

Course Code	TKIT163101P											
Course Name	Computer Network Lab. Work											
Course Instructors	Ridi Ferdiana											
Course Type	Elective											
Course Classification	Engineering Topics											
Credit / Contact Hour per Week	1 / 150 minutes per Week											
Course Description	This course will discuss computer network focusses on OSI layer and protocols related to each layer. Students will use simulation tools to implement networking concept during the course.											
Prerequisites Courses	TKIT 163101 – Computer Network											
Covered Student Outcome	Development of Engineering Solution (b) Engineering Design (c) Modern Tools Utilization (e) Sustainable Learning (k)											
Learning Outcome												
		Study Program Student Outcome										
No	Learning Outcome	SO (a) – SO (k)										
1.	Student able to analyze and solve problem related to OSI layer and protocol	Development of Engineering Solution										
2.	Student able to implement various OSI layer configuration and protocols	Engineering Design										
3.	Student able to use several latest tools to config a network	Modern Tools Utilization										
4.	Student able to improve their knowledge on networking topics by searching and learning on Internet	Sustainable learning										
Topic	<ol style="list-style-type: none"> 1. Overview of computer network 2. OSI Reference Model and TCP/IP model. 3. Application layer function and protocol 4. Transport layer function and protocol 5. Network layer function and protocol 6. IP Addressing 7. Subnetting 8. Data link layer characteristic 9. Routing protocol 10. Wide area network 11. Virtual LAN 12. Wireless LAN 13. Computer network trend 											
Direct Asessment	<table border="1"> <thead> <tr> <th>Direct Asessment Plan</th> <th>Measured Learning Outcome</th> </tr> </thead> <tbody> <tr> <td>LO1, LO2, LO3, LO4</td> <td>Weekly lab report</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		Direct Asessment Plan	Measured Learning Outcome	LO1, LO2, LO3, LO4	Weekly lab report						
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LO1, LO2, LO3, LO4	Weekly lab report											
Indirect Assesment	Questionnaire (EDOM)											
References	<p>[1] Andrew S Tanenbaum, David J Wetherall, 2011, Computer Networks, Edisi ke-5, Prentice Hall.</p> <p>[2] Todd Lammle, CompTIA Network+ Deluxe Study Guide, Wiley Publishing Inc, 2009.</p> <p>[3] Adolfo Rodriguez, John Gatrell, John Karas, Roland Peschke, "TCP/IP Tutorial and Technical Overview“ seventh edition.. IBM Redbook, 2001.</p>											