

t.MFL2 - Mechanik Festigkeitslehre 2

Person responsible for the course: Jürg Meier, mrjg
Credits: 3
Valid for: 2010/2011
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Learning objectives:

- analyze simple structures by ANSYS workbench
- determine of torsional stress and angle of twist on circular and non-circular cross sections
- calculate the general state of stress
- understand the common failure criteria
- perform simple buckling analyses

Course content:

- short introduction to FEM analysis with ANSYS Workbench
- shear stress, shearing off, change of shape by shear stress, shear stress with bending
- torsional stress and angle of twist on circular cross sections
- torsional stress and angle of twist on non-circular cross sections
- multi axial state of stress
- failure criteria
- buckling

Previous knowledge:

t.MFL1

Teaching method:

Type of lesson:	Number of lessons per week:
Lecture	12x3L
Tutorial/Practicum	
Group teaching	3x2L (FEM introduction)
Block instruction	
Seminar	

Assessment:

According to the table or as specified in writing by the lecture at the beginning of the semester!

Number	Type	Weighting
1	End of term exam	60%
2	Exam during the semester	20% each
	Further assessments	

Language of instruction:

Deutsch

Instruction material:

Script of the lecturer, possibly use of the books Technische Mechanik 2: Gross, Hauger, Schnell
Formeln und Aufgaben zur Technischen Mechanik 2: Gross, Schnell, Ehlers, Wriggers

Comments:

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