

**Discipline: Probability theory and mathematical statistics**

**Annotation**

**Labor intensity: 2 ECTS, 72 academic hours.**

**Final control form: exam**

Probability theory is a mathematical discipline that studies patterns random phenomena, random events, random variables, their properties and operations on them. Mathematical statistics develops mathematical methods systematization and use of statistical data for scientific and practical conclusions.

Mat. Statistics are based on probability theory to assess reliability and the accuracy of inferences drawn from the data. In addition to the general mathematical values, these disciplines have a wide range of applications both in natural sciences and in the humanitarian.

Relationship with other disciplines of the specialty: course "Theory of probability and mathematical statistics "is interconnected with such disciplines of the specialty "Economics" like "Mathematical Analysis", "Linear Algebra", "Research operations "and" Financial mathematics ". Mathematics is not only a powerful tool for solving applied problems and the universal language of science, but also an element of the general culture.

Therefore, mathematical education should be considered as the most important component fundamental student preparation.

Fundamentality of mathematical training includes sufficient generality of mathematical concepts and constructions, providing a wide range of their applicability, accuracy of formulations mathematical properties of the studied objects, logical rigor of presentation mathematics, based on an adequate modern mathematical language.

The total complexity of the discipline is 72 academic hours (2 academic credits).

The course is designed for 18 hours of lectures and 16 hours of practical training, as well as 38 hours independent work of students, which will consist in doing homework assignments and preparation for intermediate controls.