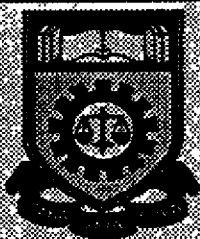


**WATER LEVEL CONTROL SYSTEM
(SOFTWARE DEVELOPMENT)**

**This is presented in partial fulfilment for the award of the
Bachelor (Hons.) in Electrical Engineering of
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ABSTRACT

Level control is widely used in chemical, oil and gas plant. Without controller. The product has low quality. By using the controller, such as Programmable Logic Controller (PLC), micro controller or personal computer, the quality of the product easy to maintain. Personal computer is the most powerful tool for this application. The available of low cost computers places a powerful tool to monitor, control and improve the quality. This thesis provide the theory of analogue to digital and digital to analogue conversion and their applications.

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CHAPTER 1

1. INTRODUCTION

Type of process in batch industry may be divided into three, that are:

- a) **Batch Process.** Batch process is referring to the process of a discrete quantity of material according to some prescribed sequence of operation. The operation and activities are regarded as discrete event dynamical system (introduce by Ramadge and Wonham -1986) which characterized by the starting and ending of discrete processing activities.

The process is normally takes place in an open loop system which usually in the real life needs more manpower in that process plant. Often it is a multipurposed, a time variant process and a very complex operation. Its concept is poorly, understood. The process also takes place in a closed loop system as well.

- b) **Continuous Process.** Continuous process is often regarded as the mass side of the industry. A product is made by passing it through different process of specialised equipment each of which ideally operates in steady state and performed one dedicated processing function. This process is marked by a flow of all essential materials from the beginning to the end of the operating