



<b>Introduction to Mechanics</b>	
Course number:	6316
Hours per week:	4 (lecture) + 2 (practice sessions)
ECTS:	6
Scheduled:	Summer term
Format:	Lecture and team work
Examination:	Written exam (90 min)
Lecturer:	Prof. Dr. Jochen Krieger
Objectives:	
Contents:	<p><b>Engineering Mechanics: Statics</b></p> <ul style="list-style-type: none"><li>- Introduction Mechanics, Newton's laws</li><li>- Statics of particles</li><li>- Rigid Bodies and Equivalent Systems</li><li>- Equilibrium of Rigid Bodies</li><li>- Friction</li><li>- Analysis of Structures</li><li>- Distributed Forces, Centroids and Center of Mass</li><li>- Forces in Beams</li></ul> <p><b>Mechanics of Materials</b></p> <ul style="list-style-type: none"><li>- Concept of Stress</li><li>- Stress and Strain: Axial Loading</li><li>- Deflection of Beams</li></ul>
Pre-requisites	None
Recommended Reading:	Vector Mechanics for Engineers: Statics by Ferdinand Beer , Wiley Engineering Mechanics: Statics by J. L. Meriam, Wiley Mechanics of Materials by Ferdinand Beer, Wiley (all books in current edition)