CECS: structuring a report

ANU Academic Skills

Research and Writing process

Prepare

Understand the task

Collect information

Perform analysis/tasks/
calculations

Form a tentative
message/recommendation

Analyse

Gather more evidence

K
E
Y

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A
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E

Structure and plan

Write

Draft and Re-draft

Edit

Basic generic report structure

- Title page

- Table of contents

- Executive summary

- Introduction

- Discussion

- Conclusion

- Recommendations

- References

- Appendices

This section can vary from report to report depending on the course and the report task

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Alternative sections of a report: IMRD

Introduction | **Why** you investigated this topic/issue
↓
Method | **How** you investigated this topic/issue
↓
Results | **What** you found about this topic/issue
↓
Discussion | **Why** it is meaningful

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CECS report structure

- Executive summary
- Introduction
- Analysis of the problem and requirements
- Analysis of design ideas and decisions
- Design proposal or recommendation
- Conclusion
- References

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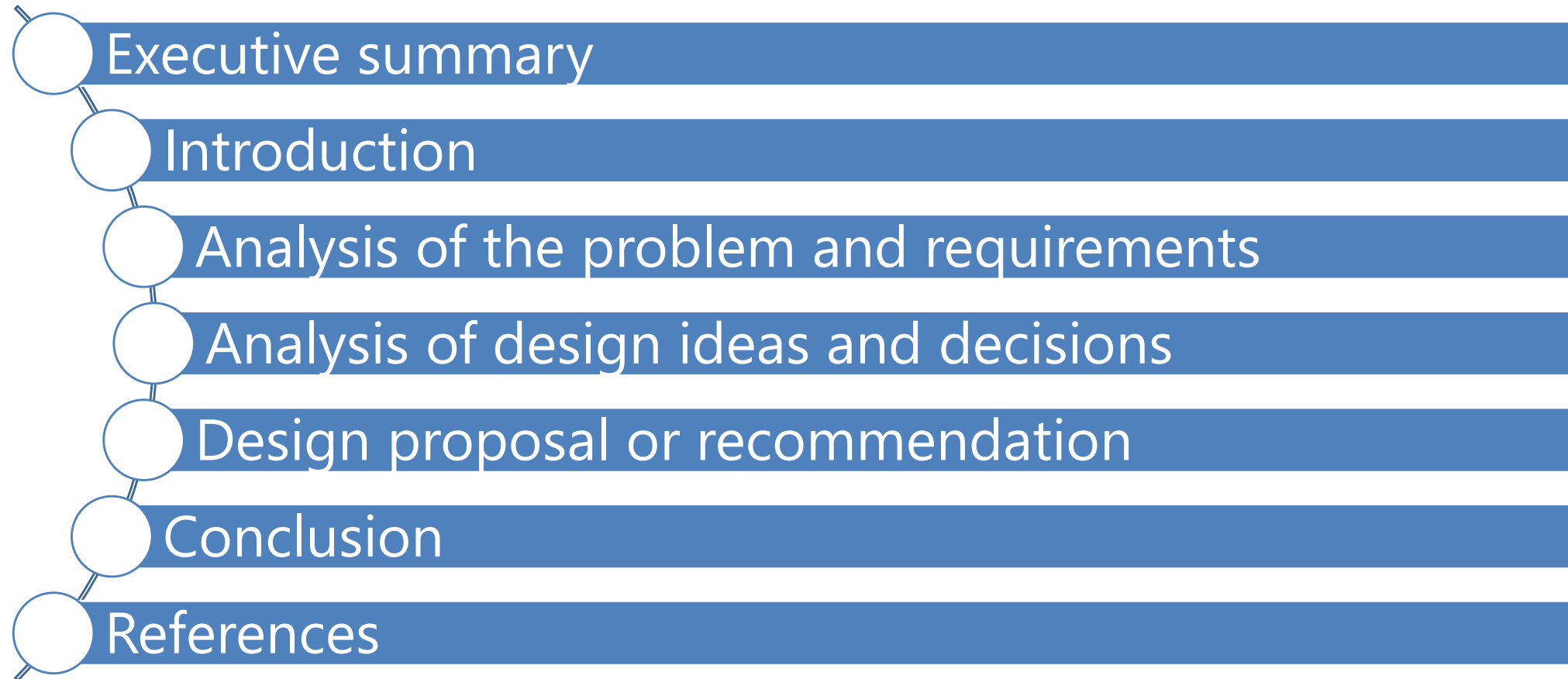
Organise the body of your report

- Break your report into major points
  - These are your sections and sub-sections

- For each section / sub-section, break into points again
  - These become your paragraphs

- If you have multiple sub-subsections within a main section of a report, you may need to include brief section introductions and conclusions

Sample computer science report structure

- Abstract
- Introduction
- Preliminaries
  - Graph theory
  - Matrix theory
- Discussion on consensus protocol
  - Applications
  - Coefficient setting methods

- Proposal of the coefficient setting method for two-hop consensus
- Adaptive coefficient setting method for two-hop consensus
- Updating scheme

- Simulation results
- Discussion
  - The effect of graph topology
  - The effect of consensus protocol
- Conclusion
- References

Sample engineering report structure

- Introduction
- Theoretical background
  - Composites
  - E-glass / Epoxy Resin Domes
- Hypothesis
- Method
  - Equipment
  - Materials & Preliminary Preparation
    - Fabrication
- Results

- Analysis
  - Dome Properties
  - Density of the Composite
  - Longitudinal Modulus of Elasticity
  - Transverse Modulus of Elasticity
- Discussion
  - Limitations
  - Comparison of dome making in the lab and in the industrial scale
- Conclusion
- References

Your structure should support your key message

There must be:

- A logical sequence of ideas
- A narrative that persuades the reader you have a good solution / recommendation / analysis

Therefore:

- Each section has a purpose tied to the overall message
- Each paragraph has a point tied to the section's purpose

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References

Wang, C 2012, 'An investigation of the adaptive coefficient setting method for the two-hop consensus protocol and the effect of network topology on power systems', *The ANU Undergraduate Research Journal*, vol. 4, pp. 87- 102

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