presentations can be used to tailor a course of study for a particular project or group. The chart on the next page provides a full listing of what’s available.



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Videos	Slide Sets	
<ul style="list-style-type: none"> • Software Assurance Challenges • Adopting Software Trustworthiness • Software & Supply Chain Assurance: Enabling Enterprise Resilience through Security Automation, Software Assurance, and Supply Chain Risk Management • Software Assurance for Development • The Security Development Lifecycle • Software Assurance: Mission Assurance • Software Assurance for Acquisition • Software Assurance Introduction • Agile 101 for Executives • Insider Threats in the Cloud • The Insider Threat: Lessons Learned from Actual Attacks • Software Assurance in the Software Development Process and Supply Chain • Software Assurance: Incorporate Risk Analysis Early in the Acquisition Life Cycle 	<ul style="list-style-type: none"> • An assurance ecosystem • Basic Concepts of Security • Basic concepts vul-risk-threat-attacks • BSIMM3 • Cloud Computing Basics • Everything Is Data • Foundations for Software Assurance • Implementation Strategy • Information Assurance Policy Governs Actions • Introduction to A-SQUARE • Microsoft Security Development LC [Life Cycle] Basics • Mission Risk Diagnostic • Mission Thread Analysis • Mission Thread Analysis Application • Mission Thread Analysis Lessons Learned • Mobile Devices and Removable Media • NIST Security Control Publications 	<ul style="list-style-type: none"> • Principles of Software Assurance • Requirements Engineering • Risk-Based Measurement Analysis • Risk Management • Risk Management Overview • Software Assurance Challenges • Software Assurance Guiding Principles • Software Assurance: Incorporate Security Early in Acquisitions • Software Assurance Lifecycle Models • Software Assurance Practices • SQUARE • Standard Driver Sets • SwA Acquisition Background • Two Approaches for Analyzing Risk • Why care about mission threads? • What does mission failure look like?