



STATE UNIVERSITY OF TRADE AND ECONOMICS

CERTIFICATE

is presented to

ALISA VOITKEVYCH

has participated
Workshops «Challenges and Realities of the IT Space:
Software Engineering and Cyber Security»
(SECS-2022 25th – 29th of October 2022 Kyiv, Ukraine)

Total: 30 hours (1 credit ECTS)

**Rector,
Doctor of Economic Sciences
Professor, Academician
of the National Academy
of Pedagogical Sciences
of Ukraine**



Anatolii MAZARAKI

Kyiv, October 29th 2022

Module 1. National Cybersecurity

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|-----|---|----------|
| 1.1 | Ensuring National Cybersecurity during the Wartime | (1 hour) |
| 1.2 | Fighting against Cyberterrorism and Cybercrimes | (1 hour) |
| 1.3 | EU Cybersecurity in Conditions of Foreign Aggression | (1 hour) |
| 1.4 | Cybersecurity of Business Entities | (1 hour) |
| 1.5 | International Cybersecurity, Fake News and Disinformation | (1 hour) |
| 1.6 | Risk Analysis in National Cybersecurity | (1 hour) |

Module 2. Cybersecurity: Threats and Countermeasures

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|-----|---|----------|
| 2.1 | Applied Cryptography and Cryptographic Protocols, Security of Internet of Things and Ubiquitous Systems | (1 hour) |
| 2.2 | Novel Authentication and Authorization Methods, Novel Attack Schemes, OSINT Analysis | (1 hour) |
| 2.3 | Context-aware, Multi-modal, or Adaptive Access Control, Firewalls, Deep Packet Inspection, Honeypots | (1 hour) |
| 2.4 | Biometrics, Machine Learning and Artificial Intelligence in Cybersecurity | (1 hour) |
| 2.5 | Social Engineering, Trust and Human Factor in Security | (1 hour) |
| 2.6 | Denial of Service and Ransomware Attacks, Man-in-the-Middle and Man-in-the-Browser Attacks | (1 hour) |

Module 3. User and Citizen Privacy

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|-----|---|----------|
| 3.1 | Personal Information Security during Peace and War | (1 hour) |
| 3.2 | Privacy Preserving Systems | (1 hour) |
| 3.3 | Privacy Enhancing Technologies | (1 hour) |
| 3.4 | Management of Sensitive Data in Organization | (1 hour) |
| 3.5 | Mobile Device Security | (1 hour) |
| 3.6 | Ethical Aspects of User Security and Private Security | (1 hour) |

Module 4. Security and Software Engineering

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| 4.1 | Software Engineering within Hybrid Threats | (1 hour) |
| 4.2 | Secure Software Development | (1 hour) |
| 4.3 | Novel Methods for Code Security Assessment | (1 hour) |
| 4.4 | Zero Trust Architectures | (1 hour) |
| 4.5 | Threat Modeling Methods | (1 hour) |
| 4.6 | Privacy by Design | (1 hour) |

Module 5. Software Designing, Developing and Maintaining

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| 5.1 | Web Design and Web Programming | (1 hour) |
| 5.2 | Architecture and Technologies of Mobile Application Programming | (1 hour) |
| 5.3 | Enterprise Software Development, Software Testing | (1 hour) |
| 5.4 | Database Systems | (1 hour) |
| 5.5 | Artificial Intelligence, Expert Systems, Internet of Things | (1 hour) |
| 5.6 | Information Technologies in Economics, Information Technologies in Education | (1 hour) |

Total : 30 hours (1 credit ECTS)