

**DEVELOPMENT OF MICROCONTROLLER-BASED CLASSROOM KEY/CARD
ACCESS KEEPER AND MONITORING SYSTEM**

Undergraduate Design Project
Submitted to the Faculty of the
College of Engineering and Information Technology
Cavite State University
Indang, Cavite

In partial fulfillment
of the requirements for the degree
Bachelor of Industrial Technology - Electronics

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ABSTRACT

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The study was conducted to design a system that will prevent users or faculty members of the department to misplace the key/card access, to monitor and to limit the usage of each room in the department. Performance of the device was evaluated through actual testing.

The microcontroller-based classroom key/card access keeper and monitoring device proved to be efficient in preventing users to misplace or losing the key/card access. The device has GUI and microcontroller-based system corresponding for each panel in which the traditional key or card access must be kept.

The evaluation was conducted to determine the performance of the device. Evaluators from DIET faculty were also the end user of the device. The evaluation proved that the device can monitor the borrowers or users and prevent losing key/card access.