

TECHNICAL REPORT WRITING FOR ENGINEERS

Report Checklist - complete this before submitting your reports to check you haven't missed anything from the course.

Target audience:

Who is this report aimed at? Is it for your boss, your tutor, your employees, the general public?

Have you checked the level of understanding required to read your report is suitable for the reader above and that there is no technical terminology or acronyms they won't understand?

Title

- Only used a title page for long report
- Contains author, title and date
- Title summarizes the content
- Considered picture/logo/affiliation

Abstract

Contains a summary of **all** the information in the report

States:

- The problem
- What you did
- What you got out of it

No citations, figures, equations

Very succinct (typically <200 words)

Introduction

Clearly defines the problem

Includes context and importance

Previously published work reviewed

Establishes how the work presented adds to current understanding

Theoretical/conceptual background

Clearly states aim and objectives

References and citation

All citations appear in references

Referencing system is consistent

Referencing contain enough information to find source material

Ordering of references is correct

Material not referenced but used for report is in a Bibliography

Equations and data

Equations sequentially numbered

Equations referred to from the text

All nomenclature is defined

Separate Nomenclature section considered

Fonts match for variables in text and in equations

Numbers use correct precision

Numbers have appropriate units

There is a clear and distinct separation between background work that has come before, and novel work presented in your report



Method/Procedure

- Enough information for someone else to repeat the process
- Only relevant information is included
- Impartial record of events
- Logical, chronological order
- Any dangers clearly described

Figures

- Figures relevant to the discussion
- Choice of figure type is correct
- Schematics used where appropriate
- Figures sequentially numbered
- Figures referred to from text
- Figures captioned with enough detail
- In high enough resolution

Results

- Clearly explains outcome of work
- Considered use of tables/graphs
- Writing points out themes in results
- Includes raw and processed data
- No conjecture or opinions presented

Graphs

- Title is in caption
- Axes are labelled
- Axes have units
- Precision of numbers is appropriate
- Axes are scaled correctly
- Not too much whitespace
- Series distinguishable
- Series can be identified
- Continuous data represented with line, discrete data with points

Tables

- Tables sequentially numbered and captioned
- Tables referred to from the text
- Rows and columns contain titles
- Rows and columns contain units
- Precision of numbers is appropriate
- Borders are appropriate.

Discussion

- Puts the results into context
- Compares results to theory or other work
- Limitations/uncertainty described
- Use of conjecture is clearly defined

Conclusion

- Does not introduce new information that hasn't been discussed previously

Structure

- All sections and subsections numbered sequentially
- All pages numbered
- Considered contents page of sections, including page numbers

Layout and Style

- It is word processed
- All fonts/styles consistent presentation elements of the report.

Language

- No use of contractions
- No use of personal pronouns
- No superlatives (e.g. huge, really)
- Technical terms explained