

Department of Electronic Engineering

A Guide to Laboratory Work

INTRODUCTION

The purpose of the experimental work which you are required to carry out in the electronic engineering laboratories is four-fold. Namely :

- (i) to develop your experimental technique by providing you with an opportunity to use electronic equipment, instruments and tools to observe, measure and investigate certain aspects of electronic engineering,
- (ii) to reinforce certain key principles relating to your lecture modules,
- (iii) to develop your ability to write concise laboratory records as the experiment proceeds.
- (iv) to provide an opportunity for you to develop your skills in the preparation of formal, or technical, reports.

EXPERIMENTAL WORK IN THE LABORATORY

(i) Before the Experiment Session

At the time of doing an experiment, you may or may not have been taught about the topic concerned. Since many experiments are intended to verify the theory, prior to the practical session, you *must*, prior to the practical session, study the experiment guide sheet to find out what is involved and carry out a preliminary study of the background material. References listed in the guide sheet can be sourced from the Library or from the laboratory.

(ii) At the beginning of the Experiment Session

You should already have a clear idea of the objectives, procedure and expected results of the experiment before you come to the laboratory. Do not start the experiment immediately. Instead, spend 10-15 minutes with your group members to plan your work schedule for the entire session, normally three hours.