

DESIGN & BUILD COMPETITION 2018

REPORT WRITING

PRESENTERS: VICTORIA MYERS, NICOLE WHITE

WHY IS A REPORT NECESSARY?

- Effectively describes and presents engineering ideas to a non-technical audience (in a concise manner)
- A well documented design process enables the ability to improve on past engineering designs
- Justifies you design and the thought process behind it

REPORT SPECIFICATION

- 2 pages in length (excluding title page, appendices, figures or tables)
- Additional material to possibly include:
 - Hand drawn sketches
 - CAD models

REPORT STRUCTURE

- **Title page**
- 1. Introduction
- 2. Preliminary designs
 - Preliminary solution
- 3. Testing, evaluation and modifications
- 4. Final design
- 5. Conclusion
- **References (will be looked favourably on)**

TITLE PAGE

- Identification of your team
- Include:
 - Name of University
 - Name of School
 - Name of Event (i.e. Design and Build 2018)
 - Title of report
 - Names and ID numbers of all team members
 - Team name

INTRODUCTION

- **Problem Statement** (What problem does your design intend to address? Why is this important?)
- **Aim** (What is the end result/what will win you the competition?)
- **Objectives** (These are your design goals)
- **Significance** (Can make something creative and inventive up here)
- **Scope** (Are there any limitations on the design?)

PRELIMINARY DESIGNS

- Discuss and evaluate design alternatives
 - Provide some comparative analysis (Hint: a table – ask your mentors)
 - A simple description is not enough!
- Preliminary Solution
 - Which of your prelim designs is best and why?
 - Another hint: Sometimes the solution is a combination of features from your prelim designs – remember to state this

TESTING AND EVALUATION

- Provide details of any testing and the results of the testing
- Did the testing lead to any unexpected outcomes? (Like a large amount of duct tape use?)
- Did this cause you to modify or re-evaluate your design choices?

FINAL DESIGN

- A description of the final design (after any modifications)
- CAD, hand drawn sketches or photos of the final design

CONCLUSION

- Summarise your design process
- Relate back to your aims and objectives
 - Did you achieve them?

REFERENCE LIST

- Use Harvard author/date system
 - Ask your mentors about this as they should be familiar with this referencing system
- Bonus points for referencing journal articles!

FORMATTING

- Use numbered section headings
 - Also make use of sub-section headings
e.g. 1.1 Problem Statement
- Make it clear and easily readable – this will quickly make a good impression on the markers

LANGUAGE

- Use formal written language
- Use language that focuses on the information (i.e. passive language that focuses on the information avoiding 'I' or 'we')
- Avoid personalisation, slang, jargon or colloquial language

ANY QUESTIONS?