

Course: Database management						
module/course code IAB69038		Student workload X hours 510 Minutes / Week	Credits (ECTS) 4.53 ECTS	Semester 6	Frequency Even Semester	Duration X semester(s) 1x / Semester
		Types of Tutorial/Lecture/Response	Contact hours : 150 Minutes / Week		Independent study 360 Minutes / Week	Class size X students 30 students
1	Prerequisites for participation (if applicable) -					
2	Learning outcomes 1. Students understand the basic concepts of databases. (Attitude) 2. Students are able to communicate verbally well, able to work together in groups, and able to manage/leadership in groups. (Social) 3. Students are able to do database design. (Skill)					
3	Description: This course provides an understanding and mastery of database concepts, relational data models, database formation and normalization techniques, the use of query language (sql) for searching, sorting, filtering, deleting and updating data as well as creating database application programs in system development. computer-based data processing.					
4	Subject aims/Content 1. Database System 2. Data Models 3. Relational Database Model 4. Entity Relationship Modeling 5. Advanced Data Modeling 6. Database Table Normalization 7. Introduction to Structured Query Language (SQL) 8. Advanced SQL 9. Database Design 10. Transaction Management and Concurrency Control 11. Database Performance Adjustment and Query Optimization 12. Distributed Database Management System 13. Business Intelligence and Data Warehouse 14. Big Data Analytics and NoSQL Database Connectivity and Web Technologies and Database Administration and Security					
5	Teaching methods 1. Lectures 2. Discussions					

	3. Group Works
6	<p>Assessment methods</p> <ol style="list-style-type: none"> 1. Task 2. Mid-Term Exam 3. Final-Term Exam 4. Quiz
7	<p>Other information e.g. bibliographical references</p> <p>Main</p> <ol style="list-style-type: none"> 1. Database Systems: Design, Implementation, and Management, 12th Edition : Carlos Coronel and Steven Morris