

IS 2150 / TEL 2810

Introduction to Security



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Access Control Model
Foundational Results



Objective

- Understand the basic results of the HRU model
 - Safety issue
 - Turing machine
 - Undecidability



Protection System

- State of a system
 - Current values of
 - memory locations, registers, secondary storage, etc.
 - other system components
- Protection state (P)
 - A subset of the above values that deals with protection (determines if system state is secure)
- A protection system
 - Captures the conditions for state transition
 - Consists of two parts:
 - A set of generic rights
 - A set of commands