## ABSTRACT

Rahayu Nofitria. 2025. *Implementation of FluidSim Software to Support Trainer in the Electric Motor Control Practical Course in Improving Students' Critical Thinking Skills*. Thesis. Electrical Engineering Education Study Program, FKIP, PGRI Madiun University. Supervisors (I) Ir. Sulistyaning Kartikawati, M.M., M.Pd., (II) Dr. Nurulita Imansari, S.Pd., M.Pd.

Technological advancements demand human resources and quality education that are able to develop, one of which is through critical thinking skills. The use of technology in learning can also provide success in theoretical and practical fields. Through media, software, specifically *FluidSim software*, can help in the learning process of the Electrical Engineering Education Study Program, which uses a physical trainer media where damage can occur to the components if there is a mistake in designing the electrical system, resulting in less efficient time and high costs. *The FluidSim software* is needed to improve critical thinking skills to find out how much influence and response students have after the software is applied. The research method used is a quantitative *quasi-experimental* approach with the *one-group pretest-posttest* design and a response questionnaire. The results of the pretest percentage obtained were 50.27%, and after the treatment was given, the posttest increased to 83.18%, and the response questionnaire obtained a percentage of 91.28% with an average answer of "strongly agree," which is interpreted as a very positive influence of the application of *FluidSim software* on students' critical thinking skills. It can be concluded that the application of *FluidSim software* can effectively support practicum-based learning simulations in the Electric Motor Control Practical course.



Keywords: *FluidSim Software*, Critical Thinking Skills, Practicum-Based Learning, Electrical Engineering Education