Checklist

* Abstract
* Introduction
* System level
  + Code
  + Description
  + Negative null equation
  + Explanation
* Subsystem 1
  + Introduce problem
  + Explain objective
  + Motivation
  + Modelling approaches
  + 3.1 – Optimisation formulation
    - Optimisation formulation
    - Describe all functions and variables
    - Justify this structure using references and explain assumptions
  + 3.2 – modelling approach
    - Modelling approach - Describe all models needed. This should make it entirely clear how the objective and each constraint are calculated. Justify each model/function with a reference or an explanation of why the model is meaningful. Explain any assumptions that you have made.
  + 3.3 – explore problem space
    - Analyse the monotonicity or expected/known constraint activity to the extent possible. Simplify your formulations wherever possible.
    - If the functions are simulations (black boxes), conduct a DOE covering the design space and see if you can determine monotonicity or develop a useful metamodel.
  + 3.4 – optimise
    - Test two different optimisation algorithms
    - Explain how you set this up and solved it
    - Show the results (both optimum and optimisers)
    - Post optimal analysis
      * Sensitivity analysis
      * Parametric study
  + 3.5 – Advanced optimisation
    - MO GA or other
    - Pareto Frontier
  + Discussion