

t.MAE2 - Mathematik: Analysis für Ingenieure 2

Person responsible for the course: Marcello Robbiani, roma

Credits: 3

Valid for: 2011/2012

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Learning objectives:

This course

- provides the mathematical armamentarium and the mathematical skills needed for the engineering courses
- introduces to the mathematical approaches of problem solving and trains abstract thinking
- allows for the common knowledge in mathematics

Course content:

power and root functions

exponential functions and logarithms

trigonometric functions and arcus functions

elementary theory of vibrations

calculus of real functions in one variable

- curve analysis and elementary optimisation

- integration methods

- length, area and volume

- baricenters and moments

the concept of differential equations - selected examples

ad hoc (nit for ST):

- descriptive statistics (continuation)

Previous knowledge:

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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	Type	Weighting
1	End of term exam	0,6
2	Exams during the semester	2 x 0.2
	Further assessments	

Language of instruction:

German

Instruction material:

Depending on lecturer

Courant: Differential- und Integralrechnung 1&2. Springer

Mayberg, Vachenauer: Höhere Mathematik. Springer

Jänich: Mathematik 1&2. Springer

Comments:

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