Courses in the area database systems

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, Diploma) 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](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 GW1 C1070, Thu 14-16 SFG 1080, Start 1st lect. week

**EXERCISES**: Wed 10-12 SFG 2080, Start 2nd lect. week

**CONTENT**: Design of Information Systems with modeling languages as UML or EMF; UML diagram forms and language features; properties of the Object Constraint Language (OCL); semantics of OCL; datamodels, metamodels; Entity-Relationship, relational model

  Tool USE (UML-based Specification Environment): internationally used OCL tool; developed by Bremen Database Systems Group; basically an interpreter for a subset of UML including full OCL; offering executable models; tool can give feedback on the developed system; for example, by animating the system

**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)