

Tárgyleírás angol nyelvű képzés tárgya esetén

Tárgy neve: Introduction to data security L.+Pr.

Tárgyfelelős neve: Lendák Imre

Tárgyfelelős tudományos fokozata: PhD

Tárgyfelelős MAB szerinti akkreditációs státusza: AT

Az oktatás célja angolul / Aim of the subject:

Knowledge

- Possesses relevant knowledge about the latest developments and challenges in the field of data security.
- Possesses an up-to-date knowledge of the relevant general theories in data security, as well as their connections with other professional and/or scientific domains.
- Is a skillful user of the relevant scientific terminology in English.

Abilities:

- Is capable to formalize and describe complex problems in the field of data security.
- Is capable to design, develop and maintain data security solutions and environments.
- Is capable to assess the business and innovative value of data security solutions, as well as to validate and convey their use in different industry domains.
- Is capable to map customer requirements to appropriate solutions in the data security domain.

Attitude:

- Follows the latest professional and scientific developments in relevant domains.
- Is devoted to retrospective analytics and evaluation of past performance.
- Is devoted to lifelong learning and the acquire novel competencies in related fields.

Autonomy, responsibility:

- Takes full responsibility for his/her professional decisions in the field of data security.

Az oktatás tartalma angolul / Major topics:

The students will be equipped with relevant knowledge in the following domains which they will be able to utilize in future applied data science tasks:

- Cyberspace, cybersecurity, cybercrime;
- Data inventory and backup;
- Identity and access management;
- Data encryption;
- Data loss prevention;
- Data privacy vs machine learning;
- Data security standards;

A számonkérés és értékelés rendszere angolul / Requirements and evaluation:

exam

Irodalom / Literature:

- Janine Kremling, Amanda M. Sharp Parker (2017). *Cyberspace, Cybersecurity, and Cybercrime*. SAGE Publications.
- Roger A. Grimes (2019). *A Data-Driven Computer Defense: A Way to Improve Any Computer Defense*.
- Clarence, David Freeman (2018). *Machine Learning and Security: Protecting Systems with Data and Algorithms*. O'Reilly Media; 1st edition.
- W. Curtis Preston (2021). *Modern Data Protection: Ensuring Recoverability of All Modern Workloads*. O'Reilly Media; 1st edition.
- Jay Jacobs, Bob Rudis (2014). *Data-driven Security*. Wiley.