Module designation	*Information Systems and Databases*
Semester(s) in which the module is taught	*4*
Person responsible for the module	*Bambang Sumarno M.Kom.*
Language	*Bahasa Indonesia*
Relation to curriculum	*Compulsory course*
Teaching methods	*150 minutes lectures and 180 minutes structured activities per week.*
Workload (incl. contact hours, self-study hours)	*Total workload is 136 hours per semester which consists of 150 minutes lectures, 180 minutes structured activities, and 180 minutes self-study per week for 16 weeks.*
Credit points	*3*
Required and recommended prerequisites for joining the module	*MAT6307 - Algorithm and Programming*
Module objectives/intended learning outcomes	*CO1 Respecting differences of opinion and different ways of solving database problems in information systems* *CO2 Using systematic and innovative thinking and demonstrating independence in carrying out individual and group tasks to produce work in the form of information systems based on analysis of field requirements* *CO3 Explaining database concepts, relational data models, database creation and normalization techniques, the use of query languages (SQL) for searching, sorting, filtering, deleting, and updating data, and the basics of information system development as a foundation for further development at the postgraduate level.* *CO4 Able to develop algorithms with correct and efficient logic to build information systems* *CO5 Take steps to develop information systems in accordance with the algorithms developed, based on needs analysis, information, and data in the field* *CO6 Able to select and utilize ICT developments, both software and hardware, that are suitable for developing information systems.*

<table>
<tr><td>Content</td><td>This course provides an understanding and mastery of database concepts, relational data models, database creation techniques and normalization, the use of query languages (SQL) for searching, sorting, filtering, deleting, and updating data, as well as the creation of database application programs in the development of computer-based data processing systems.</td></tr>
<tr><td>Examination forms</td><td>CO1: Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude.</td></tr>
<tr><td>Study and examination requirements</td><td>The student is given a value of very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not a component of the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.

The final mark will be weight as follow:
<table>
<tr><th>No</th><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr>
<tr><td>1</td><td>CO 1</td><td>a. Presentation
b. Discussion</td><td>Observation</td><td>5%
10%</td></tr>
<tr><td>2</td><td>CO 2, CO 3, CO 4</td><td>a. Individual assignment
b. Group assignment
c. Quiz
d. Midterm
e. Final test</td><td>Written</td><td>10%
10%
20%
20%
25%</td></tr>
<tr><td colspan="4">Total</td><td>100%</td></tr>
</table></td></tr>
<tr><td>Reading list</td><td>1. A. Stephens,Rod. Beginning Database Design Solutions. 2009. Indianapolis : Wiley Publishing, Inc.
2. B. Connolly, Thomas M & Begg, Carolyn E. Database Systems: A Practical Approach to Design, Implementation, and Management. 2014. England: Pearson Education Limited</td></tr>
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