**ABSTRACT** 

Technology has experienced extraordinary developments in this century.

Especially after the invention of the transistor. An invention that became the

beginning of the departure of the development of an automated system or

autonomous system [1]. Realized for the first time in certain industries, now

autonomous systems have developed in livestock industries such as broiler

cultivation.

The closed house system is a method of chicken cultivation that was

developed to be able to manipulate the air circulation and temperature in the cage

in order to obtain the standard of broiler climate requirements. Therefore,

temperature control is the right term for this closed house system. The closed house

system must ensure that all functions are carried out automatically with an effective

monitoring system and input of reference temperature. Most of the practices carried

out in supervising the operation of the control function are carried out by staying in

the cage or in the control room. This of course causes problems, including the

response of the system that cannot be 24 hours and is controlled by an open loop

system.

In this final project the author has designed an automatic temperature

control system at values of 28-29°C and 31-32°C based on IoT with a system

response time of less than 60 seconds to be applied to broiler chicken coops with a

closed house system. This design is done so that the cultivation process can be

carried out automatically and anywhere without having to make direct contact with

broiler chickens.

**Keywords**: closed house, broiler chicken, control, IoT

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