

# HANDBOOK

**BACHELOR OF INFORMATICS PROGRAM**

**DEPARTMENT OF INFORMATICS**

**FACULTY OF INTELLIGENT ELECTRICAL AND INFORMATICS TECHNOLOGY**

**INSTITUT TEKNOLOGI SEPULUH NOPEMBER**

Module name	<b>Introduction to Database Technology</b>
Module level	Undergraduate
Code	IF184983
Courses (if applicable)	<b>Introduction to Database Technology</b>
Semester	8
Contact person	
Lecturer	
Language	Bahasa Indonesia and English
Relation to curriculum	1. Undergraduate degree program; enrichment; 8 <sup>th</sup> semester. 2. International undergraduate program; enrichment; 8 <sup>th</sup> semester.
Type of teaching, contact hours	1. Undergraduate degree program: lectures, < 60 students, 2. International undergraduate program: lectures, < 40 students
Workload	1. Lectures: 3 x 50 = 150 minutes (2 hours 30 minutes) 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	A student must have attended at least 80% of the lectures to sit in the exams.

regulations	
Mandatory prerequisites	-
Learning outcomes and their corresponding PLOs	After completing this module, a student is expected to:
	<b>CO1</b> Students are able to model data and information in the form of concept diagrams and physical diagrams and apply

	<p>them to the database in a DBMS, both individually and in teamwork.</p> <p><b>CO2</b> Students are able to apply the concepts of relational algebra, DDL, and DML to manage data and information in databases</p> <p><b>CO3</b> Students are able to make database applications to manipulate data in databases</p>	
Content	<p><b>Knowledge:</b> Mastering concepts and principles of collecting, processing and storing the information in various formats</p> <p><b>Specific Skill:</b> Capable of collecting, digitalizing, representing and transforming data into new useful information by using data modelling and storage in effective and efficient manners</p>	
Study and examination requirements and forms of examination	Mid-terms examination and Final examination.	
Media employed	LCD, whiteboard, websites, books (as references), etc.	
Assessments and Evaluation		

Reading List	<p>Ramakrishnan, Raghu, Gehrke, Johannes. 2003. Database Management Systems, Third Edition. New York: The McGraw-Hill Companies, Inc</p> <p>Howe, David; Data analysis for Database Design, third Edition, Butterworth-Heineman, 2001</p>