Information Management II

CS3041 – CS4D2a – 4CSLL1
Introduction

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Course Overview

- 12 Week Course
  - Thursday 16:00-18:00
  - Wednesday 14:00-15:00

- Approx. 28 Lectures and 5 Tutorials

Course Overview

- Online Course
  - SQL

- Assessment
  - Exam
  - Continuous Assessment
    - Project Work
    - Online Course

Course Outline

- ## System Engineering:
  - State of the Art in Database Technology; Transaction Processing; Concurrency Control; Metadata Representation; Recovery; Database Security; Web Databases and Emerging Database Technologies.

- ## Information Design:
  - Relational Modelling; Functional Dependency Modelling; Normalisation; Implementation of Databases and Database Applications.

Course Layout (week 1 – 5)

1. Introduction to Databases
2. Database Architectures
3. Database Models
4. Relational Algebra for Data Manipulation
5. Designing Databases: Functional Dependency
6. Designing Databases: The Entity Relationship (ER) approach
7. Designing Databases: Mapping from ER to Relations

Recommended Reading

- Database Systems: Models, Languages, Design and Application Programming
  - Elmasri & Navathe
  - ISBN-10: 0132144980 | ISBN-13: 9780132144988 | Edition: 6th edition