The FlatCAD system lets you create your own construction kit by coding in the LOGO-like FlatLang language. No longer must construction kits be merely a product designed by someone else: if you can write a simple FlatLang program, you can design a kit.

You can also unfold solid geometries using FlatCAD. Here, we unroll a dodecahedron by changing the dihedral angles between the pentagon faces.

This work is part of the Codelab’s Computationally Enhanced Construction Kits and Craft Grant.