

## **Annotation to discipline**

### **“Computer technology in mining”**

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

#### **Purpose of discipline.**

generate students' knowledge of modern computer technology in mining;  
develop the skills and ability to perform mathematical tasks by a computer image  
output calculations and objects on the monitor or projector to the conclusion of  
calculations on the printer and the like;  
prepare students for further study of subjects related to transport and process systems  
at mines, practical training and further employment.

#### **Tasks of discipline.**

- understand the purpose and structure of modern computer technology of mining in the mine transport; teach students to build a database of characteristics freight transport in technological schemes for mining operations;
- use the method of choice in today's vehicles to support their operational parameters using advanced mathematical and computing packages;
- understand the objectives and structure of the dispatching service means of mathematical statistics.

#### **Main didactic units (parts).**

Industry sector mathematical package Mathcad. User interface;  
Structure and modified formulas. Use of symbols, operators, and functions;  
Word processing. Mathematical characters in the text;  
Interaction own programs Mathcad with Microsoft Office Word, Excel and AutoCAD;  
Calculation. Variables and functions, operators, control calculations;  
Data types. Dimensional variables, arrays, input formats of numerical data;  
Exact calculations and mathematical analysis;  
Programming in the design of transport systems;  
Matrix calculations;  
Mathematical Statistics;  
Data analysis and design calculations;  
The structure of graphs and animations;  
Registration of documents.