

***DESIGN AND ANALYSIS OF EARTH RESISTANCE MEASUREMENTS  
USING GROUND STEEL WIRE ELECTRODES IN THE MAIN BUILDING  
OF BENGKALIS STATE POLYTECHNIC***

*Name : Tarmizi*

*Number : 320418185*

*Supervisor : Agustiawan, ST.,MT*

***ABSTRACT***

*The grounding system is part of the electrical installation that functions to secure electrical equipment and humans. This grounding system has low impedance properties, so that the overcurrent in the installation network can be flowed quickly to the ground so as to minimize damage to equipment in the building and protect the people inside it. Bengkalis State Polytechnic is a State University located in Bengkalis Regency, Riau Province, from year to year there has been a very good increase, starting from the number of study programs and the number of students, each year the number of new students who are interested is increasing, therefore Bengkalis State Polytechnic took the opportunity to build the Integrated Lecture Building III. Indonesia. To secure the Integrated Lecture III Building from lightning strikes, it is necessary to provide protection media to make grounding or grounding using rod electrodes so that the building can be protected from danger and reduce the occurrence of damage to electrical or electrical equipment inside the Integrated Lecture III building. The results of grounding measurements are measured using an Earth Tester with a distance between PCs or iron poles of 1 meter with a grounding resistance value of 3.5 .*

*Keywords: Grounding system, Integrated Lecture Building III Bengkalis State Polytechnic.*