

Task: Development of a parameterized mass product

Step	Method / Utilities	Variants
Define product	Brainstorming	sharpener, USB case, chess piece, holder for mobile, key fob
Set parameters / degrees of freedom	discussion	students
Design	drawings	Drawing Instruments
Design	CAD-System	CAD models
Rapid prototyping	3D printer .	stl model
CNC-Programming	CNC-Simulator	Heidenhain, MTS, NC-CAM