



UNIVERSITAS MATARAM

(University of Mataram)

FAKULTAS TEKNIK

(Faculty of Engineering)

PROGRAM STUDI TEKNIK INFORMATIKA

(Department of Informatics Engineering)

MODULE HANDBOOK DESCRIPTION

Computer Architecture and Organization (W22B23)

Module designation	Computer Architecture and Organization
Semester(s) in which the module is taught	3 / fourth year
Person responsible for the module	Andy Hidayat Jatmika, S.T., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Lectures, Discussions
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 • 100 minutes class exercise/week • Self Study hours = 150 minutes/week • Midterm Exam = 60 minutes • Final Exam = 60 minutes Total workload 95,33 hours/semester
Credit points	3 (~ 3,81 ECTS)
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	The main objective of Computer Architecture and Organization courses is to provide an understanding of the basic principles, application techniques, and implementation of Computer Architecture and Organization for the resolution of certain cases. Based on these main objectives, the Computer Architecture and Organization courses have subject learning outcomes, namely: 1. <i>Understand the evolution and performance of computers.</i> 2. <i>Understand the main components that make up a computer.</i> 3. <i>Understand the relationship between the main components of a computer.</i>
Content	This course learns about how the processor executes a program, memory management techniques, input output techniques, interconnection structure of bus systems, and the relationship between organization and computer architecture.
Examination forms	<i>Assignments, Quiz</i>
Study and examination requirements	<i>Assignments 10%, Quiz 15%, Scheduled Exam 75%</i>
Reading list	1. William Stalling. Computer Organization and Architecture 10th Edition 2. Computer Architecture: A Quantitative Approach (The Morgan Kaufmann Series in Computer Architecture and Design) 6th Edition 3. Syahrul. Organisasi Dan Arsitektur Komputer. Penerbit ANDI.