Systems Engineering

Kennnummer	Workload	Credits/LP	Studiensemester	Häufigkeit des Angebots	Dauer
	90 Std.	3	2	Nur Wintersemester	1 Semester

1	Lehrveranstaltungen	Sprache	Kontaktzeit	Selbststudium	Geplante Gruppengröße
	a) Systems Engineering	a) English	a) 22,5 Std.	a) 67,5 Std.	a) 15

2 Lernergebnisse/Kompetenzen

Nach erfolgreicher Teilnahme am Modul können die Studierenden ...

Wissen (1)
... Describe IT management basics, important software process models, modeling techniques like UML and ERM, DB querying and BP automation techniques.

Verständnis (2)
... Understand basic IT architectures, technologies and platforms for modern business application systems and for business application integration.
... Read UML analysis and design models.
... Read database schemas und SQL queries.
... Understand BP automation technologies and architectures.

Anwendung (3)
... Apply well-established techniques for requirements analysis, requirements specification, data and systems modeling.
... Implement and follow best practice s and management methods in IT projects.

3 Inhalte

a)
- Special management issues in IT projects (risk management, cost estimation, project controlling, quality management, etc.)
- Process models for software projects
- Requirements engineering: inquiry techniques, structure and content of specification documents
- Modeling techniques for database and application development (ERM, UML)
- Database management and integration, investigating databases with SQL
- BP automation technologies and architectures
- Platform technologies for (e-)business applications and information systems (web servers, application servers, JEE)
- Technologies and standards for business application integration (EAI, XML, CORBA, SOAP, Web Services, SOA, ...)

4 Lehrformen

a) Seminar

5	**Teilnahmevoraussetzungen** - None
6	**Prüfungsformen** a) Prüfungsleistung 1K (Klausur) (3 LP)
7	**Verwendung des Moduls** Business Consulting M.Sc. (BCM)
8	**Modulbeauftragte/r und hauptamtlich Lehrende** Dr. Leonardo Antonio Noriega (Dozent/in)
9	**Literatur** a) Sommerville, Ian: Software engineering, 8. ed., Addison-Wesley 2007 Pilone, Dan; Pitman, Neil: UML 2.0 in a nutshell : [a desktop quick reference], 1. ed., O'Reilly 2005 Project Management Institute: A guide to the project management body of knowledge : (PMBOK® guide), 5. ed., PMI 2013