



Module Handbook

Module Name :	<i>Sistem Basis Data</i> Data Base System
Module level :	Bachelor degree/Undergraduate Program
Course Code :	4420103117
Abbreviation, if applicable:	-
Courses included in the module, if applicable:	Not Applicable
Semester/Term	6 th / third year
Module coordinator(s)	Dr. Elly Matul Imah, M.Kom
Lecturer(s):	Dr. Atik Wintarti, M.Kom Dr. Elly Matul Imah, M.Kom
Language:	Bahasa Indonesia (Indonesian Language)
Classification within the curriculum:	Compulsory / Elective
Teaching format/class hours per week during the semester:	3 contact hours of lectures (<i>sks</i> or credit unit*)
Workload :	3 x 50 minutes lectures, 3 x 60 minutes structured activity, and 3 x 60 minutes individual activity per week, 14 weeks per semester 119 total hours per semester ~ 4.77 ECTS**
Credit Unit:	3 credit unit (4.77 ECTS)
Requirements:	Discrete Mathematics, Graph Theory, Data Structure and Algorithm



<p>Learning goals/competencies:</p>	<p>Knowledge (KNO-1): Demonstrating mathematical knowledge and mathematical insight.</p> <p>CLO-1: Able to perform basics of databases and data models.</p> <p>Skill (SKI-2): Applying the basic principles of mathematics to solve simple* mathematical problems.</p> <p>CLO-2: Students can apply the concept of strings, arrays, functions and pointers in programming</p> <p>Skill (SKI-4): Implementing simple mathematical procedures in computer programs.</p> <p>CLO-3: Students can apply Object Oriented Programming (OOP) concept in mobile programming</p> <p>Competence (COM-2): Generating ideas used for completing mathematical tasks and to communicate them either in writing or orally, in accordance with scientific principles.</p> <p>CLO-4: able to use the rules which are reflected in database design</p> <p>Competence (COM-3): Solving mathematical problems using technology.</p> <p>CLO-5: able to utilize technology and computers in database applications and technological developments.</p> <p>Attitude and Social (SOC-2): Showing responsibility for work in the field of expertise independently, having a lifelong willingness to learn, and having the courage to make decisions</p> <p>CLO-6: Able to show responsibility about using (Graphical User Interface) GUI components.</p>
<p>Content</p>	<p>Studying the concept of basic databases, data models and how to make a good data model. This course also discusses examples of rules that apply in the field which are reflected in database design. A number of other relevant aspects, such as DBMS, SQL, database applications and the latest technological developments are also discussed in this course. Through active learning that utilizes technology and computers.</p>



Attribute Soft skill:	Active communication; Discipline; Collaboration; Responsibility; and Argumentation in class.																														
Study/exam achievements:	The final grade (<i>NA</i>) is calculated based on the following ratio:																														
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Learning Methods :	Student-centered approach; project-based learning; lecturer and discussion; and presentations (structured activities)																														
Form of Media:	Power point slides; video; worksheets, and textbooks																														



Literature (primary references):	<ol style="list-style-type: none">1. Silberschatz, Korth & Sudarshan. 2006. Database System Concepts, 5th Edition. New York. Mc Graw Hill, International Edition.2. Elmasri & Navathe. 2004. Fundamental of Database Systems, 4th Edition. New York. Addison-Wesley.3. Connolly, Thomas & Begg, Carolyn. 2005. Database Systems 4th edition, New York. Prentice Hall
Notes:	<p>*1 credit unit or <i>sks</i> in learning process = three periods consist of: (a) scheduled instruction in a classroom or laboratory (50 minutes); (b) structured activity (60 minutes); and (c) individual activity (60 minutes) according to the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 44 Year 2015 jo. the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 50 Year 2018.</p> <p>**1 credit unit or <i>sks</i> = 1.59 ECTS according to Rector Decree Of Universitas Negeri Surabaya No. 598/UN38/HK/AK/2019</p>