

SCHOOL OF ENGINEERING  
FINAL REPORT  
MICROCONTROLLER FOR MOTOR CONTROL

NAME : AJMAL MAUDARBACCUS

STUDENT ID : 99208483 (UCSI)  
: 03958197 (UNN)

MAJOR : B. ENG (HONS) ELECTRICAL & ELECTRONIC

FIRST SUPERVISOR : DR EYAD RADWAN

SECOND SUPERVISOR : MR LOW

PROJECT'S COORDINATOR: DR KHEDR M. M. ABOHASSAN

MAY-DECEMBER 2004



## **Abstract**

A project report is presented on the control of a DC motor using microcontroller. Microchip's PIC16F876 was used as microcontroller. The microcontroller send signals at intervals by means of its Pulse Width Modulation feature to drive a power MOSFET H-bridge circuit, which will finally drive the motor. The system is equipped with a closed loop feedback, making used of HEDs 5505 quadrature encoder. Such a complete system provides a high precision motor control. All subsystems were constructed on separate circuit boards and were connected to the controller module so as to provide flexibility for any future improvement on the system.