

## **UNIVERSITAS MATARAM**

(University of Mataram)

## **FAKULTAS TEKNIK**

(Faculty of Engineering)

## PROGRAM STUDI TEKNIK INFORMATIKA

(Department of Informatics Engineering)

## **MODULE HANDBOOK DESCRIPTION**

Digital System (W22K13)

Module designation	Digital System
Semester(s) in which the module is taught	1 / first year
Person responsible for the module	Fitri Bimantoro, S.T., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Lectures, Discussions, Case Study
Workload (incl. contact hours, self-study hours)	Contact Hours every week, each week of the 16 weeks/semester including Evaluation  • 3 x 50 minutes lecturer/week  • 1 x 60 minutes class exercise/week  • 2 x 60 minute Laboratory  • Self Study hours = 180 minutes/week  Total workload 520 minutes/week
Credit points	3 (~ 4,8 ECTS)
Required and recommended prerequisites for joining the module	-
Module objectives/ intended learning outcomes	In this course, students are expected to be able to:  1. able to understand the fundamentals of the digital system.  2. able to simulate the use of digital system.

Content	this course discuss about Number systems, Boolean Algebra, Logic Gates, Simplification of Functions, Combination Logic, Flip-flops, and Sequential Logic
Examination forms	Assignments, Contribution/Activeness in Class, Scheduled Exam
Study and examination requirements	Assignements 10%, Quiz 15 %, Practicum 50% Middle Exam 20 %
Reading list	M. Rafiquzzaman, Fundamentals of Digital Logic and     Microcomputer Design (5th ed.)     Hidayat, Sistem Digital. Informatika