SECURITY AND PRIVACY FOR BIG DATA AND CLOUD

Technical Teaching

BigSec

ÖNEN Melek

BOZDEMIR Beyza

ZARI Oualid

ABSTRACT

The goal of this course is to equip students with security and privacy technologies for the Big Data and the cloud computing paradigm. Students will discover the latest advances in privacy and security technologies and will understand their limitations as well.

Teaching and Learning Methods : Lectures (sometimes invited) and homeworks

Course Policies : homeworks and final project are mandatory

BIBLIOGRAPHY

- Cryptography for Security and Privacy in Cloud Computing, S. Rass, D. Slamanig, Artech house
- Securing the Cloud, Cloud Computer Security Techniques and tactics.
- Slides and scientific papers.

REQUIREMENTS

Students should have followed SecCom or equivalent prior to taking this course. Basic knowledge of cryptography is mandatory.

DESCRIPTION

The course will cover the following topics:

- Key privacy and security requirements & risks

- Advanced cryptographic tools for data security and privacy

- Database anonymity and privacy

- Legal aspects

 Learning outcome:

Upon completion of the course, students will be able to: - identify key security and privacy risks, - understand what the GDPR means, demonstrate knowledge of the main technologies available for data security and privacy.

Nb hours : 21

Grading Policy : Homework (15%), Final project (25%), Exam (60%)