

PHYSICS
ANNOTATION
COURSE SYLLABUS OF HIGHER EDUCATION INSTITUTION
6-05-0612-03 Control information systems
Automated information processing and displaying systems
(concentration)

	Форма получения высшего образования		
	Full-time	Part-time*	Part-time (contracted)**
Year	1	2	1
Semester	2	3	1
Lectures, hours	34	6	6
Practical (seminars) classes, hours	16	4	4
Laboratory classes, classes	16	4	4
Test (semester, hours)	-	3 semester (2 hours)	1 semester (2 hours)
Graded exam, semester	2	3	1
Contact hours	66	16	16
Independent study, hour	78	128	128
Total course duration in hours / Credit units	144 / 4	144 / 4	144 / 4

1. Brief outline of the discipline. The discipline “Physics” provides base training of students necessary to study physical basics of the modern technologies and methods of investigation of substance and natural phenomena; to study modern scientific instruments, to form skills of conducting physical experiments.

2. Course objectives: the student must be able to:

know: the basic laws and theories of classical and contemporary physical science, and also the limits of their application; methods of measuring of physical characteristics of substances and fields; physical basics of techniques of investigating substance; principles of experimental and theoretical studying of physical phenomena;

be able to: apply physical laws for solving applied engineer tasks; use measuring devices during experimental studying of physical and technological processes; process and analyze the results of experimental investigation of physical values;

have the skill: methods of physical modeling of technical processes; methods of analysis and solving of applied engineer tasks; techniques of determining physical properties of materials.

3. Competencies to be formed: BPC-7 “Apply the basic physical concepts and laws for studying physical phenomena and processes”.

4. Requirements and forms of current and intermediate attestation: exam (oral and written form). To get admittance the full-time student must successfully fulfill and defend all the lab works. To be admitted to the exam, the full-time and part-time students must successfully write class test, to fulfill and defend all the lab works.