

## **ABSTRACT**

*One of the factors that affect chicks is the temperature and humidity of the cage. Excessive heat causes the chickens to drink too much water, resulting in reduced feed intake. Meanwhile, temperatures that are too cold will cause blood vessels to constrict which will lead to decreased lung function in chickens. Therefore it is necessary to control the temperature and humidity in the poultry house. This final project aims to realize and determine the performance of the automatic temperature control prototype Ubidots supervised chicken coop. The methods used in the manufacturing process include requirements definition, requirements analysis, design phase including system design, hardware design, software and prototyping, tool testing, results comments and suggestions. The system uses the NodeMCU ESP 8266. board as the main control as well as a bridge for monitoring via Ubidots. The input to the system is the DHT11 sensor which is used to detect the temperature and humidity of the to monitor in real time by using a camera. The output of this system is a and 1 incandescent heater. and for remote monitoring using the Ubidots application.*

**Keywords:** Chicken, NodeMCU ESP 8266 DHTT sensor11, Ubidots,