

Course Description – Winter 2021/2022

Title	Finite Elements Method
Faculty	Mechanical Engineering
Professor	Prof. Dr. Hendrike Raßbach
ECTS	5
Level	Bachelor
Requirements	-
Add. Information	https://www.hs-schmalkalden.de/hochschule/fakultaeten/fakultaet-maschinenbau/internationales/englische-kurse.html
Content	<p>On completion of this course, the students should have some basic knowledges on the method of finite elements and they should be able to build up simple FEM-models. Some examples will be solved with the program ANSYS. The students can critically judge and interpret results.</p> <p>Basic ideas of the method of Finite Elements, different Finite Elements for structural mechanics, the applications of FEA basic procedure creating a FEA-Model Accuracy, reliability, error possibilities for verification structure of FEA-Program ANSYS – the layout of the GUI, goal and starting point of a FE Analysis, reasonable simplifications coupling of FEA and CAD-Programs, examples</p>