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Using dynamic geometry and computer algebra systems in problem based courses for future engineers.

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Summary: It is a modern trend today when formulating the curriculum of a geometric course at the technical universities to start from a real-life problem originated in technical praxis and subsequently to define which geometric theories and which skills are necessary for its solving. Nowadays, interactive and dynamic geometry software plays a more and more important role in this scenario as it helps to think algorithmically, enables to discuss the solvability of the whole class of geometric problems from different point of views and mainly serves as a first step to variational geometry needed later in geometric modelling. This makes the teaching and learning process more efficient and also more interesting for students. In our contribution, we present some particular examples of this approach.

Classification: U75 D45 M55
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