***ABSTRACT***

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**STUDY REG. NUMBER : 1920024**

**TITLE : PENGONTROLAN PINTU RUANG**

**TERTUTUP DAN ELEKTROMAGNETIC**

**LOCK DOOR BERBASIS CLIENT SERVER**

**STUDY PROGRAM : SISTEM KOMPUTER**

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*This research is about the security of closed room doors with a client server based system, Vibration Sensor Module, RFID Shield and RFID Card for access control into a room. So that not just anyone can access the room. The method used in this research is Field Research by conducting direct research on the door, to find out and learn how the security system of a room door by designing, making and testing sensory intelligence-based devices using earthquake sensors and RFID Shield. Tests are carried out per detail of the series of devices and miniature meeting rooms to test the suitability of the tool, the possibility of errors or errors in the tool. The tools needed to build this system are a Network Device (Access Point Tenda Wifi Router, 4G LTE Smartfreen Modem, UTP - Stright Cabling, RG-45 Conector, WEB SERVER), Arduino Uno R3 SMD, RFID Shield, RFID Card, Ethernet Shield, Load lock Magnetic Door Lock, Miniature Meeting Room, Vibration Sensor Module. By using RFID as a door opening key, placing the RFID Shield on the door and servo motor mounted on the top of the door to pull the door open and close, there are also other reliability in emergency situations such as earthquakes when an earthquake happens when the door will open automatically automatic. With this system designed the security of the door is more controlled and can maintain the security of a room that is privacy or a room that can only be accessed for certain.*

***Keywords: Client Server, Vibration Sensor, RFID Shield, RFID Card***