

## **What is Security?**

- Prevention
- Detection
- Reaction (Recovery)

## **Properties of Secure IT Systems**

- Confidentiality
- Integrity
- Availability

## **Additional Properties**

Accountability, Identification, Authenticity

## **Related Concepts**

Reliability, safety, dependability

## Layered Approach

applications
services
operation system
OS kernel
hardware

## Design Decisions

1. Where is the focus of security controls?
2. Which layer do we place security?
3. Simplicity & higher assurance **versus** complexity & more functionality
4. Centralized **versus** distributed
5. Blocking access to the layer below

## Other Issues

Security management, security policy