

## Engineering 90: Topic Selection Memo

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28 September 2007

### Keycard Entry System for Hicks

Our goal is to design and implement an RFID-based keycard access system for several of the laboratories in Hicks Hall. The system will be compatible with both the RFID tags currently embedded in new ID cards and with the existing system used for several years by the CS department and ITS. The design will include both the controller and server software. The server software will be composed of a mechanism for updating the controllers remotely and automatically, a database of names, ID numbers, and permissions, and an easy-to-use interface. The primary challenge will be in making the system robust, versatile, expandable, and inexpensive to implement and maintain.

We plan to work with Prof. Cheever and Mary Hasbrouck from Facilities and Services. Parts will be ordered through Facilities to guarantee compatibility and assure ease of maintenance.