

UNIVERSITAS NEGERI PADANG

FACULTY OF MATHEMATICS AND NATURAL SCIENCES MATHEMATICS DEPARTMEN, MATHEMATICS STUDY PROGRAM Main Campus Universitas Negeri Padang. Jalan Prof. Dr. Hamka Air Tawar Padang, Sumatera Barat Telepon: +62 751 7053902, Fax: +62 751 7055628 Email: humas@unp.ac.id

Bachelor of Science in Mathematics

MODULE HANDBOOK

| Module name: | Databases | | | | |
|---|---|--|--|--|--|
| Module level, if applicable: | Bachelor | | | | |
| Code: | MAT2.62.7010 | | | | |
| Subheading, if applicable: | - | | | | |
| Classes, if applicable: | Databases | | | | |
| Semester: | 7 th (seventh) | | | | |
| Module coordinator: | Head of Applied Mathematics Expertise Group | | | | |
| Lecturer(s): | Meira Parma Dewi, S.Si., M.Kom. and Defri Ahmad, S.Pd., M.Pd. | | | | |
| Language: | Indonesian Language and English | | | | |
| Classification within the curriculum: | Elective course in the fourth year (7 th semester) Bachelor Degree | | | | |
| Teaching format / class hours per week during the semester: | a. Lectures: Project Based Learning with methods such as expository, discussion, and Practicum (3 x 50 minutes = 150 minutes). b. Structured assignment: Weekly individual written assignment (3 x 60 minutes = 180 minutes). c. Individual study (3 x 60 minutes = 180 minutes). | | | | |
| Workload: | Total workload is 136 hours per semester which consists of 150 minutes of lectures, 180 minutes of structured activities, and 180 minutes of self-study per week for 16 weeks. | | | | |
| Credit points: | 3 SKS = 4,53 ECTS | | | | |
| Prerequisites course(s): | None | | | | |

| Course outcomes: | After taking this course the students have ability to: CO1. Distinguish the basic concepts of database, relational database and ERD CO2. Apply the concept of database, relational database and ERD to SQL CO3. Apply the concept of database, relational database and ERD to Visual FoxPRo | | | | |
|--------------------------|--|--|--|--|--|
| Content: | Introduction to databases Database Language Types of Databases Database System Relational Database Relational Data Model Entity Relational Diagram Normalization SQL Visual FoxPro | | | | |
| Study/exam achievements: | The final grade will be weighted as follows: The assessment consists of a final project (50%), a midterm exam (30%), and an assignment (20%). Students are separated into groups and build a programme (practicum) related to this course. The final project entails group discussion to build a program related to database A midterm test is taken to examine whether students understand the theory covered in the half-semester course. | | | | |
| Forms of media: | White Board, laptop, Projector, e-learning via elearning2.unp.ac.id, and zoom meeting. | | | | |
| Literature: | Fathansyah. 2012. Basis Data Edisi Revisi. Informatika, Bandung Janner Simarmata, Iman Paryudi. 2006. Basis Data. ANDI, Jogyakarta Kadir, Abdul. Penuntun Praktis Belajar SQL. ANDI Yogyakarta. 2002 | | | | |

PLO and CO Mapping

| | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PLO7 | PLO8 | PLO9 | PLO10 |
|-----|------|------|------|------|------|------|------|------|------|-------|
| CO1 | | | 1 | | | | | | | |
| CO2 | | | | | 1 | | | | | |
| CO3 | | | | | | | | | | ✓ |