

## Summary

Undergraduate practice was held at the State Enterprise "Quantum Research Institute", which is a part of the State Concern "Ukroboronprom", in the metrology department.

The purpose of the internship is to provide students with practical skills after learning theoretical material and new information required to write a master's thesis.

The main activities of the Kvant Research Institute are: development of mass production of radio measuring equipment, design and creation of radar equipment, electronics.

Throughout the course of the practice, comparisons were made of communication lines and communication protocols of wireless technologies such as Z-Wave, ZigBee, Insteon. The system for processing and transmitting information from unauthorized access and from failures and damages of hardware and software was also improved.

Keywords: Wireless Technology, Z-Wave, ZigBee, Insteon.