Cloud School

Sommer

(in German: Cloud School)

Module-ID: FIN-INF-110484

Abbreviation	Credit Points	Semester	Term	Duration	Language	Level
CS	5	Sommer	starting at 3.	1 Semester	english	Bachelor

Link:	LSF
Limited accessability:	
Responsibility:	Prof. Dr. Klaus Turowski
Lecturer:	Christian Haertel / Christian Daase
Classes:	• Lecture *Cloud School* • Exercise *Cloud School*
Applicability in curriculum:	- B.Sc. INF: Informatik - Wahlpflicht - B.Sc. CV: Informatik - Wahlpflicht - B.Sc. INGINF: Informatik - Wahlpflicht - B.Sc. WIF: Verstehen und Gestalten - Wahlpflicht - B.Sc. INF (bilingual): Informatik - Wahlpflicht

Intended learning outcomes:
The students ...

- know and understand the basic principles of the cloud computing paradigm
- know the typical service and deployment models of cloud computing
- understand workloads and revenue models
- are able to build basic cloud applications independently
- understand the benefits and risks of cloud computing at the business and application layer

- are able to select suitable cloud infrastructure from appropriate platform offerings for their applications
- know how to apply cloud design patterns in practical developments
- are able to use self-developed cloud applications for modern application scenarios (e.g., related to machine learning and data science)

Content:

- Cloud Computing Fundamentals
- Cloud Offering Patterns
- Cloud Application Architecture Patterns
- Cloud Application Management Patterns
- Composite Application Pattern
- Impact of Cloud Computing Properties
- Cloud Computing Application Scenarios

Workload:
45 h lecture and exercise + 105 h independent work

Pre-examination requirements:	Type of examination:	Teaching method / lecture hours per week (SWS):
In order to participate in the exam, preliminary exam requirements must be met. Details will be announced in the first lecture.	Graded und ungraded written examination, 120 Min.	2 SWS Lecture + 3 SWS Exercise class

Prerequisites according to examination regulations:	Recommended prerequisites:
none	

Media:	Literature:
	Fehling, C.; Leymann, F.; Retter, R.; Schupeck, W.; Arbitter, P. (2014): Cloud Computing Patterns: Fundamentals to Design, Build, and Manage Cloud Applications (ISBN: 978-3-7091-1567-1), DOI: 10.1007/978-3-7091-1568-8

Comments:

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