

RC15 Engineering Design

Dr Warren Kerley

The cost of product manufacture is largely determined during the design phase. Other aspects, such as, whole-life costs, safety and environmental impact are also strongly influenced, or even determined by design decisions. In addition, a major factor in the success of a product, or service, in the marketplace is determined by the functional and aesthetic appeal, together with cost and timely delivery to the market, all of which are influenced during design. Therefore, a substantial contribution to building a strong economy and improving people's quality of life can be made through the effective use of engineering design.

This reading club will explore some of the most prominent research areas that constitute the field of engineering design research. Topics will be drawn from the following research themes:

- Prescriptive models of Design
- Descriptive models of Design
- The Science of Design
- Design as Problem Solving
- Creativity in Design
- Design as Reflective Practice
- Functional Representation
- Design Optimisation