UNIVERSITI TEKNOLOGI MARA

# AUTOMATED DUSTBIN USING ARDUINO

AHMAD ZAHIL BIN ZAINI

Diploma

March 2022

# ACKNOWLEDGEMENT

Firstly, I wish to thank God for giving me the opportunity to embark on my diploma and for completing this long and challenging journey successfully. My gratitude and thanks go to my supervisor, Ts. Mohd Ridhwan Bin Mohammed Redza.

Finally, this dissertation is dedicated to my father and mother for the vision and determination to educate me. This piece of victory is dedicated to both of you. Alhamdulillah's.

# ABSTRACT

The fabrication process is the transformation of raw materials into finished product. It refers to the transformation of materials into more valuable terms through one or more processing and assembly procedures and process. Manufacturing or fabrication were an important subject to study in order to complete this project and ensure that students understood what they needed to achieve. My product, Automated Dustbin, is a waste container that has been enhanced with a sensor, allowing it to open and close automatically. This project is intended for usage in the home, office, industrial, and other similar environments. SolidWorks was used to generate the design concept. This product was created by enhancing and improving the performance of an existing product on the market that was previously available but not suited for outside usage, resulting in a product that is suitable for both indoor and outdoor use. The concept and design are undeniably appealing. This device may be used by both the industry and the home to fulfil their needs.

# TABLE OF CONTENTS