

Course Description – summer 2025

Title	Simulation driven design (SDD)
Faculty	Mechanical Engineering
Professor	Prof. Dr. Andreas Dietzel
ECTS	5
Level	Bachelor
Requirements	Basic knowledge of 3D CAD software, Fundamentals of Engineering Mechanics
Add. Information	https://www.hs-schmalkalden.de/hochschule/fakultaeten/fakultaet-maschinenbau/internationales/englische-kurse.html
Content	<p>This course provides the basics and advantages of Live-Simulation (design-related simulation), a method for using CAE-technologies directly inside of the design process/by the design engineer, to test ideas for their feasibility and compare concepts/variants of parts and assemblies objectively. The development process can thus be made faster and more reliable by eliminating uncertainties during the early designphase.</p> <p>The software systems PTC CREO Parametric and CREO SIMULATE resp. ANSYS Workbench are used in the course. Previous knowledge of the programmes mentioned is advantageous, but not required.</p>