## Summary

During the execution of this thesis will be considered the stages of development of the laboratory stand "Mechatronics". This stand includes a microcontroller, and four different engines, which it will control. During the execution of the work various variants of realization of this project were considered.

As a result of the graduation work, a system for controlling low voltage direct current motors was developed. Constructed principal and structural diagrams of the device. This allowed to calculate the element base of the future scheme, compile a list of elements and develop a printed circuit board. The system was executed using a microcontroller, so the program part was also implemented.

After that, the manufacturing factors that negatively influenced the health and work activity of the person were analyzed. The basic safety requirements were developed.

The project is presented by an explanatory note for 84 seconds .; drawings - 35; sources - 18; applications -6; posters - 4