## 1 Introduction, Definitions & Overview

### Reliability

- ... is a characteristic of an item, expressed by the probability that the item performs its required function under given conditions <u>during</u> a stated time interval, i.e. (0, t]
- Item = entity for investigation, i.e. component, assembly, equipment, subsystem, system

#### •

# 2 Probability Theory and Reliability Analysis

### Definitions:

- Experiment  $\epsilon$
- Sample space  $\Omega$
- Event E

An event E is a subset of the sample space  $\Omega$  and the experiment  $\varepsilon$  yields a set of possible outcoms (= E) of the experiment

### **Certain Events**

### **Uncertain Events**