

## **ABSTRACT**

*Smoking is an activity that is not allowed in the area of Telkom University. Many students are active smokers at Telkom University. There are already no smoking regulations in Telkom University, but there are still many regulations that violate them. Problems that arise include the number of students who smoke in hiding in toilets, emergency stairs, or rooftop campus buildings.*

*To prevent these violations we need a tool that is able to overcome these problems. One way to deal with these problems is to make a cigarette smoke detector using the MQ-2 sensor in the toilet of the Telkom University Faculty of Applied Sciences building that is connected to wifi. Cigarette smoke detector in Telkom University's Faculty of Applied Sciences is a tool that can detect cigarette smoke, if detected cigarette smoke then NodeMcu will send status and history to the database in realtime.*

*From the results of tests conducted on the device prove that the device can be used to detect cigarette smoke. In testing the functionality of the device it can carry out its functions perfectly, the delay testing uploads data from the device to the database 0,884 seconds, and the device has a 12 hour endurance without problems.*

***Keywords: NodeMCU, MQ-2 Sensor, cigarette smoke, wifi, database.***