

CAS Cybersecurity and Information Risk Management (CSIRM)

Execution: Winter 2024
 Volume: 1
 Execution: Online via MS Teams
 Start: January 11, 2024
 End: March 21, 2024
 Time: 8.45am to 4.45pm

Head of Programme: Prof. Martina Dalla Vecchia

Date	Topic	Lecturer
BootCamp 1		
Cyber threat and managing cyber risk		
January 11, 2024	1. Course opening (administrative and social) and “into darkness” – a trip into the dark side of technology, incl. setting of connectors to further course content (“lively”, i.e., practice-oriented course overview) and communication of goals as well as synchronization of terminologies (initial steps, to be continued in further course days) and expectations [individual assignments]	Martina Dalla Vecchia Johannes Dohren Rainer Kessler
January 12, 2024	2. Security governance: CISO organization, processes, and staffing, incl. ISMS and IS policy; information and technology risk management, as well as its position in the operational and enterprise risk environments [individual assignments]	Rainer Kessler
January 13, 2024	3. NIST CSF: overview of tiers, core, and profiles; information and cyber security controls, assessments, reviews, and audits, incl. control systems, common criteria (ISO/IEC 15408), maturity models, as well as COBIT, ISO 27001, and other standards; case-study kick-off [group formation and start of group work (workshop)]	Rainer Kessler
BootCamp 2		
Technical foundations, part 1		
January 25, 2024	4. Attack patterns and practice examples; hacking tactics/causes and effects of a cyber-attack – sequential order of events and reactions, incl. attribution, recovery, and lessons learned, as well as “connectors” (cf. 6) to technological detailed level (e.g., encryption) [practice day with individual assignments and group work (workshop)]	Johannes Dohren
January 26, 2024	5. "Blockchain-Game" practice day with "connectors" to hashing and encryption	Walter Dettling
January 27, 2024	6. (am) PKI, e-signatures, timestamps, DRM, and taking up the "connectors" from day 5, as well as positioning and work of CERT, SOC, and SIEM [individual assignments and group work (workshop)]	Johannes Dohren
January 27, 2024	6. (pm) PKI, e-signatures, timestamps, DRM, and taking up the "connectors" from day 5, as well as positioning and work of CERT, SOC, and SIEM [individual assignments and group work (workshop)]	Rainer Kessler
BootCamp 3		
Technical foundations, part 2		
February 8, 2024	7. Mobile security and penetration testing/red teaming [practice day with individual assignments and group work (workshop)]	Johannes Dohren
February 9, 2024	8. Threat intelligence and reconnaissance [practice day with individual assignments and group work (workshop)]	Johannes Dohren
February 10, 2024	9. Logical and physical access, incl. identity and roles management as well as credentials and multi-factor authentication, zero-trust, and vulnerability management [individual assignments and group work (workshop)]	Johannes Dohren Rainer Kessler
BootCamp 4		
Complementary cybersecurity elements		
February 22, 2024	10. (am) Information and communication technology strategy, architecture, configuration, and operation, incl. selected technical details of a functioning of ICT in traditional as well as in cloud environments [individual assignments and group work (workshop)]	Rainer Kessler
February 22, 2024	10. (pm) Information and communication technology strategy, architecture, configuration, and operation, incl. selected technical details of a functioning of ICT in traditional as well as in cloud environments [individual assignments and group work (workshop)]	Johannes Dohren
February 23, 2024	11. Further security technology, such as data loss prevention, intrusion detection, etc. [individual assignments and group work (workshop)]	Johannes Dohren

February 24, 2024	12. Escalation and business continuity management [individual assignments and group work (workshop)]	Rainer Kessler
BootCamp 5	Exploring the context of cybersecurity	
March 7, 2024	13. Information and cyber security awareness, education, and training [individual assignments and group work (workshop)]	Rainer Kessler
March 8, 2024	14. Cyber security of emerging technology, incl. A.I. safety [individual assignments and group work (workshop)]	Rainer Kessler
March 9, 2024	15. Laws and regulations for data protection, information and cyber security, as well as IT security and technology risk management [individual assignments and group work (workshop)]	Rainer Kessler
Online-Exam @home	ISO 27001: Foundation Exam ISFS (EXIN)	Participants receive a voucher. Individual appointment.
March 15, 2024	Deadline Project MoneyMaker	
March 21, 2024	16. Project Pitch: Cybersecurity & Information Risk Management Framework (ISMS) in front of (1) Management Board and (2) Expert Committee	Audit team

Version January 2023, subject to change.