

## Summary

### “Coursework in Automatic Control Theory” for students of all forms of education

Credit module «Coursework in Automatic Control Theory» is part of a cycle independent choice of educational institution in the direction of preparation Mechanical Engineering speciality Equipment of Pharmaceutical and Biotechnological Productions for students 3 course (6 semester).

The discipline of the department realized Department of Bioengineering and Biotechnies Faculty of Biotechnology and Biotechnies NTYY «KPI».

Purpose of the coursework is the formation of linear theory of knowledge single - automatic systems regulation (ASR). Securing the ability to practice engineering choice setting means regulators and regulation of transient analysis using computer technology. The acquisition of professional knowledge and skills conducive to conducting multiple studies by different calculations to a PC using a dialog, simulations on PC, image building and comparative analysis of results derived by various ways. The means to achieve the goal is the formulation of a problem typical technical problem. For the control object described by differential equation 2nd order quickly, choose the regulator that is able to provide a given quality of transition management, using PCs to compute controller settings, check prescribed transient calculations and modeling, to test the stability of supplies and to examine the impact setting them regulator, evaluate the efficiency of various ways to determine the settings of the regulator.

**Developer summary** *Mel'nyck Viktorija Mykolaivn, Professor, head of the Department of Bioengineering and Biotechnies*