

MENG541-Advanced Thermodynamics

TERM PAPER

Term Paper writing format:

[TITLE]

[Student name surname]

1. Introduction

Define the problem and state the objective of the paper.

2. Description of the System

3. Exergy Analysis

3.1. Equations

3.2. Simulation

Using the equations write a program in MATLAB or any other language or software and give details about it

4. Results and Discussion

Show your results by drawing appropriate graphs and explain what they mean

5. Conclusion

Possible topics to choose from:

1. Exergy analysis of heat pump systems
2. Exergy analysis of air conditioning systems
3. Exergy analysis of steam power plants
4. Exergy analysis of renewable energy systems
 - a. Wind energy
 - b. Wave energy
 - c. Geothermal energy
5. Exergy analysis of solar energy systems
6. Exergy analysis of cogeneration systems
7. Exergy analysis of thermal storage systems
8. Exergy analysis of drying processes
9. Exergy analysis of hydrogen production systems
10. Exergy analysis of fuel cell systems

Note: Students can choose to make an exergy analysis on their thesis subjects.