



Risk Management for IT systems Training Course

8 – 12 August 2027
Johannesburg

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Ref: 10_78289 **Date:** 8 – 12 August 2027 **Location:** Johannesburg **Fees:** 4500 Euro

Overview

Every information system, from a payroll application to a cloud-hosted customer portal, carries its own set of threats, weaknesses and business consequences. This Risk Management for IT Systems course follows the system-level approach described in NIST guidance for information technology systems. Participants take one sample system through the complete cycle: describing its boundary, data and interfaces; listing threat sources; finding vulnerabilities through scans and configuration reviews; rating likelihood and impact; selecting technical, operational and management controls; weighing their cost against the risk reduced; and writing the risk assessment report and plan of action that system owners and authorising officials sign. This course is delivered by Agile Leaders Training Center.

Who Should Attend

- Information system owners and application managers accountable for system risk
- Information security officers and analysts
- System and network administrators who maintain configurations and patches
- IT auditors and security assessors
- Software development and DevSecOps leads

Departments and Industries

Suited to organisations that must assess and authorise individual information systems before and during operation.

- Information security, IT audit and software engineering
- IT infrastructure and applications
- Government IT, banking and payments
- Hospitals and health information, telecoms and cloud service providers
- Utilities with SCADA and IT systems

Learning Objectives

By the end of this course, participants will be able to:

- Analyse an IT system's boundary, hardware, software, data flows and users.
- Build threat source and vulnerability lists using scan results, CVE data and configuration baselines.
- Evaluate likelihood and impact on confidentiality, integrity and availability and produce a risk-level matrix.
- Prioritise technical, operational and management controls and justify them with cost-benefit analysis.
- Apply security risk activities in each phase of the system development life cycle.

- Build a system risk assessment report and a plan of action and milestones for residual risk.

Course Agenda

Day 1: IT System Risk in the Development Life Cycle

- Why IT systems need their own risk assessment
- Roles: system owner, authorising official, security officer, assessor
- Risk activities in initiation, development, implementation, operation and disposal
- Security categorisation by the sensitivity of system data
- Introducing the case system and agreeing scope and roles for the assessment

Day 2: System Characterisation, Threats and Vulnerabilities

- Documenting boundary, interfaces and data flows
- Human, natural and environmental threat sources
- Vulnerability scanning, penetration test findings and CVE lookups
- Security configuration baselines and hardening gaps
- Reviewing existing and planned controls to form threat and vulnerability pairs

Day 3: Likelihood, Impact and Risk Determination

- Rating likelihood from threat capability and control strength
- Impact on confidentiality, integrity and availability
- Building and reading the risk-level matrix
- Qualitative versus quantitative approaches
- Documenting results for system owners in a ranked risk register

Day 4: Selecting and Justifying Controls

- Technical controls: access control, encryption, logging, patching
- Operational and management controls
- Accept, avoid, limit or transfer: choosing an option per risk
- Cost-benefit analysis of proposed safeguards
- Calculating and accepting residual risk, with control recommendations for the case system

Day 5: Reporting, Authorisation and Continuous Monitoring

- Writing the risk assessment report
- Plans of action and milestones for open findings
- Presenting to the authorising official, with final case report presentations
- Continuous monitoring and reassessment triggers
- Sample interview questions for assessors

Practical Exercises

Working in small assessor teams on a web-based records application, participants complete these suggested activities.

- Suggested activity: fill in the system characterisation worksheet from architecture diagrams and an interview with the system owner.
- Suggested activity: build threat and vulnerability pairs from the catalogues and sample scan and configuration review outputs.
- Suggested activity: rate each pair on the likelihood, impact and risk-level matrix.
- Suggested activity: complete the control selection and cost-benefit worksheet and draft the report and plan of action.

FAQs

Does the course cover enterprise risk management?

No. It stays at the level of individual information systems rather than enterprise or operational risk in general.

Do I need hands-on scanning experience?

No. Participants read and interpret sample scan and configuration review outputs; running scanning tools is not required.

What documents will I produce?

A system description, a threat and vulnerability list, a risk matrix, control recommendations and a risk assessment report with a plan of action.

Conclusion

Participants leave having produced the documents a security assessor actually delivers for an IT system: a system description, threat and vulnerability list, risk matrix, control recommendations and a report with a plan of action, ready to apply to risk management for IT systems in their own organisation.