The thesis describes implementation of an application for drawing three- and multidimensional polytopes allowing their fluent rotation. The application Geometric Figures for Linux and Windows is written in the C language using the OpenGL library and it supports plug-ins written in the Python language. Iterated perspective projection and edges coloring according to their location is used. In addition, the application is able to generate the convex hull of a set of points, cut figures with hyperplanes, stellate figures, create geometrically dual polytopes and cut off parts of figures; all functions are independent to the number of dimensions of the polytopes. The application profits from its easy extensibility using modules and its code being open-source.