

# **STUDY OF ENGINEERING CAD SOFTWARE IN DESIGNING**

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## **ABSTRACT**

Solid modeling process using integrated software is one of the engineering tools in solving design problems. One of the latest technologies in engineering software application in solid modeling process is by using Pro/E software.

In this project, rarely is about the application of Pro/E software in designing a solid modeling that can be used for further engineering process such as in moulding design, metal stamping, industrial design, CNC machining process and etc. The software that we used is quite similar with other software that already has in the manufacturing marketed nowadays. So in this project, we will try to design a simple product using the Pro/E software and learnt the basic concept in solid modeling. From the obtain result then we will examine the beneficial using the Pro/E software and compare it with the other software.

The result from the exercised of each process will show where all the difficulty in accomplishing the design steps by steps all the way to the assembly the product.

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## **CHAPTER 1**

### **1.0 INTRODUCTION**

#### **1.1 GENERAL**

In mechanical design for solid modeling using CAD software system there are various number of software that can be used by the engineers in solving design problems. Before these sophisticated tools are design, these engineers used a traditional method in creating a design for engineering application in various sectors of engineering work. In the old days they used T-square, Bofa set or geometry set of tools in drawing a part of the design. This method usually takes a lot of time before its reaches to the final stages of the design. After all the drawing is complete than it will go to the next process which is the manufacturing or others process.

Today the technology has been developed rapidly in computers and information technology facilities. These news toys that they have create helps the engineers in completing the design in a naked time consume. This software provides all the necessary needs for the engineer in design problems. There is several kind of software that is extensively use widely in private or government sector such as:

- 1) Pro/Engineer (Pro/E)
- 2) Unigraphics (U/G)
- 3) Catia
- 4) Ideals
- 5) Auto-cad and etc.

Each of this software got their own advantages and disadvantages in the related field of design.