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

MODULE HANDBOOK DESCRIPTION

Advanced Computer Network (P22B06)

Module designation	Advanced Computer Network
Semester(s) in which the module is taught	*8 / fourth year*
Person responsible for the module	*Andy Hidayat Jatmika, S.T., M.Kom.*
Language	*Indonesian*
Relation to curriculum	*Electives*
Teaching methods	*Lectures, Discussions, Project*
Workload (incl. contact hours, self-study hours)	Contact Hours every week, each week of the 16 weeks/semester including Evaluation ● 2 x 50 minutes lecturer/week ● 2 x 60 minutes class exercise/week ● Self Study hours = 120 minutes/week Total workload 340 minutes/week
Credit points	*2 (~ 3,2 ECTS)*
Required and recommended prerequisites for joining the module	Computer Networks

Module objectives/intended learning outcomes	The main objective of Advanced Computer Network courses is to provide students with knowledge, simulation, and analysis of ad hoc networks. The learning outcomes of the Advanced Computer Network course are: 1. Understand the competency model as a Network Engineer. 2. Understand common methods for managing network devices. 3. Understand how to use network security technologies to build a secure network. 4. Understand the basics of network services and their applications.
Content	This course contains important topics: 1. Data Communication Network Basic 2. Huawei VRP 3. Ethernet Switching 4. STP Principles and Configuration 5. IP Routing 6. OSPF Basic 7. Network Address Translation 8. Network Services and Applications 9. *WAN Technologies*
Examination forms	*Assignments, Quiz, Simulation, Project (Oral Presentation)*
Study and examination requirements	*Assignments 10%,* *Quiz 25%,* *Simulation 25%,* *Project 40%*
Reading list	1. Huawei. HCNA Networking Study Guide 2016 Edition. Springer. 2018.