

## KA EXTERNAL DEPENDENCIES

Knowledge Area	External Background Knowledge that may be Useful to Readers
Risk Management & Governance	None
Law & Regulation	None
Human Factors	SWEBOK Chapter 11.2. Group Dynamics and Psychology SWEBOK Chapter 13.15. Basic User Human Factors SWEBOK Chapter 13.16. Basic Developer Human Factors ACM Computer Science Curriculum HCI/Foundations
Privacy & Online Rights	SWEBOK Chapter 13. Computing Foundations (13.13. Network Communication Basics)
Malware & Attack Technology	SWEBOK Chapter 13. Computing Foundations (13.11. Operating Systems Basics, 13.13. Network Communication Basics) SWEBOK Chapter 3. Software Construction (3.2. Managing Construction, 3.3. Practical Considerations) ACM Computer Science Curriculum PL/Static Analysis Program Analysis
Adversarial Behaviours	SWEBOK Chapter 13. Computing Foundations (13.13. Network Communication Basics)
Security Operations & Incident Management	SWEBOK Chapter 11.2. Group Dynamics and Psychology SWEBOK Chapter 13. Computing Foundations (13.13. Network Communication Basics)
Forensics	SWEBOK Chapter 13. Computing Foundations (13.6. Data Structure and Representation, 13.11. Operating Systems Basics, 13.13. Network Communication Basics) ACM Computer Science Curriculum AL/Fundamental Data Structures and Algorithms ACM Computer Science Curriculum AR/Memory System Organization and Architecture ACM Computer Science Curriculum OS/Memory Management ACM Computer Science Curriculum OS/File Systems ACM Computer Science Curriculum PBD/Web Platforms The design and interpretation of statistical experiments
Cryptography	SWEBOK Chapter 14. Mathematical Foundations (14.10. Proof Techniques) ACM Computer Science Curriculum DS/Proof Techniques
Operating Systems & Virtualisation	SWEBOK Chapter 13. Computing Foundations (13.11. Operating Systems Basics, 13.12. Database Basics and Data Management) ACM Computer Science Curriculum OS/Overview ACM Computer Science Curriculum OS/Virtual Machines
Distributed Systems Security	SWEBOK Chapter 13. Computing Foundations (13.13. Network Communication Basics, 13.14. Parallel and Distributed Computing) ACM Computer Science Curriculum NC/Networked Applications ACM Computer Science Curriculum PD/Communication and Coordination ACM Computer Science Curriculum PD/Cloud Computing ACM Computer Science Curriculum PD/Distributed Systems
Formal Methods for Security	SWEBOK Chapter 14. Mathematical Foundations ACM Computer Science Curriculum SE/Formal methods ACM Computer Science Curriculum SE/Software Verification and Validation ACM Computer Science Curriculum Discrete Structures
Authentication, Authorisation & Accountability (AAA)	SWEBOK Chapter 13. Computing Foundations (13.11. Operating Systems Basics, 13.13. Network Communication Basics) ACM Computer Science Curriculum NC/Networked Applications ACM Computer Science Curriculum PD/Distributed Systems ACM Computer Science Curriculum SE/Formal Methods ACM Computer Science Curriculum Discrete Structures (DS) knowledge area

Knowledge Area	External Background Knowledge that may be Useful to Readers
Software Security	SWEBOK Chapter 3. Software Construction (3.2. Managing Construction, 3.3. Practical Considerations) ACM Computer Science Curriculum DS/Proof Techniques ACM Computer Science Curriculum PL/Static Analysis ACM Computer Science Curriculum OS/Operating Systems Principles
Web & Mobile Security	ACM Computer Science Curriculum NC/Network Applications ACM Computer Science Curriculum PBD/Web Platforms ACM Computer Science Curriculum PBD/Mobile Platforms
Secure Software Lifecycle	SWEBOK Chapter 3.2. Managing Construction SWEBOK Chapter 8.2. Software Lifecycles SWEBOK Chapter 10.2. Software Quality Management Processes
Applied Cryptography	SWEBOK Chapter 14. Mathematical Foundations ACM Computer Science Curriculum DS/Proof Techniques
Network Security	SWEBOK Chapter 13. Computing Foundations (13.13. Network Communication Basics) ACM Computer Science Curriculum NC/Introduction ACM Computer Science Curriculum NC/Networked Applications ACM Computer Science Curriculum NC/Routing and Forwarding ACM Computer Science Curriculum NC/Local Area Networks
Hardware Security	ACM Computer Science Curriculum Architecture and Organization (AR) knowledge area ACM Computer Science Curriculum SF/Computational Paradigms
Cyber-Physical Systems Security	Basics of control systems SWEBOK Chapter 13. Computing Foundations (13.13. Network Communication Basics) ACM Computer Science Curriculum NC/Networked Applications
Physical Layer & Telecommunications Security	SWEBOK Chapter 13. Computing Foundations (13.13. Network Communication Basics) ACM Computer Science Curriculum NC/Mobility Signal Processing and Radio Propagation Information Theory Machine Learning and Pattern Recognition