Blockchain and IT Security

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Blockchain and IT Security
Is Blockchain a Security?

“If you think technology can solve your security problems, then you don't understand the problems and you don't understand the technology”

Bruce Schneier

If you think blockchain is a security, then you don't understand the security and you don't understand the blockchain
Lecture Topics

- Security Design for Distributed Information Systems
- Cryptographic Methods in Blockchains
- Blockchain Components and Security Methods
- Secure Platforms, Tools and Enterprise Models
Lecture Topics

- Security Design for Distributed Information Systems
- Cryptographic Methods in Blockchains
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Security Design for Distributed Information Systems

- Why security is important?
- What is principles of security in Blockchains?
- What is role of cryptography in Blockchains?
- What are Blockchain platforms and applications?
Cryptographic Methods in Blockchains

- How are transactions performed?
- What is Blockchain ecosystem?
- How is identity managed?
- How is access control implemented?
- How is privacy managed?
Blockchain Components and Security Methods

- What are domains where blockchain technology is used?
- What are the security risks that are mitigated by the blockchain technology?
- What are the security risks that are found in the blockchain technology?
- What are countermeasures to mitigate these risks?
Secure Platforms, Tools and Enterprise Models

Solve Blockchain security challenges in a hands-on case analysis
Blockchain and IT Security

170 lecture slides
30 Multi-choice questions
1 Hands-on case analysis

110 minutes of voice-over narration
33 recommended external videos for self-studying

2 ECTS
52 hours of studying
Research and Publications


Blockchain Skills for ICT Professionals
http://bliss-project.eu

L1. Blockchain essentials
L2. Blockchain platforms
L3. Business merits, challenges and implications of blockchain technology
L4. Practical design and development of blockchain applications

ONLINE COURSE

ENG: https://www.openlearning.com/courses/bliss-mooc/
EST: https://www.openlearning.com/courses/bliss-vooc-ee-version-/
Projects

**CHAISE** - A Blueprint for Sectoral Cooperation on Blockchain Skill Development

01.11.2020-31.10.2024
Erasmus+, Sector Skills Alliances


**CyberPhish** - Safeguarding against Phishing in the age of 4 Industrial Revolution

02.11.2020-1.11.2022
Erasmus+ Strategic Partnership
Thank you!