

UNDERGRADUATE PROGRAM IN COMPUTER SCIENCE
DEPARTMENT OF COMPUTER ENGINEERING
FACULTY OF INTELLIGENT ELECTRICAL AND INFORMATICS TECHNOLOGY

Module name	Database Management System	
Module level	Undergraduate	
Code	EC184403	
Courses (if applicable)	Database Management System	
Semester	4 / Spring (Genap)	
Contact person	Prof. Dr.Ir. Yoyon K. Suprpto, M.Sc.	
Lecturer	Prof. Dr.Ir. Yoyon K. Suprpto, M.Sc.	
Language	Indonesia / English	
Relation to curriculum	Undergraduate degree program, mandatory, 4 th semester.	
Type of teaching, contact hours	Lecture, < 60 students, 170 Minutes * SKS	
Workload	<ol style="list-style-type: none"> 1. Lectures: 3 x 50 = 150 minutes (2.5 hours) per week. 2. Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week. 3. Private study: 3 x 60 = 180 minutes (3 hours) per week. 	
Credit points	3 credit points (sks).	
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the exams.	
Mandatory prerequisites		
Learning outcomes and their corresponding PLOs	<p>CLO-1 Students have the ability to explain the differences between the file system and the DBMS</p> <p>CLO-2 Students have the ability to explain the components of the DBMS.</p> <p>CLO-3 Students have the ability to use SQL commands for defining and processing data.</p> <p>CLO-4 Students have the ability to form a database through normalization process</p> <p>CLO-5 Students have the ability to form a database from E-R diagrams.</p> <p>CLO-6 Students have the ability to explain current applications of DBMS such as distributed databases, mobile databases, spatial databases,</p>	<p>PLO-3</p> <p>PLO-3 PLO-4</p> <p>PLO-5</p> <p>PLO-5</p> <p>PLO-5</p> <p>PLO-6</p>

	fuzzy databases, stream databases, semi-structured databases and distributed multimedia databases, and database roles in data warehouses and data mining.
Content	In this course, students will learn about the concept of database management system (DBMS) and its components. In addition, it provides information on the latest developments of DBMS such as distributed databases, mobile databases, spatial databases, fuzzy databases, stream database, semi-structured databases and distributed multimedia databases, and database roles in data warehouses and datamining.
Study and examination requirements and forms of examination	<ul style="list-style-type: none"> • In-class exercises • Quiz 1 and 2 • Assignment 1, 2, 3 • Mid-term examination • Final examination
Media employed	LCD, whiteboard, websites (myITS Classroom).
Assessments and Evaluation	CO-1: Question no 1 in midterm exam (10%) CO-2: Question no 2 in midterm exam (10%) CO-3: Question no 3 in midterm exam (10%), quiz 1 (5%) CO-4: Assignment 1 (5%), question no 4 in midterm exam (10%), Quiz 2 (5%) CO-5: Question no 1 in final exam (10%), question no 2 in final exam (10%) CO-6: Assignment 2 (5%), question no 3 in final exam (10%) CO-7: Assignment 3 (5%), question no 4 in final exam (5%)
Reading List	1. Silberschatz, Korth, Sudarshan, "Database System Concept", Fifth Edition, McGraw-Hill, 2006. 2. Raghu Ramakrisnan, "Database Management Systems ", Second Edition, McGraw-Hill, 2006.