COMPUTER AIDED INSTRUCTION FOR DC MACHINE (USING VISUAL BASIC)

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ABSTRACT

This thesis presents a computer aided instruction (CAI) project, which assist undergraduate engineering students in learning dc machine. The project was developed using Visual Basic (VB) programming, an object-oriented programming language. The developed CAI software provides interactive teaching notes, animated graphics, attractive diagram and quiz to improve the effectiveness and understanding during the learning process. The overall purpose of this project is to improve the teaching and learning process through an individualized, guided and interactive environment, which corresponds to the diversity of student knowledge.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Today's technology could bring advances that would improve education dramatically. From overhead projectors and film media, computer aided instruction (CAI) unites is the latest computer technology with collective classroom instruction and represents the next generation with the new teaching system [1].

CAI is an interdisciplinary field that deals with the use of computers for instructional purposes. It focuses on teaching content to learners by means of computers. A sound knowledge of CAI is essential for those interested or involved in the educational use of computers.

The CAI project for dc machine is aimed at assisting undergraduate engineering student at Universiti Teknologi MARA. The developed application is user-friendly and provides interactive approach within the Microsoft Windows environment. The language for implementing the CAI project is Visual Basic (VB), a powerful object-oriented programming language.

The CAI project has been designed to be simple to operate by both the lecturer and the student. It is intended to make classes more organized, by providing a more flexible, versatile and efficient way of teaching. This will contributes to a unique and quality instructional and teaching program. The student hence not only learns with the written word, but with added pictures, graphics and impressive animations, which will make learning more fun and interesting.