
Engineering Geometry as a new subject of geometrical graphics training for higher technical educational institutions

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The article presents a new academic discipline, alternative to descriptive geometry, which meets the requirements of modern geometrical graphic training for the first level of education (bachelors and specialists). Its theoretical part is represented by a visual multidimensional geometry. It is shown that multidimensional geometry in a visual presentation allows us to study the actual material, refusing to consider mathematical calculations and formulas, but we can use computer visualization capabilities of 3D-models with the most comprehension. The given examples demonstrate possibilities of visual multidimensional geometry when used in the course of geometrical graphic education following syllabus for bachelor training. A draft of the suggested program of the discipline "Engineering Geometry" is presented.

Keywords: syllabus, geometrical graphic training, Engineering Geometry, visual multidimensional geometry.

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