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# DESIGN OF AN EFFECTIVE POWER CONSUMPTION CONTROLLER AT THE VIETNAM NATIONAL UNIVERSITY OF FORESTRY

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## SUMMARY

Save energy use, sometimes simply called energy efficiency, is the goal to reduce the amount of energy required to provide products and services. Many studies have been done to improve the electrical equipment. Reduces energy costs and may result in a financial cost saving to consumers and a solution to the problem of reducing carbon dioxide emissions. In this study, a device control system was applied. The control system was applied for the practice room of the building A1. The system based on the micro processor ATMEGA328P, the sensor PIR (Passive Infrared Sensor) and Real Time IC to install the operation. The operating mode is set up based on the schedule of each day. These are: the system has the function of automatically disconnecting the operation of the lamp, fan immediately when no person is in the office; Transfer of remote controlled electrical equipment such as air conditioners, projectors... to the standby mode after an unplanned period of time (normally after about 3 minutes) and automatic switching of the equipment electricity immediately on after detecting someone in the work room or disconnect the operation of all electrical equipment in the work room during the day off work. The system has been applied in room 201 - block A1 has set requirements.

**Keywords:** Control device, office equipment, save energy.

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