

## **Abstract**

The purpose of this diploma project is to evaluate interference affecting the operation of fourth-generation networks or LTE. For full disclosure of the topic, the main parameters and devices that are responsible for data transmission and speed are considered. The analysis was performed using the OFDM digital modulation scheme. The results showed exactly what kind of interference affects the main functions of the system. Calculations for ensuring labor protection and life safety measures on the network, calculation of economic indicators to determine the economic efficiency of the proposed solutions are shown.