

TRAINING AND ADMINISTRATION OF MODULING ELECTRONIC ENGINEER MODULE FOR SMK TEACHERS IN REGIONAL REGIONS YOGYAKARTA

by Muhamad Ali, Mutaqin, Djoko Laras BT

ABSTRACT

Community Service Activities (PPM) on training and mentoring The preparation of Power Electronics Engineering Modules for Vocational High School Teachers in Yogyakarta Special Region aims to improve teachers' competence in power electronics engineering. The training is aimed at SMK teachers who are subjected to electronic control subjects and industrial automation and industrial electronics to better understand the application materials of the industrial world by creating computer-based simulation based practice modules with Multisim software.

This activity is held for 3 days of training consisting of theory, electrical engineering practice, preparation of Multisim and PSIM software-based modules, mentoring held on Thursday, August 31, 2017, Tuesday 05 September 2017 and Saturday, 09 September 2017. Activities carried out at Computer and Data Communication Laboratory and Power Electronics Laboratory which was attended by 21 people from SMK teachers throughout Yogyakarta Special Region who have electrical and electronic skill program. The methods used in this training are lecture, discussion, question and answer, demonstration, simulation and simulation practice of electronics circuit and power electronics with computer.

The results of this activity are: 1) the trainee experiences an increase of knowledge in the field of Power Electronics which is indicated by the score of the assessment result, 2) Participants know and master the simulation of power electronics with computer software especially Multisim as evidenced by the given task can be completed, 3) Participants able to complete the task in preparing the power electronics module based on simulation software Multisim and PSIM.

Kata Kunci: Community Service Activities, vocational education, power electronics