

**ABSTRACT:**

The purpose of this baccalaureate thesis is to map existing visualization tools and to evaluate their utility for 3D support teaching. The essential part of this thesis consists of the implementation of the model solution 3D visualization of a historic building – the castle of Polná.

The aim of the theoretical part is to describe the information sources of the objects involved and creation of 3D models. Concrete opportunities for practical realization of 3D visualization of the historical object are presented and some areas of its implementation into the life of society are also suggested in this thesis; the emphasis is on the educational field.

The objective of the practical part is to introduce implementation of the model solutions 3D visualization of the historical object and to present the process of the investigation of the model into teaching. Results of the verification of the application are also involved in the thesis as well as the conclusions and recommendations for school practice.