

Abstract

The aim of my thesis is the study of satellites in navigation systems. Since navigation systems have practical applications in our modern world.

In this thesis, research and analysis of global satellite navigation systems was carried out. In the course of the work, a number of principles for measuring satellite navigation, position determination, signal transit time and subsequent error correction were studied. The Global Positioning System (GPS), BeiDou, Galileo and the Global Navigation Satellite System (GLONASS) were analyzed, their features are principles of operation, modulation procedures, orbital constellations, navigation radio signals and ground segment, as well as position calculation.

Also in the diploma work, the calculation of the evacuation time and the calculation of the number of fire extinguishers for the office space for life safety were made.