

INFORMATICS
(course title)
COURSE SYLLABUS ABSTRACT

6-05-0713-04 Automation of technological processes and production

(speciality code and name)

Automated electric drives

(concentration)

	STUDY MODE	
	full-time	part-time
Year	1	1
Semester	1, 2	1,2
Lectures, hours	50	10
Laboratory classes, hours	50	10
Classroom examination, (semester, hours)		1 (2h)
Exam, semester	1	1
Pass/fail, semester	2	2
Contact hours	100	22
Independent study, hours	188	266
Total course duration in hours / credit units	288/8	

1. Course outline

The discipline studies modern information technologies and tools of transformation, processing, storage and transmission of information.

2. Course learning outcomes

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

- personal computer`s device and hardware;
- system and application software;
- the basics of modern multimedia and network technologies, their means and capabilities;
- basics of algorithmization of engineering problems;
- at least one programming language and basic techniques for using it;

to be able to:

- work in the Microsoft Windows operating system;
- use standard office software packages, including the Microsoft Word processor, Microsoft Excel spreadsheet processor, and Microsoft Power Point presentation tools;
- use packages of special mathematical programs;
- build mathematical models and develop algorithms for solving applied problems;
- implement algorithms in the form of your own programs in the Visual Basic for Application programming language;
- use programming skills in professional activities.

to possess a skill:

- knowledge of methods for algorithmizing engineering problems;
- practical creation and support of the functioning of automated workstations based on personal computers;
- methods of managing programs, data and equipment based on modern operating systems for personal computers.

3. Competencies

UC-2. To solve standard problems of professional activity based on the usage of information and communication technologies; BPC-1. To use natural science laws in professional activities.

4. Requirements and forms of current and intermediate certification

The module-rating system is used. Intermediate certification: assessment of laboratory works. Current certification: exam, pass/fail.