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Computer's Based Education in Engineering Graphics

The contemporary trends in advances of engineering are described with widespread use of computer systems in engineering work. To be able to use these systems the future engineers need to be provided not only with the necessary technical equipment but also with the adequate computer software and manuals consistent with students' potentials.

Admittedly the first step in the use of software for computer-aided design should be in "Applied Geometry and Engineering graphics" classes; the first drawing should be geometrical constructions/structures since each complex drawing consists of separate 2-dimensional figures with some relation between each of them.

As of today the most widespread computer graphic system (software for computer-aided design) is AutoCAD which has one major advantage before all other similar computer programs – basic graphic commands (primitives) are the same in all versions of the program.

To be able to use this software the students should be able to:

- 1. Make a parametrical analysis of some geometrical concepts using the basic graphic commands (primitives);
- 2. Have certain level of English language proficiency.

If both conditions are satisfied it gives possibility for practical use of interdisciplinary relations between Geometry, Computer-aided Design and Drawing. From instituted surveys it's determined that the perceiving increases and the theoretical matter is more of interest to the students and improvement of interactions with the computer graphics system AutoCAD.