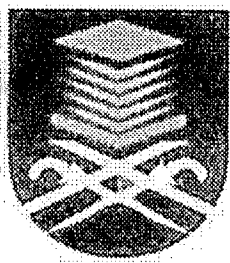# SIMULATION OF THREE PHASE INDUCTION MOTOR IN COMPUTER AIDED EDUCATION

This project report is presented in partial fulfillment for the award of the Bachelor of Electrical Engineering (Honours) (Power)

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ABSTRACT

This project is design for anyone especially for Electrical Engineering students to assist them in the process of learning the induction motor especially in the simulation of three phase induction motor. This project presents the Computer Aided Education (CAE) software. It was developed using Visual Basic (VB) programming language. Both text and graphics are included to provide simulation of induction motor program, interactive teaching notes, interactive diagrams and animated graphics, to make the learning process become understandable, interesting, assisting and improve the teaching and learning process.

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CHAPTER 1

INTRODUCTION

1.1   Introduction to Computer Aided Education (CAE)

In teaching and learning process of three phase induction motor, the real challenge is to enable learner to understand and visualize the events that take place inside the machine and make the machine run [1]. With the increased availability of microcomputers in recent years, there has been a drive toward development of software packages that not only integrate the computers in the undergraduate curriculum to a larger extent, but also provide valuable tools for learning and teaching [1] especially in simulation of three phase induction motor.

To remedy this difficulty and make the concepts related to the three phase induction motor clearer, a software package called Computer Aided Education (CAE) is developed to provide simulation of induction motor program, interactive teaching notes, interactive diagrams and animated graphics, which facilitate the learning process.

CAE is a software environment for generating and executing lessons by users such as administrator, teachers and pupils [2]. A lesson consists of simulation, brief explanations and testing sections.

The language for implementing this project is Visual Basic 6, an object-oriented language.

1.2   Objective of this project

The objective of this project is to present the development of the CAE project and its usage specifically in teaching and learning the three phase induction motor. The CAE software is developed to make the instructor's task easier in teaching the three phase

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