

Annotation to discipline **“Metrology, standardization and certification”**

Total work content of discipline learning is 3 points of credit (108 hours).

Purpose of discipline. To shape the students' knowledge about metrology, standardization, certification and accreditation, to familiarize them with the legal and methodological fundamentals of metrology, standardization bodies and the organization of standardization, certification and accreditation, certification systems and standards, certification and accreditation procedure for the production facilities of international activities in these sectors. Prepare students for further study of subjects related to the use of the knowledge and production activities in the economy.

Tasks of discipline. Students are required to characterize the purpose, nature, area, object, structure, and various activities in the field of metrology, standardization, certification and accreditation, methodological and theoretical knowledge on the measurement of physical quantities and statistical processing of the results of the experiment, the procedure of standardization, certification and accreditation of national economy enterprises as a means of improving the quality of products, processes or services, functions and organs that carry out these activities, and the requirements for them.

Main didactic units (parts):

Metrology.

Fundamentals of metrology.

Classification and measurement of measurement in the art.

Metrological characteristics.

Verification of measurement tools.

Metrological Service of Ukraine.

Metrology in mining.

Standardization.

Basics of standardization.

Types of standardization and standards.

The standardization bodies in Ukraine.

Standardization in mining.

Certification.

Fundamentals certification.

Certification of products.

Certification in mining.

Accreditation.

Fundamentals of accreditation.

Accreditation in mining.