Sichere Systeme

Summer

(engl. Secure Systems)

Modulnummer: FIN-INF-110115

Kürzel	CP	Semester	Fachsem.	Dauer	Sprache	Niveau
SISY	5	Summer	1.	1 Semester	deutsch	Bachelor

Link zum LSF:	LSF
Zugang beschränkt:	
Verantwortung:	Prof. Dr. Jana Dittmann
Dozent:in:	Prof. Dr. Jana Dittmann
Lehrveranstaltungen:	• Vorlesung *Sichere Systeme* • Übung *Sichere Systeme*
Verwendbarkeit:	- B.Sc. INF: Informatik II - Pflicht - B.Sc. INF: Aufbaumodule (SPO 2027) - B.Sc. CV: Informatik - Wahlpflicht - B.Sc. CV: Computervisualistik Wahlpflicht (SPO 2027) - B.Sc. INGINF: Informatik II - Pflicht - B.Sc. INGINF: Ingenieurinformatik Pflicht (SPO 2027) - B.Sc. WIF: Anwenden - Pflicht - B.Sc. WIF: Informatik Pflicht (SPO 2027) - B.Sc. INF (bilingual): Informatik II - Pflicht - B.Sc. INF (bilingual): Aufbaumodule (SPO 2027)

Angestrebte Lernergebnisse:
The students ...

- are able to describe and evaluate secure systems using design principles
- can consider safety aspects and warranty objectives in the concept and implement them using selected mechanisms and evaluate them using examples
- can independently describe the importance of design principles for secure systems

- can recognize different security needs for themselves and organize themselves accordingly
- can use selected threats and vulnerabilities to recognize and name abstract security aspects and security objectives, assign basic attacks and derive selected security mechanisms
- can carry out a security assessment and interpret the results
- can understand security as a process in an ICT system and design and apply selected mechanisms

Inhalt:

- IT security aspects, warranty objectives and IT security threats
- Design principles of secure IT systems
- Security guidelines
- Selected security mechanisms

Arbeitsaufwand:
56h attendance + 94h independent work (solving exercise tasks and exam preparation)

Prüfungsvorleistungen:	Studien-/Prüfungsleistungen:	Lehrform / SWS:
	• Recommended participation in the lectures and exercises: • Grade: Exam (written, 120 min, no preliminary work) • Not graded: Announcement of the required preliminary work in the course	• Lecture (2 SWS) • Exercise (2 SWS)

Voraussetzungen nach Prüfungsordnung:	Empfohlene Voraussetzungen:
none	• Einführung in die Informatik • Grundlagen der Theoretischen Informatik • Grundlagen der Technischen Informatik

Medienformen:	Literatur:

Hinweise:

https://omen.cs.uni-magdeburg.de/itiamsl/deutsch/lehre/index.html

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