



UNIVERSITAS MATARAM
(University of Mataram)
FAKULTAS TEKNIK
(Faculty of Engineering)
PROGRAM STUDI TEKNIK INFORMATIKA
(Department of Informatics Engineering)

MODULE HANDBOOK DESCRIPTION

Database System (W22B34)

Module designation	Database System
Semester(s) in which the module is taught	<i>3 / third year</i>
Person responsible for the module	<i>Moh. Ali Albar, S.T., M.Eng.</i>
Language	<i>Indonesian</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<i>Lectures, Discussions, Project</i>
Workload (incl. contact hours, self-study hours)	Contact Hours every week, each week of the 16 weeks/semester including Evaluation <ul style="list-style-type: none"> ● 3 x 50 minutes lecturer/week ● 3 x 60 minutes class exercise/week ● Self Study hours = 120 minutes/week Total workload 450 minutes/week
Credit points	<i>3 (~ 4,8 ECTS)</i>
Required and recommended prerequisites for joining the module	Information Technology Introduction

Module objectives/intended learning outcomes	<ol style="list-style-type: none"> 1. Mastering, analyzing and applying the principles of Database Design 2. Mastering, analyzing and applying the principles of Database Programming
Content	This course provides knowledge about Basic Database Concepts, Database Systems & Architecture, Data Modeling using ER Diagrams, Relational Models, Mapping ER Diagrams to Relational Models, Functional Dependencies, Database Normalization, Relational Algebra, SQL Query.
Examination forms	<i>Assignments, Quiz, Project</i>
Study and examination requirements	<i>Assignments 7%, Quiz 53%, Project 40%</i>
Reading list	<ol style="list-style-type: none"> 1. J. A. Hoffer, M. B. Prescott, F. R. McFadden, Modern Database Management, Edition 6, Upper Saddle River New Jersey: Prentice Hall Pearson Education International, 2002. 2. Fathansyah, Basis Data, Edisi Revisi, Bandung: Penerbit Informatika, Juni 2012. 3. R. H. Sianipar, Pemrograman Database Menggunakan MySQL, Edisi 1, Yogyakarta: Andi Offset, 2015.