# DC MOTOR EXPERIMENTAL STATION

**Thesis is presented in partial fulfilment for the award of the Bachelor in Electrical Engineering of**
**INSTITUT TEKNOLOGI MARA**

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**DECEMBER 1996**

ACKNOWLEDGEMENT

All a praised to be ALLAH, The Beneficient, The Merciful . My ever-lasting thank to ALLAH for granting me patience in completing this project.

I would like to express my deepest gratitude to my Project Supervisor, Encik Mohamad Aris Bin Ramlan for his guidance, ideals and patientness in advising and assisting my project.

My gratitude also goes to Encik Ahmad Ismail, Encik Ngah Ramzi, Encik Kamal, Encik Zaini and Encik Maliki for their guidance and willingness in sharing knowledge and the opportunity to use the laboratory.

Also thanks to my friends for their suggestions and contributions towards the accomplishment of this project

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ABSTRACT

This project describe the development of the control system and measurement expremental station for conducting various experiments on D.C machine. The control system is capable of driving the D.C machine over wide range of speed by controlling the biasing voltage of a transistor. By varing this biasing voltage causes the input voltage into the machine to vary accordingly. Beside of driving the machine, the system is also capable of taking the measurement of current, voltage and speed. These parameters are acquired from the various signal sensing and conditioning subsystem which are designed to process into its digital equivalent before being transmitted into the computer through I/O interfacing card. All the data signals are then transmitted in sequence into the computer for computation . The software and hardware developed provide suitable tools for research or teaching in the electrical machine for various laboratory test and measurements. It also provide improvement in reliability and accuraccy of measurement and provide such features as speed copntrol , over load identification , protection and graphic display of measured variables.

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