

Course Code	TKEE163231											
Course Name	Digital Control Systems											
Course Instructors	Samiadji Herdjunanto											
Course Type	Required											
Course Classification	Engineering Topics											
Credit / Contact Hour per Week	3 / 150 minutes per Week											
Course Description	This course examines the aspects of control. The Constitutional Court examines the various components of the control system, mathematical model, state space, sampling, transformation, stability, feedback role, control methods, observers and applications.											
Prerequisites Courses												
Covered Student Outcome	<b>Development of Engineering Solution (b)</b> <b>Engineering Design (c)</b>											
Learning Outcome	1. Students are able to design the control component in accordance with the desired performance by considering the stability aspect.											
Topic	<ol style="list-style-type: none"> <li>1. Transformation z.</li> <li>2. Snippet.</li> <li>3. Feedback system.</li> <li>4. PID.</li> <li>5. Space circumstances.</li> <li>6. Controllable concept.</li> <li>7. The concept of obserabilitas.</li> <li>8. Stability.</li> <li>9. Introduction to optimal control.</li> </ol>											
Direct Asessment	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 60%;">Direct Asessment Plan</th> <th>Measured Learning Outcome</th> </tr> </thead> <tbody> <tr> <td>Assignments</td> <td>LO1</td> </tr> <tr> <td>Mid Exam</td> <td>LO1</td> </tr> <tr> <td>Final Exam</td> <td>LO1</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		Direct Asessment Plan	Measured Learning Outcome	Assignments	LO1	Mid Exam	LO1	Final Exam	LO1		
Direct Asessment Plan	Measured Learning Outcome											
Assignments	LO1											
Mid Exam	LO1											
Final Exam	LO1											
Indirect Assesment	Questionnaire (EDOM)											
References	[1] Modern digital control systems by Raymond Jacquot											