

COURSE SYLLABUS ABSTRACT

Specialty 6-05-0713-04 Automation of technological processes and productions

Profiling Automated electric drives

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	3	3	2
Semester	6	6	4
Lectures, hours	16	4	4
Laboratory classes, hours	16	4	4
Course paper, semester	6	6	5
Exam, semester	6	6	4
Contact hours	32	8	8
Independent study, hours	76	100	100
Total course duration in hours / credit units	108/3		

1. Course outline

The purpose of the academic discipline is for students to obtain the skills to independently apply the basic principles of the theory of automatic control to solve specific problems in the research and design of automatic control systems (ACS).

2. Course learning outcomes

Upon completion of the course, students will be expected to know:

- functional diagrams of the ACS;
- mathematical models of ATS;
- dynamic characteristics of the ACS;
- the concept of sustainability and quality of management processes;
- modern methods of analysis and synthesis of automatic control systems using a com-

puter;

be able to:

- apply theoretical knowledge in practice (be able to build functional diagrams and calculate mathematical models of ACS);

to possess a skill:

- in working with mathematical software Mathcad;
- to analyze dynamic characteristics and stability of the automatic control system.

3. Competencies

To know the basics of engineering design in the specialty.

4. Requirements and forms of midcourse evaluation and summative assessment

Summative assessment involves assessing the performance and protection of laboratory work.

To assess the quality of students' assimilation of educational material, including acquired competencies, midcourse evaluation is carried out in the form of an exam.