



Engineering Basics II: Basics of Mechanical Engineering	
Course number	6316
Hours per week:	4 (lecture) + 2 (practice session)
ECTS:	6
Scheduled:	Summer Term
Format:	Lecture and team work
Examination:	Written exam: 90 Minutes
Lecturer:	Prof. Dr.-Ing. Jochen Krieger
Objectives:	
Contents:	Engineering Mechanics: Statics <ul style="list-style-type: none">– Introduction Mechanics, Newton’s laws– Statics of particles– Rigid Bodies and Equivalent Systems– Equilibrium of Rigid Bodies– Friction– Analysis of Structures– Distributed Forces, Centroids and Center of Mass– Forces in Beams) Mechanics of Materials <ul style="list-style-type: none">– Concept of Stress– Stress and Strain: Axial Loading– Deflection of Beams
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)