

Course Code	TKEE163245P													
Course Name	Advanced Control Lab Work													
Course Instructors	Adha Imam Cahyadi; Oyas Wahyunggoro													
Course Type	Selected Elective													
Course Classification	Engineering Topics													
Credit / Contact Hour per Week	1 / 150 minutes per Week													
Course Description	In this Lab Work, the students are introduced to the common structure in industrial control system. The aim is to equip students with the capability to implement control system in industrial context.													
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	1. Students are able to demonstrate control principles into actual solution for simple industrial control problem 2. Students are able to perform experiments to measure the performance of their proposed control solution 3. Students are able to cooperate in a teamwork while preparing equipments													
Topic	1. Simulasi Ladder Diagram 2. Timer 3. Analog Input, Bit Memory, Counter 4. Pemodelan Sistem Diskret 5. Pengendali level dengan NI myRio 6. Pengendali motor DC dengan NI myRio													
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>Post Test</td> <td>LO1 LO2 LO3</td> </tr> <tr> <td></td> <td></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	Post Test	LO1 LO2 LO3				
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Lab Work Report	LO1 LO2 LO3													
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Indirect Assesment	Questionnaire (EDOM)													
References														