Material Forming and Control Engineering

Based on the “Dual Mode” programs of German vocational education, we aim to cultivate talents in areas of auto industry, electronic fields, rail transit as well as aeronautics and astronautics manufacturing. Undergraduates in this program can grasp the basic theory and expertise, understand the industry standard while holding the ability of analyzing materials forming technology and designing and exploring the mold. Grasping the technics of press forming, injection molding, composite material manufacturing and forming as well as reverse engineering and rapid prototyping, qualified graduates with innovation can undertake the task of technology exploration, designing and manufacturing, experiment and research and manufacturing management.

List of Core Curriculum

1	Fundamentals of mechanical design
2	Engineering materials
3	Fundamentals of mechanical manufacturing
4	Mechanical properties of materials
5	Principle and Technology of Material Forming
6	CAD / CAM technology of material forming
7	Stamping process and die design
8	Injection molding process and mold design
9	Reverse Engineering and Rapid Molding Technology