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FACILITATING INDIVIDUAL LEARNING PROCESSES WITH ADVANCED INSTRUCTIONS

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Individual learning processes are most successfully activated and intensified when a variety of combinations of instructions and exercises is being used in conveying basic knowledge. Thus we have developed a didactic concept that provides a sophisticated, though compact access to spatial-geometric thinking using CAD software. This concept based on advanced instructions has proved successful for a great number of first-year university students of engineering sciences.

In this beginners' course the students will deal with examples of extraordinary complexity guaranteeing an increased motivation. The content of this course is structured according to the conditions of the learning process rather than with respect to thematic considerations. The fact that knowledge transfer and application are clearly separated facilitates and supports the learning process.

Most favorable conditions for learning will be realized if the students can cut their own paths with respect to their individual originality and capability. The learners will have to assume responsibility for their own learning process. This concept makes it possible for participants to choose between various offers during the course of classes, to evaluate their own personal experience and to opt for appropriate versions of learning - leading all students to identical outcomes.

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