Physics

(course name)

COURSE SYLLABUS ABSTRACT

Subject area __1-53 01 05 – Automated electric drive_____

Concentration (profile) _____

 Qualification _____

	STUDY MODE		
	full-time	reduced part-time	part-time
Year	1, 2	1	2
Semester	2, 3	1, 2	3,4
Lectures, hours	68	16	14
Practical lessons (seminars), hours	50		12
Laboratory works, hours	68	12	14
Graded work, semester (hours)		1 (2h), 2 (2h)	3 (2h), 4 (2h)
Graded exam, semester	2, 3	1, 2	3,4
Contact hours (incl. guided independent study)	186 (4)	32	44
Independent study, hours	164	318	306
Total course duration in hours / credit units	350/10	350/10	350/10

The aim of the training is to develop basic knowledge and skills in the aria of physics. They allow one to navigate in the flow of scientific and technical information and form a materialistic worldview and a scientific method of cognition.

As a result of the mastering of the subject, the student has to **know**: the basic laws and theories of classical and modern physical science, as well as the limits of their applicability; methods for measuring the physical characteristics of substances and fields; physical foundations of methods for studying substances; principles of experimental and theoretical study of physical phenomena and processes; to apply: the laws of physics to solve applied engineering problems; use measuring instruments for the analysis of physical phenomena and processes; to master the methods of physical modeling of technical processes, methods of analysis and solution of applied engineering problems.

Competency Code	Competency description
BPC-3	Be able to apply the laws of physics to solve applied engineering problems, use measuring instruments to analyze physical phenomena and processes.

The overall assessment of the knowledge, skills and abilities of students is to analyze their work when they perform various types of classes. So, with a short survey of students before the start of the lecture, based on the results of the previous lecture, their knowledge in understanding the previously presented material is assessed. When students carry out measurements during laboratory work, it is assessed how deeply they have mastered the skills of working with measuring instruments, and when they perform calculation tasks when called to the board or independent work, their physical and mathematical culture is assessed. Intermediate attestation (exam) is carried out in two stages. The first stage includes a written answer to the questions, which are a random sample of the questions submitted for the exam and one task. The second stage consists in a brief conversation with the student on the fundamental issues of the course.