

Example Project Requirements & Constraints

See below for definitions and examples...

Definitions

Requirement:

What a particular product or service should do. It is a statement that identifies a necessary attribute, capability, characteristic or quality. In engineering, sets of requirements are inputs into the design stages of product development.

Constraint:

A restriction or limitation on the degree of freedom one has in providing a solution to problem or challenge.

Example Requirements (examples taken from different projects)

According to our client, the product we design must:

- Have four dome quadrants to measure the peripheral vision of a child
- Have independently-controlled water faucets
- Be able to be turned on/off by a child
- Cost less than \$20 to produce
- Be recyclable

Example Constraints (examples taken from different projects)

The product must meet the requirements under the following constraints:

- Must have at least one light in each of the four dome quadrants
- Operator/tester limited to choose between warm or cold water temperature
- Limited strength of children
- Budget and materials: as limited by teacher and school