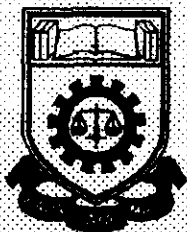


**COMPUTERISED PERSONAL IDENTIFICATION NUMBER
CODE CONTROLLED LOCKING
SYSTEM**

**This is presented in partial fulfilment for the award of the
Advanced Diploma in Electrical Engineering of
INSTITUT TEKNOLOGI MARA**



**MOHD ASRI B. MUHAMMAD ALI
Department of Electrical Engineering
INSTITUT TEKNOLOGI MARA
40450 Shah Alam, Malaysia
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Abstract

This paper described the development of computer based controlled lock system that control the opening and closing of door or entrance of restricted rooms and building for security reasons. It will permit entry to only authorised personals keying correct personal identification numbers through an input port. The system is driven by a software which compute and compare the input data with that of the system data. Relevant command signals will be generated to activate the driver relays to energise locking mechanism. Software developed allows the operation of the system to be more flexible. To open the door, to allow access for only certain pre set duration before it automatically de energised to close the door again.

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CHAPTER 1

INTRODUCTION

1.0 Introduction.

In restricted building or complex, maintaining entry only to authorised persons is a problem. A typical way of managing the door of a room or building is through the use of security guard. Employing security guard does solve the problem of mending the door, but instead cause other problems to arise such as extra manpower and cost. This problem can be solved by automation the operation of the door or entrance.

A microcomputer based automatic door controlled system provide efficient control of the operation of the door and monitoring the movement of personnel entering and leaving the building [1]. The system allows entry to only authorised personnel keying the correct personal identification number (PIN) code at a terminal input at the entrance. The computer will compare the input data with that of its system data and generate an appropriate command signal to energise or deenergise the locking mechanism.

The system can also be incorporated with keyless entry unit [2]. A keyless entry unit is an input unit that can read data stored in the magnetic or bar code card. The magnetic card allows the PIN code of the personnel to be stored in it and retrieved by the magnetic card reader conveniently.