

ABSTRACT

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Study Program : *Electrical Engineering*

Title : *Design and Build a Waste Bank Data Input Device Using Arduino with the Internet of Things Basis.*

Waste banks as a method of waste management is considered a good solution because it can provide economic benefits. Human resources are needed as managers who are tasked with sorting, weighing and recording customer accounts. This study aims to assist the role of humans in managing waste banks. The tool can store and display data in the form of time, customer identity, weight and type of waste so that it can be accessed by customers via the internet. This tool utilizes the ESP32 microcontroller which is configured with the sensors used in this research are load cell as weight detector, RFID as identity detector, and RTC DS2321 module as time detector. The data is then processed by the microcontroller and stored on a google sheet with average time delay 2 seconds.

Keywords : *ESP32, Google Sheet, Internet, Load Cell, Waste Bank*