# t.MAE3 - Mathematik: Analysis für Ingenieure 3

Person responsible for Nadin Stahn, stan

the course:

Credits: 3

**Valid for:** 2010/2011

**Last saved:** 19.08.2010 14:52

#### Learning objectives:

The students know methods to solve complex problems analytical and apply these methods consciously.

#### **Course content:**

real functions of several variables

- elementary concepts (rapresentation of curves and surfaces)
- differential calculus (gradients, differentials, curvature)
- integral calculus selected examples

combinatoric and elementary probability theory

#### **ODEs**

- first order equations
- linear higher order equations
- systems of equations selected examples

## Previous knowledge:

MAE1, MAE2

#### **Teaching method:**

Type of lesson:	Number of lessons per week:	
Lecture	14x(2L+2L)	
Tutorial/Practicum		
Group teaching		
Block instruction		
Seminar		

# Assessment:

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

Number	Туре	Weighting
1	End of term exam	
	Exam during the semester	
		accordant written determination of the lecturer at the beginning of the semester

## Language of instruction:

Deutsch

## Instruction material:

Dozierendenabhängig

Blatter: Ingenieur Analysis II, Verlag der Fachvereine Zuerich

Arnol'd: Gewöhnliche Differentialgleichungen. Springer Walter: Gewöhnliche Differentialgleichungen. Springer

## **Comments:**

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