

**ENERGY SYSTEMS ENGINEERING**

**“course code”**

**EXPERIMENT “*number*”**

**“experiment name”**

**Group # “*number*”**

**Submitted on “*date*”**

# ABSTRACT

Give brief descriptions of the experiment and the report content. Make sure to state the experiment name, time, place, report submission date and the participating people. You should also mention the work division between group members for the report preparation briefly here.

# TABLE OF CONTENTS

Put a table of contents in this section.

# INTRODUCTION

Write a brief introduction to the experiment, its objective, its procedure and how the experiment is done and by whom. You may add introduction to relevant topics if necessary. Make sure to give an overview of the report as well.

You may mention the work distribution among group members in this section.

# THEORY

Give the theoretical information relevant to the experiment. Avoid unrelated content. (Do not copy and paste from experiment manual directly!) You may create sub-sections in this section if you think it is necessary.

# EXPERIMENTAL SET–UP

Give the descriptions of the experimental set-up and experiment steps. You may use the pictures of the experimental set-up given in the experiment manual but write the descriptions with your own words.

# DATA SHEET

You should provide data sheet you have documented and any additional data taken during the experiment in a tabulated form. (Form the table from scratch, do not use scanned pages!)

If the observation data is extensive and needs a computer and/or softcopy file, there is no need to list all the data in a tabulated manner. Only mention what is measured in the experiment in a few sentences and give a few example data points.

# SAMPLE CALCULATIONS

This section should include your calculations for the results. Write your steps clearly using proper equation editing tools (i.e. MC Word built-in equations or LaTeX). If you have to calculate similar steps multiple (more than 3) times, write only one sample calculation. Make sure you explain the steps with clear descriptions of what you are doing.

# RESULTS IN TABULAR FORM

This section should include your results as a table. If results table is provided in the experiment manual, you may use it. If not, you should express your results in a clear manner. If the results are numerous and cannot be expressed as table in an efficient manner, you may state the calculated parameter names in a few sentences and put graphs to represent the calculated data. If any graph or figure is requested specifically in the manual, put them in this section.

# DISCUSSION

In this section, you should state the results with words and provide explanations. Then, you should make a solid discussion about the experiment and your findings. Make sure you refer to every figure or table you have put in the section 6. Discuss possible discrepancies in the results and provide reasonings for errors if applicable. Note that there may be some specific discussions mentioned in the experiment manual, make sure you answer them in this section.

# REFERENCES

Use the IEEE format for the references. Make sure any reference you have used is properly cited in the main text. The experiment manual is not considered a reference.