UNIVERSITAS MATARAM

(University of Mataram)

FAKULTAS TEKNIK

(Faculty of Engineering)

PROGRAM STUDI TEKNIK INFORMATIKA

(Department of Informatics Engineering)

MODULE HANDBOOK DESCRIPTION

Computer Network (W22B33)

Module designation	Computer Network
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, Practicum*
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 ● 3 x 60 minutes class exercise/week ● Self Study hours = 180 minutes/week Total workload 510 minutes/week
Credit points	*3 (~ 4,8 ECTS)*
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	The main objective of Computer Networks courses is to provide an understanding of the basic principles, application techniques, and implementation of Computer Networks for the resolution of certain cases. Based on these main objectives, the Computer Networks courses have subject learning outcomes, namely: 1. *Able to perform basic configuration of network devices such as Cisco's Switches and Routers.* 2. *Able to design topology and perform simple network simulation using Cisco Packet Tracer network simulator software.* 3. *Able to allocate IP Address version 4 (IPv4) on a network in accordance with IPv4 theory and calculations.*
Content	This course learn how to design a simple network topology, how data communication occurs, how network equipment works, the routing process, allocates IP addresses, configures network equipment, and performs network simulations according to computer network theory.
Examination forms	*Assignments, Quiz , Practicum*
Study and examination requirements	*Assignements 10%,* *Quiz 15%,* *Practicum 25%,* *Scheduled Exam 50%*
Reading list	1. A.F. Hastawan, Djuniadi, B. Sunarko (2021). Manajemen Jaringan Komputer dengan Menggunakan Cisco Paket Tracer. 2. S.H. Wibowo. (2022). Jaringan Komputer Dan Komunikasi Data. 3. O.W. Purbo. (2019). IPv6 Untuk Mendukung Operasi Jaringan Dan Domain Name System. 4. Vani Makula, D. Sunitha, Radhika Rajoju. (2020). COMPUTER NETWORKS AND DATA COMMUNICATION