# ABSTRACT

The difficulty of installing a tool to call the nurse in a hospital using wire, also the effect that'll reduce the esthetic of the patient room are the cause to the idea in giving an alternative to the hospital. In this final project, a tool that can be used to call the nurse using ASK modulation. By giving a code for each room, the process in serving the patients will take less time.

This wireless nurse calling system was built from encoder as the code maker in each room, ASK modulation on every wireless caller in patient rooms, ASK demodulation on the receiver side and microcontroller to control LED as a sign which room needs help. This tool is equipped with an alarm that continues ringing until the service done. For LOS condition the distance between the transmitter and receiver is 35m while for NLOS is about 25m.

This tool can also present data log automatically when it connected with a computer by serial port and it has not to be connected with the computer to be applied but with consequence that the data log can not be recorded automatically. The application program is built using Borland Delphi.