

SCHOOL OF ENGINEERING  
UNIVERSITY COLLEGE SEDAYA INTERNATIONAL  
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DESIGN AND FABRICATION OF AN  
EXERCISING-BICYCLE-WASHING MACHINE

FINAL PROJECT REPORT

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### Abstract

Nowadays, most of the daily tasks can be performed by the technologies. This is one of the possible reasons for human obesity, which is a common problem in every society nowadays. In this point of view, an exercising bicycle washing machine is proposed to be the tool that meets the requirements of helping human in carrying out daily tasks and at the meantime provides the option for human to exercise, and subsequently able to help overweight people to lose weight.

In this project, a functional exercising bicycle washing machine that allows the user to exercise while performing the laundry tasks was created. A top-loading washing machine and a mountain bicycle were utilized to produce the **“Exercising Bicycle Washing Machine”**.

Two mechanisms were designed to operate this machine, namely the fully manual operation and the PIC-controlled operation. Most of the operating mechanism is operated by mechanical work input from the user. The circuit board designed is successful in controlling the inflow and outflow of the water.

This project will be very beneficial to overcome the over-weight problem that is currently faced by a large portion of the population. This machine is able to provide a cost-effective way for carrying out the laundry tasks and at the same time, it also can be used as the low-cost exercising bicycle.