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| Course Code | TKEE163211P |
| Course Name | Advanced Power Machine 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 | This labwork continues the sequence of test and measurement from the Basic Electric Machine Labwork by introducing further measurement instrument and more advanced electric machine. |
| Prerequisites Courses | Advanced Power Machines (TKEE163211) |
| **Covered Student Outcome** | **Engineering Design (c)**<br>**Data and Experiment (d)**<br>**Modern Tools Utilization ( e )**<br>**Multidisciplinary Teamwork (h)** |

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| Learning Outcome | 1. Students are able to identify performance indicator necessary for the design of electromechanical system<br>2. Students are able to measure the performance indicator of advanced electric machines<br>3. Students are able to operate in team to perform measurement of advanced electric machine |
| Topic | 1. Pengujian Efisiensi dan Regulasi Trafo<br>2. Hubungan Primer-Sekunder Trafo dan Bilangan Jam<br>3. Pengujian Torsi Mesin Arus Searah DC<br>4. Pengujian Torsi Mesin AC Asinkron/Induksi 3 Fase<br>5. Generator Induksi<br>6. Simulasi Transformasi Clarke dan Transformasi Park |
| Direct Asessment | |
| Indirect Assesment | Questionnaire (EDOM) |
| References | [1] Chapman, Stephen J., 2005, Electric Machinery Fundamentals, 4th., McGraw-Hill<br>[2] Wildi, Theodore. 2002. Electrical Machines, Drives, and Power Systems, 5th., Prentice Hall<br>[3] Paul C. Krause, 1986, "Analysis of Electric Machinery", McGraw-Hill Series in Electrical Engineering ISBN 0-07-035436-7 |

| **Direct Asessment Plan** | **Measured Learning Outcome** |
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| Lab Work Report | LO1 LO2 LO3 |
| Pretest | LO1 LO2 LO3 |
| Post Test | LO1 LO2 LO3 |