

## ASPECTS OF ENGINEERING GRAPHICS THEORY IN PRACTICAL IT MODELS

The article explores the options to revamp both the course in descriptive geometry and the methodology for its teaching within existing time limitations, identify the ways to improve the efficiency of learning delivery and make qualitative changes in both the process of professional training and its results.

The article provides examples of methodology for teaching engineering graphics at the Faculty of Environmental Engineering of Vilnius Gediminas Technical University (VGTU).

The main challenge is to update both the course in descriptive geometry and the methodology of its teaching (Figure 1) within existing time limitations, identify the ways to improve the efficiency of learning delivery and make qualitative changes in both the process of professional training and its results.

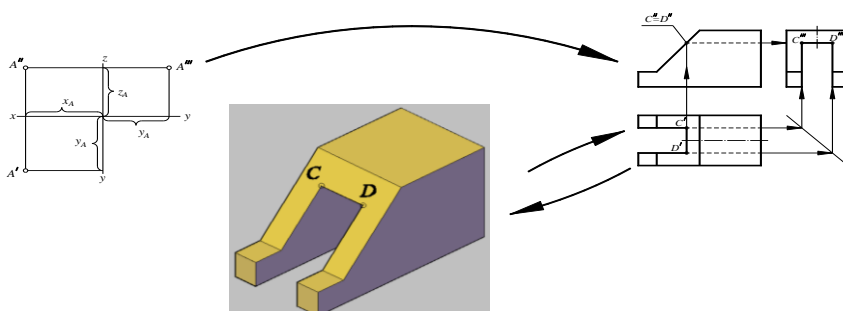


Figure 1. Detection of projections of points.

The planning of educatory process may only begin with accurate identification of learning objectives. The incentives, which the professors use based on work experience, are no longer effective. The students are unable to perceive them since they cannot find anything to confirm them in the social realm. This is the main cause of inefficiency of learning – the students do not understand or do not accept the purposes of studying one or another subject. Students are always keen on finding an answer to the question: “How does

this subject relate with my future profession? Professors must give more examples (Figure 2) showing the links between the subject being studied with the disciplines to be studied in future or being studied concurrently, with the profession in general, focus on application-oriented aspects of geometry and graphics.

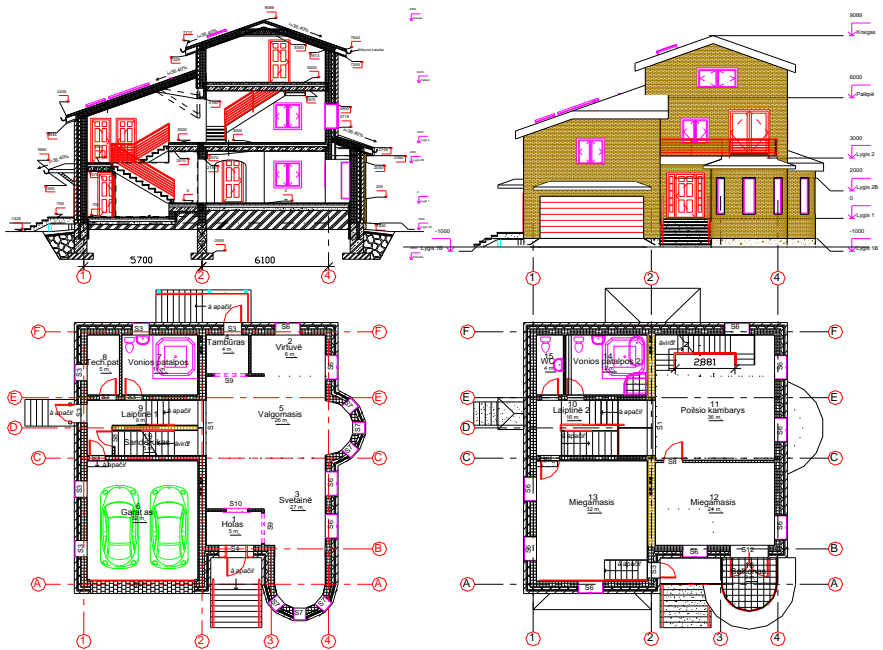


Figure 2. Example of a construction drawing