



UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Department of Computer Science and Electronics

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Bachelor in Electronics and Instrumentation

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MODULE HANDBOOK

Module name	Experiment on Computer Networks
Module level, if applicable	Undergraduate
Code, if applicable	MII-2612
Courses, if applicable	Experiment on Computer Networks
Semester(s) in which the module is taught	Even
Person responsible for the module	Lukman Heryawan, PhD
Lecturer(s)	Lukman Heryawan, PhD
Language	Bahasa Indonesia & English
Relation to curriculum	1. Undergraduate degree program, compulsory, 6th semester. 2. International undergraduate program, compulsory, 6th semester.
Teaching methods	1. Undergraduate degree program: lectures, < 60 students, 2. International undergraduate program: lectures, < 30 students.
Workload (incl. contact hours, self-study hours)	1. Exercises and Assignments: 1 x 50 = 50 minutes per week. 2. Private study: 1 x 50 = 50 minutes per week.
Credit points	1 credit point
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the exams.
Required and recommended prerequisites for joining the module	Operating system, computer network
Learning outcomes and their corresponding PLOs	After completing this module, a student is expected to: CO1. Able to explain and identify the concepts and characteristics of operating system and computer network CO2. Able to explain and identify the components of operating system and computer network CO3. Able to explain operating system and computer network processing and how does it works CO4. Able to explain and to do computational related experiment using operating system's environment CO5. Able to explain and to do computational related experiment using computer network's environment

	<table><tr><th colspan="2">PLO</th><th>CO1</th><th>CO2</th><th>CO3</th><th>CO4</th><th>CO5</th></tr><tr><td rowspan="5">Program Learning Outcome (PLO)</td><td>PLO1</td><td>√</td><td></td><td></td><td></td><td></td></tr><tr><td>PLO2</td><td></td><td>√</td><td></td><td></td><td></td></tr><tr><td>PLO3</td><td></td><td></td><td>√</td><td></td><td></td></tr><tr><td>PLO4</td><td></td><td></td><td></td><td>√</td><td></td></tr><tr><td>PLO5</td><td></td><td></td><td></td><td></td><td>√</td></tr></table>	PLO		CO1	CO2	CO3	CO4	CO5	Program Learning Outcome (PLO)	PLO1	√					PLO2		√				PLO3			√			PLO4				√		PLO5					√																		
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Content	1. Concept and understanding, operating system and computer network technology and method 2. Architecture and components of operating system and computer network 3. Management of operating system and computer network 4. Operating system and computer network supporting technology and its application 5. Operating system and computer network security																																																								
Study and examination requirements and examination forms	The evaluation is done in 2 forms, namely: 1. Trial, either midterm or semester test, 2. Two tasks, including individual, 3. Two group assignments to be completed within a certain timeframe, and Assessment is done using benchmark assessment, with the aim of measuring the level of student understanding related to the target and class rank.																																																								
Media employed	e-learning Platform (ELOK), LCD, blackboard, and websites.																																																								
Assessments and evaluation	<table><tr><th>Type</th><th>Percentage</th><th>CO1</th><th>CO2</th><th>CO3</th><th>CO4</th><th>CO5</th></tr><tr><td>Task 1</td><td>10</td><td>√</td><td></td><td></td><td></td><td></td></tr><tr><td>Group Task 1</td><td>15</td><td></td><td>√</td><td></td><td></td><td></td></tr><tr><td>Midsem Test</td><td>25</td><td></td><td>√</td><td>√</td><td></td><td></td></tr><tr><td>Task 2</td><td>10</td><td></td><td></td><td>√</td><td></td><td></td></tr><tr><td>Group Task 2</td><td>15</td><td></td><td></td><td></td><td>√</td><td></td></tr><tr><td>FinalSem test</td><td>25</td><td></td><td></td><td></td><td>√</td><td>√</td></tr><tr><td>Total</td><td>100</td><td></td><td></td><td></td><td></td><td></td></tr></table>	Type	Percentage	CO1	CO2	CO3	CO4	CO5	Task 1	10	√					Group Task 1	15		√				Midsem Test	25		√	√			Task 2	10			√			Group Task 2	15				√		FinalSem test	25				√	√	Total	100					
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Reading list	• William Stallings, Data and Computer Communication 8th Ed., Prentice Hall, 2007 • Andrew S. Tanenbaum, Computer Network 4th Ed., Prentice Hall, 2003 • Silberchatz, Abraham, Operating Systems Concepts with Java, 8th Edition, John Wiley, 2009																																																								

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