

Course Code	TKEE163245P									
Course Name	Electrical Power Protection Lab Work									
Course Instructors	Budi Setiyanto									
Course Type	Selected Elective									
Course Classification	Engineering Topics									
Credit / Contact Hour per Week	1 / 150 minutes per Week									
Course Description	In this labwork, the students are introduced to the current technology of electrical power protection equipment..									
Prerequisites Courses										
Covered Student Outcome	<b>Engineering Design (c)</b> <b>Data and Experiment (d)</b> <b>Modern Tools Utilization ( e )</b> <b>Multidisciplinary Teamwork (h)</b>									
Learning Outcome	<ol style="list-style-type: none"> <li>1. Students are able to determine the important aspects in designing protection system of electrical power system with the current technology</li> <li>2. The students are able to measure the performance of current electrical power system protection.</li> <li>3. Students are able to operate in a team setting to design an electrical power system protection</li> </ol>									
Topic	<ol style="list-style-type: none"> <li>1. Overcurrent Relay</li> <li>2. Overcurrent Relay Coordination</li> <li>3. Feeder Protection, Motor Protection</li> <li>4. Generator Protection</li> <li>5. Ground Fault Relay</li> <li>6. Ground Fault Coordination</li> </ol>									
Direct Asessment	<table border="1"> <thead> <tr> <th>Direct Asessment Plan</th> <th>Measured Learning Outcome</th> </tr> </thead> <tbody> <tr> <td>Lab Work Report</td> <td>LO1 LO2 LO3</td> </tr> <tr> <td>Pretest</td> <td>LO1 LO2 LO3</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		Direct Asessment Plan	Measured Learning Outcome	Lab Work Report	LO1 LO2 LO3	Pretest	LO1 LO2 LO3		
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Lab Work Report	LO1 LO2 LO3									
Pretest	LO1 LO2 LO3									
Indirect Assesment	Questionnaire (EDOM)									
References	<p>[1] Ravindranath, B., M. Chander, Power System Protection and Switchgear, Wiley Eastern Limited, New Delhi</p> <p>[2] Warrington, A.R.V.C., Protective Relays, Their Theory and Practice, Chapman and Hall, London</p> <p>[3] IEEE Recommended Practice for Protection and Coordination of Industrial and Commercial Power Systems</p> <p>[4] Protective Relays Application Guide, GEC Measurements The General Electric Company Limited of England</p>									