## **Abstract**

This diploma project shows performance evaluation in the network standard IEEE 802.16 (WiMAX), and discusses the network performance.

And this diploma project considered a simulation model, which was developed by using GPSS World in network standard IEEE 802.16 (WiMAX), and data of these were collected for analysis.

Also presented the problem of life safety areas and lighting tasks and air conditioning systems. To perform this work showed the fundamentals of the scientific and economic research.