

Course Code	TKEE163102											
Course Name	Electrical Wiring and Installation											
Course Instructors	Tiyono, Harnoko											
Course Type	Required											
Course Classification	Engineering Topics											
Credit / Contact Hour per Week	2 / 100 minutes per Week											
Course Description	This course studies various electrical systems and engineering techniques as well as drawings of techniques, whether electrical power installation, power and computer. Engineering installation lecture materials: Introduction, lighting / lighting installation, electric motor installation, installation of lightning rods, alarm / signal installation, telephone installation, computer network installation and grounding system. This course is given in the third semester and is compulsory for students of Electrical Engineering Program. Prerequisite subject does not exist. Some learning materials are given in the form of lectures and discussions. Examples given will always be adapted to the development of science and technology.											
Prerequisites Courses	-											
Covered Student Outcome	<b>Development of Engineering Solution (b)</b> <b>Engineering Design (c)</b>											
Learning Outcome	<ol style="list-style-type: none"> <li>1. Students are able to understands the general picture of electrical power distribution from power plant to consumer</li> <li>2. Students are able to understands the voltage classification in electrical power system and electrical installation drawing</li> <li>3. Students are able to understands the electrical lighting planning and its regulation</li> </ol>											
Topic	<ol style="list-style-type: none"> <li>1. Know and understand the general description of power delivery systems from power plants to consumers.</li> <li>2. Know the classification of voltages in the electrical power system and understand the electrical installation drawings</li> <li>3. Understand and calculate the planning of electrical lighting / lighting installation and implementation of installation and regulations.</li> <li>4. Understand and calculate the planning of the installation of lightning arrest and the implementation of the installation and its regulations</li> <li>5. Understand and calculate the planning of the installation of electric motors and the implementation of installation and regulations</li> <li>6. Understand and know the system installation of alarm / signal, planning and installation and regulations</li> <li>7. Understand and know the telephone installation system, planning and installation and regulations</li> <li>8. Understand and know the earthing system, planning and installation and regulations</li> </ol>											
Direct Asessment	<table border="1"> <thead> <tr> <th>Direct Asessment Plan</th> <th>Measured Learning Outcome</th> </tr> </thead> <tbody> <tr> <td>Assignment</td> <td>LO1,LO2,LO3</td> </tr> <tr> <td>Mid Exam</td> <td>LO1,LO2</td> </tr> <tr> <td>Final Exam</td> <td>LO3</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		Direct Asessment Plan	Measured Learning Outcome	Assignment	LO1,LO2,LO3	Mid Exam	LO1,LO2	Final Exam	LO3		
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Assignment	LO1,LO2,LO3											
Mid Exam	LO1,LO2											
Final Exam	LO3											
Indirect Assesment	Questionnaire (EDOM)											
References	<ol style="list-style-type: none"> <li>[1] Guinness, Mc., Stein, Reynold, 1989, Mechanical and Electrical Equipment for Building, 6th edition, John Wiley and Sons, New York</li> <li>[2] Panitia Revisi PUIL, 2000, PUIL 2000, Jakarta</li> <li>[3] Reeves, EA., Howell, AG., 1988, Handbook of Electrical Installation Practice, Granada Publishing Company</li> <li>[4] Stetyawan, E., Harten, van., 1987, Instalasi Listrik Arus Kuat, Jilid I, II, III, Bina Cipta, Bandung.</li> </ol>											