

Data Privacy by Design (PbD)

Description

Data privacy is on the minds of users, customers, investors, and employees. As we enter in the next phase of digital age, data privacy is a concern every organization should address. This course will focus on what data privacy is, why it matters, and how we can achieve it using 'Data Privacy by Design' strategies and related actionable steps. It will also include common data masking techniques, Privacy Enhancing Technologies (PET's) and importance of Data Privacy by Design in legal terms by discussing EU's General Data Protection Regulation (GDPR).

Learning Objectives and Outcomes

- Introduction to data and its types, information & knowledge.
- Data Privacy by Design (PbD): Understanding principal concepts, goals and strategies with actionable steps.
- Anonymization & pseudonymization, Data masking techniques and Privacy Enhancing Technologies (PETs).
- Legal importance of Data PbD: EU's General Data Protection Regulation (GDPR).

Course Schedule and Contents

Session#1

- Primer
 - Data & its types
 - Class exercise 1
 - Data privacy, secrecy and control
 - What can be done
- Data Privacy by Design (PbD)
 - An obligation
 - PbD principles, goals & strategies
 - Assumptions & activities
 - Case Studies
 - Class exercise
 - Take away

Session#2

- Data privacy risks and solutions
 - Top privacy risks
 - Crypto package (basics and common pitfalls)
 - Crypto package (good practices)
 - Data masking (anonymization vs pseudonymisation)
 - Data masking (common techniques)
 - Demo session on ARX tool
 - *Class exercise*

Data Privacy by Design (PbD)

Session#3

- Privacy Enhancing Technologies (PETs)
 - Data Anonymization techniques
 - Differential privacy
 - K-anonymity
 - Tor/Panoramix
 - General Security controls
 - Practice session on ARX tool

Class exercise
- General data protection regulation (GDPR): Introduction and key definitions
 - Why GDPR (+ complemented by)
 - Roles
 - Data Privacy Officer (DPO)
 - Data protection impact assessment (DPIA)

Session#4

- GDPR: Scope and Other aspects
 - Lawful basis for processing
 - Privacy by design (PbD)
 - Privacy by default
 - Individual (subject) rights
 - Accountability and governance
 - Cross-border data transfers
 - Security & Data breaches
 - Sanctions & fines
 - GDPR Mantra (+ unclear areas)

Session#5

- Closing
 - Review
 - In conclusion
 - *Open session*
 - *Protecting yourself*
 - *Spreading awareness*

Final remarks, Q/A

Total course hours: 15 (3 hour / session)

Grading

Class attendance	10%
Class participation	10%
Class assignment (practical work):	30%
Final Evaluation	50%



Policies

- Class participation and discussion is strongly encouraged – and could award you bonus points.
- I expect you to take notes and ask questions.
- I expect you to turn-in your assignments on time to avoid grade penalties.
- Any work submitted must be your own.
- I expect everyone to contribute equally to group assignments.
- Late work will not be accepted unless prior notification with adequate reasoning has been made.

Good Luck!