### CHAPTER 01: The role of statistic in Engineering

## The Engineering method and Statistical Thinking

The steps in the Engineering method are as follows:

1. Develop a **clear** and **concise** description of the problem.
2. **Identify**, at least **tentatively**, the **important factors** that affect this problem or that may play a role in its solution.
3. **Propose a model** for the problem, using scientific or engineering knowledge of the phenomenon being studied. State any **limitations** or **assumptions** of the model.
4. Conduct appropriate experiments and collect data to **test** or **validate** the tentative model or conclusions made in step 2 and 3.
5. **Refine the model** on the basis of the observed data.