

## **Abstract**

In this diploma project analyzed and developed a model of corporate multiservice network. The current state and direction of development of multiservice networks was studied. Also provided the analysis of the real multiservice traffic. During the research, a simulation model of a multiservice network was built in the GPSS World program. Multiservice network traffic simulations as  $M/M/1/\infty$  have been simulated.

In this work, the business plan of the project is also compiled and a description of the economic efficiency of the project is provided to calculate the payback period.

In the section of life safety, an analysis of working and microclimate conditions was carried out. The calculation of artificial lighting and air conditioning of the working room is presented.