

## **Annotation to discipline**

### **“Mining computer-generated graphics”**

**Total work content of discipline learning** is 2 points of credit (40 hours).

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

- To shape students' knowledge about modern technologies of computer-generated graphics on the basis of graphics editing AutoCAD;
- To shape developed skills and practical abilities as per drafting (drawing) with the help of EOM, object image on monitor display or projector, printing out etc.
- To prepare students for
  - Further studying of disciplines, connected with transportation and manufacturing systems at mining companies;
  - Conducting work practice at mining companies;
  - Operating activities at mining companies.

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

- To master and to know modern methods of drafting (drawing) with the help of EOM and printing out;
- To be able to use graphics editing;
- To transfer the information from the hard copy and magnetic media to EOM;
- To master skills as per receiving image and textual information through global network and to carry out reverse actions;
- To create own, convenient for work, interface;
- To strengthen the capabilities of own drafting (drawing) or program setting.

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

- Formation of blocks of mining and transportation drawings;
- Integration into AutoCAD image with further receiving of technical drawing;
- High-precision (0,000001) scaling of graphics objects;
- Works with solid objects and animation of three-dimensional models of mining and transportation equipment;
- Own programming in graphics editing for more productive engineering of mining and transportation systems;
- Usage of modern multi-media products (scanner, digital camera etc.) for fast and high-quality work of production engineer;
- Usage of Internet worldwide network (email etc.) for transmitting/receiving of work documentation for development of transportation systems in the area of mining enterprises. Access to Autodesk, as well as learning of Jn-Line (E-Learning) program;
- Intellectual digital property protection at mining companies.