

# OPTIMIZATION OF MECHATRONIC PRODUCTION SYSTEM (MPS 500+) AS A TRAINER OF COURSE PRACTICE CONTROL AND DATA ACQUISITION

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## ABSTRACT

*The purpose of this paper is (1) Development of hardware and software that can improve the use of FMS MPS 500; (2) Knowing the performance results of SCADA system software on FMS MPS500 (3) Knowing the feasibility level of SCADA system on FMS MPS500 for the improvement of student competence in practice technique of control and data acquisition. This study was conducted in Electrical Engineering Education Study Program, Faculty of Engineering, Yogyakarta State University. The development model used is ADDIE (Analysis, Design, Development, Implementation, and Evaluation). Testing of instructional media is done by validating the instructional media by inviting material experts and learning media experts and students to assess the learning trainers developed. The result of the study shows that the design of FMS trainer as a learning media in the practice of control technique and data acquisition and virtual software development as a learning media have feasibility based on the material experts got the average score of 3.13 and 3.15 are both included in the decent category, while based on media experts get the average score of 3.46 and 3.48 both are included in the category is very feasible. Assessment of user responses to get the average score of 3.36 and 3.32 both included in the category is very feasible.*

Kata Kunci: *learning media, FMS, control*