Software Assurance for Executives:
Mapping of Common Topics to Specific Materials

Purpose of This Document
This document presents

1. an outline of common topics covered in the Software Assurance for Executives class; listed with each topic are the course materials (Video and Slide Sets) pertinent to that topic
2. a list of useful resources

Use this document to organize your course experience or to select materials that focus on a particular area.

Mapping of Common Topics to Specific Materials

Software Assurance

1. **Why Is this Important?**
   Video
   *Software Assurance Challenges, Software & Supply Chain Assurance: Enabling Enterprise Resilience through Security Automation, Software Assurance, and Supply Chain Risk Management*

   Slide Sets
   *Software Assurance Challenges*

   a. Risks and Threats
   Video
   *Malicious Insiders*

   b. Critical System Compromises and Failures
   Video
   *Software Assurance Challenges, Software & Supply Chain Assurance: Enabling Enterprise Resilience through Security Automation, Software Assurance, and Supply Chain Risk Management*

   c. Concepts of Confidentiality, Integrity, Availability, and Authentication
   Video
   *Software Assurance Introduction*

   Slide Sets
Basic Concepts of Security

d. Principles of Software Assurance
  Video
  Software Assurance Introduction

Slide Sets
  Principles of Software Assurance, Foundations for Software Assurance, Software Assurance
  Guiding Principles

2. In-House Versus Acquired
  Video
  Software Assurance for Acquisition, Software Assurance in the Software Development Process
  and Supply Chain, Software & Supply Chain Assurance: Enabling Enterprise Resilience through
  Security Automation, Software Assurance, and Supply Chain Risk Management

Slide Sets
  Acquisition Background

3. Cloud Component Considerations
  Video
  Malicious Insiders, Cloud Computing and Insider Threat

Slide Sets
  Cloud Computing Basics

4. System Evolution
  Video
  Software Assurance in the Software Development Process and Supply Chain

Assurance Management

5. Ownership issues
  Video
  Cloud Computing and Insider Threat, Software & Supply Chain Assurance: Enabling Enterprise
  Resilience through Security Automation, Software Assurance, and Supply Chain Risk
  Management

Slide Sets
  Cloud Computing Basics, Mobile Devices and Removable Media

6. Assurance Management
  Video
  Mission Assurance, Software & Supply Chain Assurance: Enabling Enterprise Resilience
  through Security Automation, Software Assurance, and Supply Chain Risk Management
Slide Sets
Why care about mission threads?, What does mission failure look like, Mission Thread Analysis, Mission Thread Analysis Application, Mission Thread Analysis Lessons Learned

a. Making a Business Case for Assurance
   Video
   Software & Supply Chain Assurance: Enabling Enterprise Resilience through Security Automation, Software Assurance, and Supply Chain Risk Management

b. Compliance with Laws, Regulations, Standards, Policies, and Best Practices
   Video
   Software & Supply Chain Assurance: Enabling Enterprise Resilience through Security Automation, Software Assurance, and Supply Chain Risk Management

Slide Sets
Mobile Devices and Removable Media, NIST Security Control Publications, Information Assurance Policy Governs Actions

c. Best practices
   Video
   Software & Supply Chain Assurance: Enabling Enterprise Resilience through Security Automation, Software Assurance, and Supply Chain Risk Management

Slide Sets

Software Security Fundamentals

7. Life-Cycle Models
   Video

Slide Sets

8. Security and Software Assurance Aspects of Software Development Activities–Video
   Software Assurance for Development, Agile 101 for Executives

Slide Sets
9. **Basic Concepts of Security**
   Video
   *Software Assurance Introduction, Software Assurance for Development*

   **Slide Sets**
   *Basic concepts vul-risk-threat-attacks, Basic Concepts of Security*

**Security in Detail**

10. **Threats and Attack Vectors**
    Video
    *Software Assurance for Development, Security Assurance That Works: Applying the Security Development Lifecycle, Malicious Insiders*

11. **Security Policy and Its Importance**
    Video
    *Software Assurance in the Software Development Process and Supply Chain, Software & Supply Chain Assurance: Enabling Enterprise Resilience through Security Automation, Software Assurance, and Supply Chain Risk Management*

    **Slide Sets**
    *Information Assurance Policy Governs Actions*

12. **Security from a Return on Investment (ROI) Perspective**
    Video
    *Software & Supply Chain Assurance: Enabling Enterprise Resilience through Security Automation, Software Assurance, and Supply Chain Risk Management*

13. **Security Supply Chain**
    Video
    *Software Assurance for Acquisition, Software & Supply Chain Assurance: Enabling Enterprise Resilience through Security Automation, Software Assurance, and Supply Chain Risk Management, Software Assurance: Incorporate Risk Analysis Early in the Acquisition Life Cycle*

    **Slide Sets**
    *Software Assurance: Incorporate Risk Analysis Early in the Acquisition Life Cycle*
Software Assurance Risk Management

14. **Software Assurance Risk Management** – Video
   *Software Assurance for Acquisition, Software Assurance: Incorporate Risk Analysis Early in the Acquisition Life Cycle*

   Slide Sets
   *Mobile Devices and Removable Media, Risk Management, Risk Management Overview, Two Approaches for Analyzing Risk, Mission Risk Diagnostic, Standard Driver Sets, Risk-Based Measurement Analysis*

Conclusion

15. **Importance of Software Assurance for Acquirers**
   Video
   *Software Assurance Challenges, Software Assurance for Acquisition, Software & Supply Chain Assurance: Enabling Enterprise Resilience through Security Automation, Software Assurance, and Supply Chain Risk Management*

16. **The Way Forward**
   Video
   *Software Assurance Challenges*

   Slide Sets
   *Implementation Strategy*