

## Course Description – summer 2024

<b>Title</b>	Simulation driven design (SDD)
<b>Faculty</b>	Mechanical Engineering
<b>Professor</b>	Prof. Dr. Andreas Dietzel
<b>ECTS</b>	5
<b>Level</b>	Bachelor
<b>Requirements</b>	Basic knowledge of 3D CAD software, Fundamentals of Engineering Mechanics
<b>Add. Information</b>	<a href="https://www.hs-schmalkalden.de/hochschule/fakultaeten/fakultaet-maschinenbau/internationales/englische-kurse.html">https://www.hs-schmalkalden.de/hochschule/fakultaeten/fakultaet-maschinenbau/internationales/englische-kurse.html</a>
<b>Content</b>	<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>