

Credit program module "Engineering and Computer Graphics 1. Development of technical documentation" discipline "Engineering and Computer Graphics" prepared in accordance with the educational and vocational training programs for bachelor direction 6.051101 "Air and rocket science" in the specialty 6.05110101 "" Aircraft ".

Discipline lays the foundation for the study of other disciplines such as design and construction of the aircraft; design elements of aircraft systems CAD / CAM / CAE, instrumentation, automation design, performance of course and degree projects.

The purpose of the credit module is the formation of students' abilities:

- geometric modeling and computer methods of technical objects;
- construction and decoration of their drawings in accordance with existing standards;
- the use of the professional work of CAD systems.

According to the requirements of the program of the discipline students, after mastering the credit module should demonstrate such learning outcomes:

*knowledge:*

- the basic principles of geometric modeling of technical objects;
- projection methods of construction and the study of spatial objects at their flat in the figure;
- the main features of modern engineering software packages.

*skills:*

- to perform and read a projection image of technical objects;
- draw up design documentation in accordance with applicable standards;
- to carry out engineering and design documents using computer-aided design;
- create a variety of drawings of parts and assemblies;
- apply knowledge of computer graphics, modern information technologies in the study of other disciplines in the future professional activity.

*an experience:*

- the use of existing standards for the development of technical documentation;
- implementation of the hand sketches and drawings using the drawing tools.