Database Design and SQL

Course Title: Database Design and SQL					
Course Code: CIE61011	**Student Workload:** 8.50 Hours/ Weeks	**Credits:** 3 Credits (4.50 ECTS)	**Semester:** 3rd Semester	**Frequency:** Odd Semester	**Duration:** 16 Weeks/ Semester (*Lecture and practical work*: 14 weeks; *Midterm assessment*: 1 week; *Final assessment*: 1 week)

1	**Types of Courses:** Content Knowledge Course	**Contact Hours:** *Lecturing*: 1.67 Hours/ Week; *Practical Work*: 2.83 Hours/ Week	**Independent Study:** *Self-study:* 2.00 Hours/ Week; *Structured Assignment*: 2.00 Hours/ Week	**Class Size:** 40 Students
2	**Prerequisites for Participation** (If Applicable)**:** -			
3	**Learning Outcomes:** 1. M1: Able to understand the concept of using database architecture as the basis for data processing transformations under the school or non-school organization's problem domain (ILO-2) (0,35) 2. M2: Able to design various forms of a normalized database (ILO-5) (0,2) 3. M3: Able to manage database system (ILO-5) (0,15) 4. M4: Able to design applications that are connected to the database as the deliverable of the organizational problem-solving domain process (ILO-9) (0,3)			
4	**Subject aims/Content:** At the end of the course, students are expected: 1. L1: Able to distinguish between databases, database systems, and database management systems (M1) 2. L2: Able to design database conceptually and relationally (M2) 3. L3: Able to perform database normalization (M2) 4. L4: Able to configure database management system (M3) 5. L5: Able to integrate the database into a developed application (M4)			
5	**Teaching Methods:** Lecturing, Group Discussion, Case-Based Learning, Project-Based Learning			
6	**Assessment Methods:** Essay, performance test, anecdotal record/logbook, case assessment, project assessment			
7	**This Course is Used in The Following Study Programme/s as Well:** -			
8	**Responsibility for Course:** Satrio Agung Wicaksono, S.Kom., M.Kom. Tri Afirianto, S.T., M.T.			
9	**Other Information:** Bibliography: 1. Fundamentals of Database Systems (7th Edition) Elmasri-navathe 2. Database Fundamentals First Edition (November 2010) IBM Canada 3. Database Management Systems 3rd Edition, Ramakrishnan			