Criterion B

**Conceptual Design**

(i) Developed feasible ideas to meet appropriate specifications, which explores solutions to the problem.

* generating original ideas
  + Start with [sketches](http://www.businessinsider.com/pixar-movies-thanks-to-napkin-sketches-at-lunch-meeting-2014-4) (number the individual sketches)
  + Select about 4  ideas to incrementally improve so to better meet the appropriate specifications
  + Make low fidelity card/clay etc models of the 4
  + Evaluate them against the specifications, with the client and peer review (summarise the client and peer feedback)
  + Choose two based on the evaluation
* communicating ideas clearly using appropriate techniques
  + graphic, CAD, and physical (3d printed and card) modelling.
  + appropriate and meaningful annotations to identify key features that explain how they meet the design specifications
  + annonations should also related back to the theory, e.g. topic 1
  + annotations should show begin thinking and be linked to previous designs
* undertaking additional (and record it) research as required to inform development.

This should be on approximately **six A4** (letter) pages or equivalent.

(ii) Use concept modelling to guide design development

* Concept models in the form of sketches, CAD, 2D and 3D models should be used to establish the validity of ideas against specifications before refining ideas through detailed development.

Concept modelling is used to:

 test design ideas to find out if they will meet requirements

* against the specifications
  + gain target audience (client) feedback
  + peer/expert appraisal
* provide feedback, which is used to develop designs further.
* You should consider the appropriate use of conceptual, graphical, physical and CAD models to develop, refine and test their ideas.
* Develop your two chosen ideas further with extra modelling (Graphic, CAD, etc)
* Continue annotations (see above)
* Annotations should show begin thinking and be linked to previous designs

This should be on approximately **four A4** (letter) pages or equivalent.

(iii) **Justifies the most appropriate idea for detailed development**.

* **Evaluate ideas and models against the design specification** to identify the most feasible solution.
* The most appropriate idea should be validated against specifications before development is refined to enable manufacture.
* The most **appropriate idea should be validated** by the client and peer/expert
* Present the most feasible idea.
  + 3D sketch or CAD model
* **Justification for chosen solution**.

This should be on approximately **one A4** (letter) pages or equivalent.