



# MINI STEAM CAR PROJECT

Faculty of Manufacturing Engineering  
Universiti Malaysia Pahang

## THERMODYNAMICS

BFF 2233

SEMESTER 2

SESI 2016/2017

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### A. OBJECTIVES

- i. To apply the thermodynamics concepts by design and develop thermodynamics project.
- ii. To explain the concepts of thermodynamics.
- iii. To work in a team to complete a design project utilizing thermodynamics.

### B. PLANNING AND EXECUTION

MONTH	MARCH				APRIL			MAY				JUNE
WEEK	3	4	5	6	7	8	9	10	11	12	13	14
<b>CHAPTER 1 INTRODUCTION</b>												
Background of the Project												
Scope of Project												
Objective												
Gantt Chart												
<b>CHAPTER 2 METHODOLOGY</b>												
Procedure												
Costing												
Preparing materials												
Development of Steam Car												
<b>CHAPTER 3 RESULT &amp; DISCUSSION</b>												
Justification Project												
<b>CHAPTER 4 CONCLUSIONS</b>												
Submission Report												
Competition												

- i. Students should establish a group of size 3 maximum.
- ii. Students proposed project (Week 3), prepare proposal report (Week 4), Develop hardware-progress 1 (Week 7), Continue develop hardware-progress 2 (Week 10), final report and presentation (Week 12), Exhibition (Week 13).
- iii. Plagiarisms are strictly not allowed.

### C. ASSESSMENT TOOLS

- Project report (10%)
- **Design Mini Steam Car** (40%)
- Demonstration

## D. REPORT

- i. The format of the report should follow standard reporting format.
- ii. Proposal Report
  - Title page
  - Table of contents
  - Introduction
    - Gives overview of the project, explains the thermodynamics concepts in this project.
  - Objectives
  - Scope
  - Project Planning – Gantt Chart and Costing
  - Methodology (materials used, procedure of the project, design)
  - References/ Appendices
- iii. Final Report
  - Continue proposal report with the addition of;
  - Results and discussion- Results from the project/design. Success or failure? Justify and discuss.
  - Conclusions – is it your objectives are achieved?
  - References/Appendices
- iv. Each group must submit a **softcopy** of the **proposal report** (pdf file) and **hardcopy** and **softcopy** of **final report** (pdf file) at KALAM.