Academic discipline:
"Electrodynamics"

Code and name of specialty	1- 02 05 0 Physics and computer science
Training course	3
Semester of training	6
Number of class hours	54
Lectures	34
Seminar classes	-
Practical classes	20
Laboratory classes	-
Form of current assessment (credit/differential credit/exam)	Exam
Number of credits	3
Competencies to be formed	To apply theoretical and practical skills, research methods in the field of astronomy, electrodynamics and theoretical physics

Summary of the content of the academic discipline:

Introduction
Experimental foundations of electrodynamics.
General properties of the electromagnetic field in a vacuum.
An electrostatic field in a vacuum.
A stationary magnetic field in a vacuum.
Electromagnetic waves.
The electromagnetic field of an arbitrarily moving charge.
The electromagnetic field in matter.
Elements of nonlinear electrodynamics. Nonlinear waves. Special theory of Relativity (SRT).