

Database Systems Group, Prof. Martin Gogolla: Teaching - General remarks

- Courses in the area Database Systems / Software Engineering
- DBS: Database Systems / Datenbanksysteme
Winter semester
- DIS/EIS: Design of Information Systems / Entwurf von Informationssystemen
Summer semester
Topic: Information system design, concentrating on the
Object Constraint Language (OCL) in connection with modeling languages as
UML (Unified Modeling Language) or EMF (Eclipse Modeling Framework)
- Theses (Bachelor, Master) and examinations in the area Database Systems and
Software Design

- **COURSE:** Design of Information Systems (8 ECTS)

WEB INFO: <http://www.db.informatik.uni-bremen.de>

Preferably after 4th semester; for students having experience in software development; suitable for Bachelor and Master students

LECTURES: Thu 10-12 MZH 1450, Thu 14-16 SFG 2020, Start 1st lect. week

EXERCISES: Wed 10-12 MZH 1450, Start 2nd lect. week

CONTENT: Design of Information Systems with modeling languages like UML or EMF; UML diagram forms and language features; properties of the Object Constraint Language (OCL); semantics of OCL; datamodels, metamodels

Tool USE (UML-based Specification Environment): internationally used UML/OCL tool; developed in Bremen; interpreter for subset of UML including full OCL; offering executable models; tool gives feedback on the developed system; for example, by animating the system; google 'gogolla publications'

tool is about MODEL EXECUTION and MODEL TESTING not about DRAWING

FORM OF EXAMINATION: (A) Writing a paper about an application designed with UML/OCL (English or German; homework, "Hausarbeit"; including presentation of results in the exercise lessons; within a group of about 3 students); (B) oral examination (20 minutes)

- **SEMINAR:** Entwicklung von UML- und OCL-Modellen mit USE (4 ECTS)
(Master level)

Development of UML and OCL Models with USE (4 ECTS)

COORDINATES: Wed 16-18 MZH 1450, Start 1st lect. week

Student talks on selected topics in modeling with USE

Oral presentation with slides

Written report on the chosen topic

Background: google 'gogolla publications'